Financial Management
IN THE SPORT INDUSTRY
SECOND EDITION
BROWN • RASCHER • NAGEL • McEVOY
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PREFACE

The business of sport has changed dramatically since the first edition of *Financial Management in the Sport Industry* was published, and this second edition reflects the impact of these changes on financial management within the industry. Adopters of the first edition expressed positive feedback regarding its content, and they also provided important ideas where material could be updated and new information could be introduced.

I [Matt Brown] had been teaching sport finance for several years when the need for this text became apparent. During my time at Ohio University, the graduate and undergraduate sports administration programs evolved as they prepared to move into the College of Business. In addition, as students became grounded in introductory accounting, economics, and finance courses, it became apparent that there was a need for a text that truly explored financial management in the sport industry. At the time, most sport finance texts focused on revenue generation in sport, with little focus on financial management. Feedback from students and their quest for new knowledge moved us to write the first edition of this book.

In the sport industry, the need for understanding finance and the importance of sound financial management has continued. Over the past decades, through periods of financial growth and even turmoil, the industry has grown tremendously—the estimate of its growth and current value vary depending on the source, but we all agree it is large and expanding. Concurrent with the growth, the need to better prepare students to assume managerial roles in sport organizations has also grown. This need is underscored by the movement of several renowned sport management programs into business schools and the creation of specialized sport management MBAs. As mentioned above, we believe that change is also needed in books devoted to sport finance; they need to focus on revenue acquisition and also address basic financial management concepts in sport. In this book, we go even further to discuss how finance works in the sport industry.

Part I, Finance Basics, introduces sport finance and basic financial concepts and explains the tools and techniques of financial quantification using industry examples. Topics covered in this section include the analysis of financial statements and ratios, risk, and time value of money. In Chapter 2 we use the financial statements of Under Armour as a basis for discussing balance sheets, income statements, and statements of cash flow, and we revisit these financial statements when discussing and calculating financial ratios. Chapter 3 relates risk to revenue sharing models used in North American sport leagues. In Chapter 4, the time value of money is explored using examples such as deferred salary issues related to major league sports teams.

Part II covers the foundations of financial management—the decisions within sport organizations to ensure wealth maximization. Budgeting, debt and equity financing, and capital budgeting are addressed, using examples from the sport industry. This part segues between traditional texts on the fundamentals of financial management and a text on these fundamentals as applied to the sport industry. Here we go beyond simply providing examples in a sport context to discussing how finance actually works in the sport industry. For example, we address how a team uses debt and equity financing and why one method over the other may be selected. We also explain the importance of capital budgeting when planning for a new facility, such as upgrading the field in a university football stadium and constructing a community swimming pool.

Part III of this book applies financial management concepts to the industry through the examination of facility financing, valuation, feasibility studies, and economic impact. Much of this section is written based on our past consulting experiences with industry partners, including several professional teams, various sport leagues, and several municipalities. Finally, Part IV examines financial management in three sectors of the industry: public sector sport, collegiate athletics, and professional sport. We provide an in-depth analysis of the mechanics of financial management within each of these sport sectors.

This book is designed so that it can be used in either an upper level undergraduate or a graduate course in a sport management program. Students do not need a previous background in finance to grasp the material. Part I, Finance Basics, provides the needed introduction to financial concepts. After reading the chapters in Part I, students will be prepared for material in the remaining sections.

The text can also be used by students in business schools in an upper-level finance course or students in an MBA/Sport Management program. Chapters 1 and 5 through 15 can be used for an in-depth study of sport
finance. **Part II**, Financial Management, contains material that would be covered in a Principles of Financial Management course at either the undergraduate or first-year MBA level. However, the topics in these chapters are addressed from the sport industry’s perspective, addressing what works and what doesn’t work. **Part III**, Application of Financial Management in Sport, and **Part IV**, Financial Attributes of Select Sport Industry Segments, should be completely new material for most readers, providing a detailed view of financial management in those segments.
NEW TO THIS EDITION

This edition includes new and revised material reflecting a broad spectrum of changes in sport finance. These discussions cover changes in college athletic finance (O’Bannon v. NCAA, cost of attendance, new television right packages); current venue financing methods; the financial impact of new collective bargaining agreements on players, teams, and leagues; new revenue sources in professional sports and college athletics (such as the development of entertainment districts, public-private partnerships, and sale of luxury suites and their pricing); and additional emphasis on sport outside college and professional sport (high school, recreational sport, entrepreneurial sport ventures).

This edition also reflects the increasingly global nature of sport. For example, new sidebars cover the effect of differing national income tax rates on players and teams in European professional soccer leagues and the NFL, and the impact of competition for players by the Russian Premier League on the WNBA’s salary structure. Other changes include:

- Current industry examples used throughout to help make the principles of financial management applicable to sport.
- A primer on accounting principles to help students interpret financial statements.
- A valuation case study assignment that takes students step-by-step through a valuation using both income and market approaches.
- A new stadium feasibility analysis focused on efforts by the Oakland Raiders to get a new stadium.
SPECIAL FEATURES

In an effort to make this text useful and to facilitate understanding of financial management topics, the following features are included:

Case Studies. When teaching sport finance, we have found that the case-based method is one of the best means to help students learn the material. Each chapter contains a current case on a relevant topic followed by questions to help students understand how financial management concepts have been or should have been applied in the given situation. These cases and questions invite in-depth analysis and discussion of selected topics.

Sidebars. Throughout the text, sidebars provide additional high-interest context. Often, explaining a financial management concept is not quite enough for readers unfamiliar with finance to grasp a new concept. To reinforce the understanding and the application of concepts to the sport industry, sidebars offer additional examples, with a broad range of topics. These include, for example, the financial turnaround of an NCAA Division I athletic program; the use of stadium districts to generate additional revenue for a team; the formation of school district, community, and professional sport partnerships to benefit sport at all levels; the financial practices of selected international sport organizations; the use of deferred contracts in professional sport; and the development of various professional women’s leagues over the past 20 years.

Concept Checks and Practice Problems. The concept check questions found at the ends of chapters emphasize key concepts and aid in the review of chapter material. Further, the practice problem sections reinforce the use of numerous financial management tools and formulas in the sport industry.

Glossary of Key Concepts. Key concepts are boldfaced and defined when they first appear in the text. They also appear in a glossary at the end of the text. Since financial concepts discussed in one chapter often apply to several chapters and topics in the text, the glossary will be helpful when readers need to review a concept presented earlier.

It is our hope that this book continues to help readers better understand financial management in the sport industry. We thank the instructors and students who encouraged us as we revised the book to meet the needs of today’s sport finance students.
ACKNOWLEDGMENTS

All of us wish to thank those who reviewed this book in various stages and offered suggestions for its improvement. Their input helped us to make this a better book. These individuals are as follows. For this edition: Stephen Dittmore, University of Arkansas; Marion Hambrick, University of Louisville; Michael Hutchinson, The University of Memphis; Sloane Milstein, Texas A&M University; Emily Must, Metropolitan State University of Denver; Jeffry Noble, Wichita State University; Seheon “Jack” Oh, New York University; Andrea Pent, Neumann University; Larry Prober, Rider University; Kathy Pryor, Ecclesia College; Janice Robinson, Durham College; Eric Schwarz, Victoria University, Melbourne, Australia; Narcissus Shambare, College of Saint Mary; Brian P. Soebbing, Temple University; Emily Sparvero, The University of Texas at Austin; and Lonni Wilson, Keiser University. And for the previous edition: Jan Bell, St. Thomas University; Joris Drayer, Temple University; Dianna Gray, University of Northern Colorado; Daniel F. Mahony, Winthrop University; Joel Maxcy, Drexel University; J. Christopher McGrath, Georgetown University; John Miller, Troy University; Michael Mondello, University of South Florida; Stephen Shapiro, Old Dominion University; Robert Taylor, California University of Pennsylvania; Nathan Tomasini, Virginia Commonwealth University; Galen Trail, Seattle University; Sharianne Walker, Western New England University; and Jason Winfree, University of Idaho.

I first wish to thank those students who initially pushed me to develop a better finance course and better materials, particularly the Ohio graduate and undergraduate classes of 1999 through 2005. I especially want to thank my graduate and undergraduate students at South Carolina, who provided feedback on the first edition and also suggested changes needed for the second edition.

Next, this project would not have been possible without my coauthors, Dan, Mark, and Chad. It has been great writing with you over the years. I appreciate the quality of your work and most importantly your friendship. As usual, completing this project took longer than anticipated, given job and university changes. Thanks for sticking with the project and seeing it through to completion.

To my friends and colleagues at Ohio and South Carolina, thank you for your friendship and support. Andy Kreutzer, Doc Higgins, Tom Regan, and Frank Roach have been great mentors, and they have helped shape and influence the sport industry.

To my wife, Becky, and sons Jake and Luke, thanks for letting me sneak away to complete this manuscript. Your support at home is truly appreciated.

Finally, Colette Kelly at Holcomb Hathaway, Publishers has been extremely patient with us. Her edits, comments, and work on early drafts were insightful and made significant improvements to the text. Colette, Gay Pauley, Sally Scott, and the rest of the Holcomb Hathaway staff have been great to work with, and we appreciate all they have done to help us make this edition the best it can be. I am glad that my friendship with Packianathan Chelladurai (Chella) and his relationship with Holcomb Hathaway made this all possible.

Many people were involved, either directly or indirectly, in helping develop this book and its content. The reason for writing this book is, of course, because of the enthusiastic students who want to understand all there is to know about managing sport organizations. My thanks to those students who read the first edition and provided feedback.

I want to thank my wife and partner, Heather, for helping me think about the best ways to explain some of the complex ideas, but more importantly for her patience and encouragement. I also want to thank my two wonderful boys, Aidan and Lucas, for understanding that I also had homework like them (this book) that needed my best efforts. It seems that both boys love sport as much as I do.

The team at Holcomb Hathaway, especially Colette Kelly and Gay Pauley, have been very supportive and have provided us with excellent insight, ideas, and editing. They also found very helpful reviewers who provided important insights. Additionally, Michel Desbordes at the University of Paris-Sud was a kind host during my summer sabbatical, allowing me to make great progress in a creative environment.
The most satisfying part of this has been my work with my coauthors, Matt, Mark, and Chad. I want to thank them for having me be a part of this team once again. My friendships with each of them have been the most important and long-lasting outcome of these editions. Thank you all for your excellent work.

DAR

I would first like to thank my family and close friends, who have provided continual support for this project and many others. There would have been no way to complete a second edition without my loved ones providing the time needed to focus on writing and editing. My wife Leslie has been especially patient once the initial shock dissipated after I told her we planned to work on a second edition. I am hopeful my wonderful children, Annie and Canton, will someday understand how much excitement the challenge of seeking knowledge to write a book can provide. It is my goal that they both someday find a passion for something in the same way that I have found a passion for the sport industry. I am also extremely thankful that my parents—who have never been sport fans—both tolerated and encouraged my passion to continually learn about something I love. Hopefully, they can find room on their shelf for this edition among all the non-sport books that they have read over their lifetimes.

I was extremely fortunate to work with esteemed coauthors on this book and other projects. Matt, Dan, and Chad consistently challenge me to think and inspire me to see what can be accomplished. What is particularly rewarding is that we genuinely enjoy spending time together talking about sport, business, and, most importantly, life. It is a wonderful blessing to work with close friends I respect. My colleagues in the Sport and Entertainment Management Department at the University of South Carolina have also provided consistent support as I worked odd hours at “the end of the hall.” It is a blessing to be able to come to work with people who are not only dedicated professionals but also wonderful friends. The students I have had the privilege to teach throughout my career have provided an outlet for my (sometimes) crazy ideas. I hope that I have been able to teach them as much as they have taught me. Colette Kelly and the staff at Holcomb Hathaway remained patient throughout our endeavors, and for that I will be forever grateful.

MSN

I would like to thank all those involved in publishing this book. Colette Kelly and the staff at Holcomb Hathaway were excellent to work with. Thanks as well to the many reviewers who provided excellent advice on how to improve the text.

Thank you to all of my students and colleagues, both past and present. Because of you, coming to work each morning is a pleasure. Helping our students grow, learn, and chase after their dreams of working in the sport industry is an incredibly rewarding profession.

Thanks also to my wonderful family—to my wife Kerry for being so supportive and for being such a terrific partner and mother, and to our children, Andy, Luke, and Abby, who bring a smile to my face each and every day. I look forward to continuing to share my love of sport with you in the years to come.

Finally, thank you to Matt, Dan, and Mark for including me in this project. I appreciate both your collaboration and your friendship immensely.

CDM
ABOUT THE AUTHORS

Matthew T. (Matt) Brown is the chair and an associate professor in the Department of Sport and Entertainment Management at the University of South Carolina. He teaches graduate and undergraduate sport finance courses and researches in the areas of sport finance and sport business. His current research focus is on tax practices and the impact of tax policy on professional sport leagues. Brown’s research has led to publications in the *Journal of Sport Management, Sport Marketing Quarterly, Entertainment and Sport Law Journal, International Journal of Sport Finance*, and *Sport Management Review*. In addition, he has presented at more than 70 national and international conferences.

Brown has been a consultant for a variety of organizations in the sport and tourism industries. His clients have included Patriots Point, the Center for Exhibition Industry Research, the International Association of Venue Managers, minor league hockey teams, minor league baseball teams, the Ohio Golf Course Owners Association, and the State of South Carolina. He currently serves as a consultant for the Lexington County Blowfish, a wood bat baseball team in the Coastal Plain League. In addition to his work with the Blowfish, Brown has served as the chief financial officer of the Southern Ohio Copperheads and treasurer of the Board of Directors of the Southern Ohio Collegiate Baseball Club. He also has served as the treasurer of the North American Society for Sport Management. In 2003, Brown was named the Jefferson College Alumnus of the Year.

Brown received his doctorate in sport administration from the University of Northern Colorado. Prior to joining the faculty at the University of South Carolina, he was a faculty member in the Sports Administration and Facility Management program at Ohio University. His primary teaching responsibilities were in the dual-degree MBA/MSA graduate program, where he taught sport finance and research methods courses to first and second-year MBA students.

Daniel Rascher teaches and publishes research on sports business topics and consults to the sports industry. He specializes in economics and finance and, more specifically, in industrial organization, antitrust, mediations and arbitrations, valuation, economic impact, market readiness, feasibility research, marketing research, damage analysis, strategy, and labor issues in the sport industry. Rascher founded SportsEconomics to enable sport enterprises to capitalize on the sport industry’s transition from hobby status to multibillion dollar industry. As founder and president of SportsEconomics, LLC, partner at OSKR, LLC, and former principal at LECG, LLC, Rascher’s clients have included organizations involved in the NBA, NFL, MLB, NHL, NCAA, NASCAR, MLS, PGA, sporting goods and apparel, professional boxing, mixed martial arts, minor league baseball, NHRA, AHL, Formula One racing, Indy Car racing, American Le Mans racing, Premier League Football (soccer), professional cycling, endurance sports, IPL, media, ticketing, IHRSA, music, as well as sports commissions, local and state government, convention and visitors bureaus, tourism businesses, entrepreneurs, and B2B enterprises.

Rascher received his Ph.D. in Economics from the University of California at Berkeley. He is Director of Academic Programs and professor in the Sport Management Program at the University of San Francisco, where he also teaches courses in sports economics and finance and research methods. He has also taught at Northwestern University, the IE Business School in Madrid, and the University of Massachusetts (Amherst). He has authored articles for academic and professional journals, book chapters, and a textbook in the sport management and economics fields, has been interviewed hundreds of times by the media on various aspects of the business of sports, and has given more than 50 presentations at professional and academic conferences. Rascher has served on the editorial boards of *Case Studies in Sport Management, Journal of Sport Management, Sport Management Review, International Journal of Sport Finance, International Journal of Sport Management and Marketing*, and the *Journal of the Quantitative Analysis of Sports*. He has been named Research Fellow of NASSM. He is also certified as a valuation analyst (CVA) by the National Association of Certified Valuators and Analysts.

Rascher has testified as an expert witness in federal and state courts, in arbitration proceedings, and provided public testimony numerous times to state and local governments.
Mark S. Nagel became a faculty member in the Department of Sport and Entertainment Management at the University of South Carolina in 2006. He now serves as the Associate Director of the College Sport Research Institute there. Prior to joining USC, he was the director of the graduate sport management program at Georgia State University. At Georgia State he was responsible for all aspects of the sport management program including recruiting and advising students, developing and scheduling courses, identifying and supervising adjunct faculty, and maintaining alumni and sport business relationships. Nagel has also previously worked in sport management programs at the University of West Georgia and San Jose State University. He currently serves as an adjunct faculty member at the University of San Francisco and St. Mary’s College, where he teaches summer courses in sport administration.

Nagel received his doctorate from the University of Northern Colorado. He has authored and co-authored numerous articles in refereed journals such as the Journal of Sport Management, Sport Marketing Quarterly, Entertainment and Sport Law Journal, International Journal of Sport Finance, and Sport Management Review. He coauthored the books Introduction to Sport Management: Theory and Practice and Sport Facility Management. In addition, he has written numerous academic book chapters and given dozens of research presentations. Nagel was named Research Fellow of the North American Society for Sport Management and served as treasurer for NASSM and the Sport and Recreation Law Association. Nagel has also worked as a consultant for a variety of sport and tourism organizations.

Before pursuing a career in academia, Nagel worked in various areas of sport management, primarily in athletic coaching and administration as well as campus recreation. During his years as an assistant coach of the women’s basketball team at the University of San Francisco, he helped lead the team to three NCAA Tournament appearances and a spot in the 1996 Sweet 16.

Chad D. McEvoy is a professor and chair of the Department of Kinesiology and Physical Education at Northern Illinois University, having previously been a sport management professor at Illinois State University and Syracuse University. Prior to pursuing a career in academia, McEvoy worked in marketing and fund raising in intercollegiate athletics at Iowa State University and Western Michigan University. He has conducted research projects for clients at various levels of sport, including professional sport, intercollegiate athletics, Olympic sport, and sports agency organizations.

McEvoy holds a doctoral degree from the University of Northern Colorado, a master’s degree from the University of Massachusetts, and a bachelor’s degree from Iowa State University, each in sport management/administration. His research interests focus on revenue generation and ticket pricing in commercialized spectator sport settings. McEvoy has published articles in journals including the Journal of Sport Management, Sport Management Review, Sport Marketing Quarterly, and International Journal of Sport Management and Marketing. His research has been featured in numerous media stories and interviews including The Wall Street Journal, Sports Illustrated.com, ESPN.com, Chicago Tribune, Philadelphia Inquirer, and Atlanta Journal-Constitution. McEvoy appeared as a panelist before the prestigious Knight Commission on Intercollegiate Athletics in 2008, and he serves as the founding editor of the journal Case Studies in Sport Management, having previously served as the co-editor of the Journal of Issues in Intercollegiate Athletics. McEvoy served as president of the Sport Marketing Association for 2015–2016.
PART I
Finance Basics

1 Introduction to Sport Finance
2 Analyzing Financial Statements and Ratios
3 Risk
4 Time Value of Money
Introduction to Sport Finance
KEY CONCEPTS

- capital markets
- debt financing
- distributed club ownership model
- economic cycle
- economic depression
- economic growth
- equity financing
- finance
- financial management
- gift financing
- government financing
- gross domestic product (GDP)
- gross domestic sport product (GDSP)
- investments
- money markets
- multiple owners/private investment syndicate model
- multiple owners/publicly traded corporation model
- North American Industry Classification System (NAICS)
- retained earnings
- Sherman Antitrust Act
- single-entity structure
- single owner/private investor model
- sustainability
- wealth maximization
Introduction

Why is an understanding of financial management important? Consider the example of the construction of a new stadium or arena. This area of sport finance is often in the news because a new stadium or arena directly impacts local residents, businesses, and government. Here are a few examples:

- Levi’s Stadium, home of the San Francisco 49ers, opened in 2014 at a cost of $1.2 billion. The venue seats 68,500 and offers 165 luxury suites and 8,500 club seats. The stadium has several environmentally friendly features, including a green roof atop the luxury suite tower and three solar bridges with several hundred solar panels.

- The City of Columbia, South Carolina, is paying approximately $29 million to build Spirit Communications Ballpark to bring Minor League Baseball back to the state’s capital. The $35 million ballpark will open in 2016 and seat 8,000 for baseball games and 14,000 for concerts. The city is using revenues from its hospitality tax to pay off bonds used to finance the new stadium’s construction. The Savannah Sand Gnats announced in 2015 that they would relocate to Columbia for the 2016 season. Hardball Capital, the team’s owner and manager of the stadium, will contribute approximately $6 million toward construction costs.

- In 2008, the New York Yankees replaced old Yankee Stadium, built for $2.5 million in 1923, with new Yankee Stadium. The $1.3 billion stadium opened in 2009, with top seats selling for $2,500 per seat, per game.

- Emirates Stadium, which opened in London in 2006, is the third largest stadium in England and seats 60,000. Home to Arsenal of the English Premiere League, the £470 million ($869.6 million) venue was privately financed by the club, primarily via a £260 million senior loan from a stadium facilities banking group. This group of banks included the Royal Bank of Scotland, Bank of Ireland, Allied Irish Banks PLC, and others. The loan was for 14 years.

- For the Minnesota Twins, a new stadium meant access to previously unavailable revenue. The Twins shared the Hubert H. Humphrey Metrodome with the Minnesota Vikings. The facility was poorly designed, not only for watching a baseball game but also for generating baseball revenue. The Twins received almost nothing from luxury suite rentals; rather, the money from luxury suite sales went to the Vikings. The City of Minneapolis kept a portion of revenue generated from parking, concessions, and in-stadium advertising. In their new ballpark, Target Field, the Twins have kept almost all revenue, including revenue from naming rights, premium seats, and luxury suites. The average ticket price for a premium seat when the stadium opened was approximately $52 per game. A membership fee of $1,000 to $2,000 was also charged to premium seat ticket holders for access to the exclusive club areas within the stadium (Roberts & Murr, 2008).

- Texas A&M University is expanding and renovating Kyle Field, its football stadium, in a $450 million project. More than 20,000 seats are being added, bringing the stadium’s capacity to more than 102,000 and making Kyle Field the largest stadium in the Southeastern Conference (SEC).

- MetLife Stadium, home of the New York Giants and the New York Jets of the National Football League (NFL), opened in 2010, replacing Giants Stadium (The Meadowlands), which opened in 1976. The $1.6 billion stadium was named by Billboard Magazine as the highest-grossing stadium in the world in 2014 (Oliver, 2015). In addition to being the home of two NFL teams, the venue held a variety of non-NFL events, including concerts and soccer games. For the 2014 season, the stadium grossed more than $71 million.

These examples represent the revenue side of constructing new venues—the large price tags of which put them in the news. But what about other financial management issues related to a facility’s construction, for example, how the revenue is shared and how ongoing operating expenses will be met? To consider these issues and how they can impact a community, let’s look at the Indianapolis Colts. Lucas Oil Stadium, the replacement to the RCA Dome, immediately generated new revenue for the Colts after the team moved into its new home; however, none of the new stadium-generated revenue went to the Capital Improvement Board (CIB). The CIB is the governmental entity that operates the stadium and manages its debt service—the cash required over a specific time period for repayment of the principal and interest on the debt (“Indy Wrestles,” 2009).

The $675 million stadium was paid for through a municipal bond issue backed primarily by a 1% tax increase on prepared food in nine counties surrounding Indianapolis. However, the revenue generated through the increased tax covers only the facility’s debt service. No funds were made available for the operation of the...
facility. With the tax revenue allotted for debt service and stadium revenue going to the Colts, the CIB has been operating the stadium at a $20 million annual deficit (“Indy Wrestles”). As a result of poor financial management—specifically plans and forecasts relating to the operating costs of the new stadium—state officials had to act. The citizens of the metropolitan area likely will be required to pay for the stadium’s operating costs through some form of tax increase.

As the above examples show, the revenue generated in these new venues attracts a large amount of media attention. However, financial management issues related to the construction and operation of the venues are often ignored, overlooked, or perhaps not understood. When this happens, as in the case of Indianapolis, the importance of understanding financial management becomes clear.

In this chapter, we will introduce you to key concepts in finance, many of which will be discussed in greater depth in later chapters. You may encounter terms with which you are unfamiliar. To gain a working knowledge of these terms, refer to the Glossary at the end of the book.
WHAT IS FINANCE?

Finance, the science of fund management, includes application of concepts from accounting, economics, and statistics. Within the world of finance, there are three interrelated sectors: (1) money and capital markets, (2) investments, and (3) financial management (Brigham & Houston, 2012). Money markets are markets for highly liquid, short-term securities; capital markets are markets for intermediate or long-term debt, as well as corporate stock. Hence, the money and capital markets sector includes securities markets such as the New York Stock Exchange and the Chicago Mercantile Exchange. Investment banking falls within this sector as well, as do insurance and mutual fund management.

As opposed to this first sector, the focus of the investments sector is on security choices made by individual and institutional investors as they build portfolios. Merrill Lynch and Edward Jones are companies operating within this sector.

The financial management sector involves decisions within firms regarding the acquisition or use of funds, usually with the goal or outcome of wealth maximization, or maximizing the overall value of the firm. To achieve wealth maximization, the finance department forecasts future revenues and plans future expenses. In sport, this may include calculating cash flow increases resulting from a move to a new facility (as shown in the chapter introduction) and determining how much the organization can increase player payroll as a result of the forecast. The finance department also performs a portion of the control function of management. Through coordination with other departments in the organization, the finance department pursues efficiency of operation and resource utilization. The finance department makes investment and financing decisions, working with financial markets and investment firms when necessary. The type of debt financing to be used when constructing a new stadium is one example of these decisions.

A firm in the sport industry may be structured as a for-profit, not-for-profit, or governmental entity. For-profit sport enterprises have many commonalities with other types of for-profit business. Hence, the financial management of a sport organization is often quite similar to the financial management of organizations in other industries. These commonalities include value creation, or increasing the value of a firm over time, and revenue growth. However, there are areas of difference. One major difference is the diverse objectives of firm owners within sport (Foster, Greyser, & Walsh, 2005). Although sport organizations usually compete for wealth maximization, an owner in professional sport might not be interested in this goal. Rather, the owner may be more interested in winning championships or in seeking celebrity status by being one of a select few professional sport franchise owners. Another goal of the owner may be to protect a community asset. The differing objectives of owners can harm the competitive balance in a league, particularly in terms of winning championships. For example, an extremely wealthy owner with a willingness to incur losses over several seasons can create an imbalance in competition. As a result, at the beginning of a season, only a few teams may have a realistic chance of winning a championship. Leagues have reacted by implementing salary constraints, revenue sharing, and other similar mechanisms that create both competition between franchises on the field and cooperation regarding financial management off the field.
FIVE WAYS TO FINANCE THE OPERATION OF A SPORT ORGANIZATION

Whether an owner’s objective is wealth maximization or winning and whether the sport organization is for-profit, not-for-profit, or governmental, a manager in the sport industry will encounter five methods used to finance the organization (see Exhibit 1.1). These include three methods typically used by for-profit companies to finance their operations: debt, equity, and reinvestment of retained earnings. In sport, two additional financing methods are often available: government funding and gifts. Examples of each will be seen throughout this text. A brief introduction to each is presented here.

**Debt**

When an organization borrows money that must be repaid over a period of time, usually with interest, debt financing is being used. Typically in sport, teams issue bonds or borrow from lending institutions (or in some instances their league) to finance operations through debt. The New York Yankees financed the new Yankee Stadium in this way. The team borrowed $105 million from a group of banks, including Goldman Sachs, to pay for cost overruns. The team also borrowed more than $1.2 billion through the tax-exempt and taxable bond markets (Kaplan, 2009). Debt financing may be either short-term or long-term; short-term debt obligations are those repaid in less than one year, and long-term obligations are those repaid in more than one year. A key point of financing operations with debt is that the lender does not gain an ownership interest in the organization. The sport organization’s obligation is limited to the repayment of the debt.

**Equity**

In contrast to debt financing, in equity financing, the owners exchange a share or portion of their ownership for money. The organization, therefore, obtains funds for operations without incurring debt and without having to repay a specific amount of money at a given time. A drawback is that ownership interest will be diluted and the original owners may lose control as additional investors are added. Stephen M. Ross used equity financing to raise capital after he purchased the Miami Dolphins in 2009. He sold minority interests in the team to several partners, including singers Marc Anthony and Gloria Estefan (Talalay, 2009). Few sport organizations issue stock, a common form of equity financing outside the sport industry. One of the few, the Green Bay Packers, used $143 million of stock proceeds to help finance the renovation of Lambeau Field (“History of Green Bay Packers,” 2015).

Two reasons account for the fact that professional team sport organizations do not typically issue stock to raise equity capital. One reason is that little can remain hidden when a company is publicly traded. To comply

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**EXHIBIT 1.1 Methods used to finance sport organizations.**

<table>
<thead>
<tr>
<th>METHOD</th>
<th>DEFINITION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt</td>
<td>Borrowing money that must be repaid over time, usually with interest</td>
<td>Construction of Yankee Stadium</td>
</tr>
<tr>
<td>Equity</td>
<td>Exchanging a share or portion of ownership of the organization for money</td>
<td>Green Bay Packers’ renovation of Lambeau Field</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>Reinvestment of prior earnings</td>
<td>Packers Franchise Preservation Fund</td>
</tr>
<tr>
<td>Government</td>
<td>Funding provided by federal, state, or municipal sources, including land use, tax abatements, direct stadium financing, state and municipal appropriations, and infrastructure improvements</td>
<td>Tax-backed bonds issued by the City of Arlington, TX to support AT&amp;T Stadium</td>
</tr>
<tr>
<td>Gift</td>
<td>Charitable donations, either cash or in-kind</td>
<td>Donations totaling $85.4 million to Texas A&amp;M with most money going toward Kyle Field</td>
</tr>
</tbody>
</table>
with Securities and Exchange Commission (SEC) regulations, publicly traded organizations must file annual reports detailing the accounting activities of the organization. A team that claims financial hardship in seeking public funding for a new stadium may have difficulty convincing the municipality of the need if financial reports reveal significant positive cash flow. A second reason is that teams that issue stock must answer to their shareholders. Stockholder demands for profitability might run counter to the goal of winning on the field (for example, the team might be unable to acquire a player at the trading deadline because of the near-term financial loss that would result from the acquisition). Concern over public ownership is so great that the NFL does not allow its teams to be publicly owned. The league instituted a ban on public ownership in 1960 (Florio, 2011).

As noted above, the Green Bay Packers are an exception to the norm and the NFL rule. To keep the franchise from leaving Green Bay, Wisconsin, the team went public in 1923, and today the Packers continue to be exempt from the NFL’s prohibition on issuing shares. However, unlike those of a typical publicly traded company, the Packers’ shares do not appreciate in value and are not traded on a stock exchange.

Despite sport organizations’ reluctance to use equity financing, teams in leagues other than the NFL have raised significant amounts of capital by doing so. The Cleveland Indians raised $60 million through the team’s initial public offering (IPO) in 1998. The Florida Panthers, Boston Celtics, Vancouver Canucks, and Colorado Avalanche all have used equity financing. Today, however, these teams are privately held (Kaplan, 1999).

Retained Earnings
In addition to financing through debt and equity, organizations can finance operations or the acquisition of assets through the reinvestment of prior earnings. The portion of earnings that a firm saves in order to fund operations or acquire assets is termed retained earnings. The reinvestment of retained earnings is generally considered a type of equity financing, as this financing method is often used by publicly traded companies, when they choose to reinvest earnings rather than pay them to shareholders as dividends. However, in sport, financing through the reinvestment of retained earnings should be considered separately from equity financing, because organizations in the industry—with the exception of sporting goods manufacturers and retail stores—are typically privately held. Although earnings may be distributed to team owners, in sport they are often used to finance the acquisition of players, improve operations, or make other investments.

The Green Bay Packers reinvest retained earnings to maintain a competitive and successful football operation and to preserve the franchise and its traditions. However, because the franchise is owned by its shareholders and not a single, wealthy individual, the organization is at a disadvantage when reacting to business challenges. A wealthy owner is able to use personal funds to infuse cash into a sport organization. One method that the Packers use to overcome this disadvantage is the Packers Franchise Preservation Fund. By providing liquidity, the fund is intended to improve the sustain-ability of the corporation and franchise. In 2013, the fund totaled $127.5 million and is a part of the team’s corporate reserve fund. At the end of the 2013 fiscal year, the corporate reserve fund totaled $254 million (Walker, 2013).

Government Funding
In the sport industry, it is common for private organizations, such as professional sports teams, to receive funding from governmental sources. In addition, public high schools and universities typically receive a portion of their financing through direct or indirect government funding, and this funding may support sport programs at these schools. For all sport organizations, government financing may be provided by federal, state, or municipal sources and may include land use, tax abatements, direct stadium financing, state and municipal appropriations, and infrastructure improvements. During the 2012 season, 64 major-league teams played in stadiums and arenas built with tax-free municipal debt (Kuriloff & Preston, 2012). Exhibit 1.2 provides examples of direct stadium financing from government sources.

Gifts
Gift financing includes charitable donations, either cash or in-kind, made to an organization. Gift financing is a primary source of operating and investing income for major collegiate sports programs. It is also a supplemental source for minor college programs and non-profit sport organizations. According to Wolverton and Kambhampati (2015), colleges received $1.26 billion in athletic department donations during 2014. Of this total, the top 20 athletic departments received over $700 million, with Texas A&M collecting the most of any department. See Exhibit 1.3 for athletic donations to the universities in the Southeastern Conference.

EXHIBIT 1.2 Select tax-backed stadium/arena bond issues.
<table>
<thead>
<tr>
<th>STADIUM/ARENA</th>
<th>ISSUER</th>
<th>SECURITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T Stadium</td>
<td>City of Arlington, Texas</td>
<td>Sales tax, hotel tax, rental car tax</td>
</tr>
<tr>
<td>Camden Yards</td>
<td>Maryland Sports Authority</td>
<td>State appropriation</td>
</tr>
<tr>
<td>US Cellular Field</td>
<td>Illinois Sports Authority</td>
<td>Hotel tax, state appropriation</td>
</tr>
<tr>
<td>Great American Ballpark</td>
<td>Hamilton County, Ohio</td>
<td>Sales tax</td>
</tr>
<tr>
<td>Cleveland Browns Stadium</td>
<td>City of Cleveland, Ohio</td>
<td>City appropriation</td>
</tr>
<tr>
<td>Comerica Park</td>
<td>Detroit/Wayne County Stadium Authority</td>
<td>Hotel tax, car rental tax</td>
</tr>
<tr>
<td>University of Phoenix Stadium</td>
<td>Arizona Sports and Tourism Authority</td>
<td>Hotel tax, car rental tax, jock tax, sales tax</td>
</tr>
<tr>
<td>Toyota Center</td>
<td>Houston-Harris County Sports Authority</td>
<td>Hotel tax, car rental tax</td>
</tr>
<tr>
<td>Marlins Park</td>
<td>Miami Dade County</td>
<td>Hotel tax, tourism tax, county appropriations</td>
</tr>
<tr>
<td>Target Field</td>
<td>Hennepin County</td>
<td>Sales tax</td>
</tr>
<tr>
<td>Amway Center</td>
<td>City of Orlando, Florida</td>
<td>Hotel tax, city appropriations</td>
</tr>
</tbody>
</table>


EXHIBIT 1.3 2014 Southeastern Conference athletic department donations (cash only).

<table>
<thead>
<tr>
<th>SCHOOL</th>
<th>TOTAL DONATIONS</th>
<th>MAJOR GIFTS</th>
<th>ANNUAL GIVING</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>$45,881,118</td>
<td>$15,818,729</td>
<td>$30,062,389</td>
<td>$0</td>
</tr>
<tr>
<td>Arkansas</td>
<td>$26,750,000</td>
<td>$4,800,000</td>
<td>$21,300,000</td>
<td>$650,000</td>
</tr>
<tr>
<td>Auburn</td>
<td>$37,500,000</td>
<td>$9,000,000</td>
<td>$26,700,000</td>
<td>$1,800,000</td>
</tr>
<tr>
<td>Florida</td>
<td>$47,939,603</td>
<td>$12,721,864</td>
<td>$35,217,739</td>
<td>$0</td>
</tr>
<tr>
<td>Georgia</td>
<td>$34,054,000</td>
<td>$5,660,000</td>
<td>$28,474,000</td>
<td>$0</td>
</tr>
<tr>
<td>Kentucky</td>
<td>$24,808,367</td>
<td>$6,109,026</td>
<td>$18,699,340</td>
<td>$0</td>
</tr>
<tr>
<td>LSU</td>
<td>$34,100,000</td>
<td>$10,600,000</td>
<td>$23,500,000</td>
<td>$0</td>
</tr>
<tr>
<td>Mississippi State</td>
<td>$25,910,094</td>
<td>$9,095,428</td>
<td>$13,738,184</td>
<td>$3,076,482</td>
</tr>
<tr>
<td>Missouri</td>
<td>$14,720,000</td>
<td>$2,010,000</td>
<td>$10,100,000</td>
<td>$2,610,000</td>
</tr>
<tr>
<td>Ole Miss</td>
<td>$26,200,000</td>
<td>$5,700,000</td>
<td>$14,700,000</td>
<td>$5,800,000</td>
</tr>
<tr>
<td>South Carolina</td>
<td>$31,500,000</td>
<td>$6,200,000</td>
<td>$13,600,000</td>
<td>$11,700,000</td>
</tr>
<tr>
<td>Tennessee</td>
<td>$33,466,660</td>
<td>$9,556,160</td>
<td>$22,780,285</td>
<td>$1,130,215</td>
</tr>
<tr>
<td>Texas A&amp;M</td>
<td>$85,379,483</td>
<td>$51,868,435</td>
<td>$28,000,000</td>
<td>$5,511,048</td>
</tr>
<tr>
<td>Vanderbilt</td>
<td>$10,400,000</td>
<td>$5,300,000</td>
<td>$5,100,000</td>
<td>$0</td>
</tr>
<tr>
<td>Average</td>
<td>$34,186,380</td>
<td>$11,031,403</td>
<td>$20,855,138</td>
<td>$2,299,839</td>
</tr>
</tbody>
</table>

31
College athletic programs use revenue from gifts to offset the rising costs of collegiate sport, build or renovate facilities, and increase endowments; Duke University, for example, raises approximately $17 million each year for athletic scholarships. Other institutions use gift financing to offset losses in institutional (government) financing resulting from cuts in state government funds to colleges and universities. Most institutions are also seeking to increase their athletic department endowments (see Exhibit 1.4). Duke hopes to increase its endowment by $260 million to endow its scholarship costs fully. Stanford University’s athletic endowment is worth between $450 million and $500 million and pays out at a 5.5% rate each year (Cohen, 2013).
The sport industry is large and diverse. This makes classifying the industry and measuring its size and scope difficult. Further, how sport is defined affects estimates of industry size. For example, PricewaterhouseCoopers (PwC) estimated that the global sports industry was a £95 billion ($150.7 billion) industry in 2015 (Cave, 2015), whereas Plunkett Research (2015) estimated the value to be $1.5 trillion, or ten times as large. Why is there such a difference in estimates? PwC and Plunkett Research are likely using two different definitions of the sport industry.

In the United States, federal agencies use the North American Industry Classification System (NAICS), developed by the U.S. Census Bureau, to measure and track the business economy. Each business is classified as part of a larger industry. However, the sport industry is not classified as an industry in the NAICS. Instead, the sport industry as it is commonly conceived is scattered across at least 12 different industries in the NAICS (see Exhibit 1.5). The largest grouping of sport businesses is within the Arts, Entertainment, and Recreation segment (NAICS 71).

### Exhibit 1.5 NAICS codes for sport businesses.

<table>
<thead>
<tr>
<th>CODE</th>
<th>INDUSTRY</th>
<th>SUBINDUSTRY</th>
<th>SPORT BUSINESS TYPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>237</td>
<td>Construction</td>
<td>Heavy and Civil Engineering</td>
<td>Field Construction</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Construction</td>
<td></td>
</tr>
<tr>
<td>315</td>
<td>Manufacturing</td>
<td>Apparel Knitting Mills</td>
<td>Sport Apparel</td>
</tr>
<tr>
<td>335</td>
<td>Manufacturing</td>
<td>Electrical Equipment, Appliance,</td>
<td>Stadium Lighting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>and Component Manufacturing</td>
<td></td>
</tr>
<tr>
<td>339</td>
<td>Manufacturing</td>
<td>Miscellaneous Manufacturing</td>
<td>Sporting Goods Manufacturing</td>
</tr>
<tr>
<td>423</td>
<td>Wholesale Trade</td>
<td>Merchant Wholesalers, Durable</td>
<td>Sporting Goods Wholesale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goods</td>
<td></td>
</tr>
<tr>
<td>424</td>
<td>Wholesale Trade</td>
<td>Merchant Wholesalers, Nondurable</td>
<td>Sportswear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goods</td>
<td></td>
</tr>
<tr>
<td>451</td>
<td>Retail Trade</td>
<td>Sporting Goods, Hobby, Book, and</td>
<td>Sporting Goods</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Music Stores</td>
<td></td>
</tr>
<tr>
<td>453</td>
<td>Retail Trade</td>
<td>Miscellaneous Store Retailers</td>
<td>Used Sporting Goods</td>
</tr>
<tr>
<td>515</td>
<td>Information</td>
<td>Broadcasting (except Internet)</td>
<td>Sports Television</td>
</tr>
<tr>
<td>516</td>
<td>Information</td>
<td>Internet</td>
<td>Sport Internet Sites</td>
</tr>
<tr>
<td>532</td>
<td>Real Estate and Rental Leasing</td>
<td>Rental and Leasing Services</td>
<td>Sports Equipment Rental</td>
</tr>
<tr>
<td>561</td>
<td>Administrative and Support and</td>
<td>Administrative and Support</td>
<td>Ticketing</td>
</tr>
<tr>
<td></td>
<td>Waste Management and Remediation</td>
<td>Services</td>
<td></td>
</tr>
<tr>
<td>611</td>
<td>Educational Services</td>
<td>Educational Services</td>
<td>Sport and Recreation Instruction</td>
</tr>
<tr>
<td>621</td>
<td>Health Care and Social Assistance</td>
<td>Ambulatory Health Care Services</td>
<td>Sports Physical</td>
</tr>
</tbody>
</table>
The Arts, Entertainment, and Recreation segment is described as follows by the U.S. Department of Labor’s Bureau of Labor Statistics (BLS). This segment employs a large number of seasonal and part-time workers. Those employed in the industry tend to be younger than employees in other industries, and wages are relatively low. As of 2012, the BLS forecast for the industry as a whole was promising. Barring new recessionary trends, rising incomes and increasing leisure time over the next ten years should lead to an increase in demand in this sector, with employment growing 9.7% by 2022 (“Industry-occupation matrix data,” 2012). Almost all leisure-time activities, other than watching movies, are included in this industry sector.

The BLS classifies this sector into three large subsectors: live performances or events; historical, cultural, or educational exhibits; and recreation or leisure activities. The live performances or events subsector includes professional sports, commercial sport clubs, sport promotion companies and agencies, and dog and horse racing facilities. Privately owned museums, such as the National Baseball Hall of Fame and Museum, are found in the subsection for historical, cultural, or educational exhibits. The recreation and leisure activities subsector includes golf courses, fitness facilities, bowling centers, and health clubs. The BLS further divides the subsectors of the Arts, Entertainment, and Recreation segment, assigning NAICS codes to smaller divisions. Exhibit 1.6 lists the codes for spectator and recreational sport divisions. These subsectors range from sport teams and clubs to bowling centers and marinas.
<table>
<thead>
<tr>
<th>Code</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>713930</td>
<td>Marinas</td>
</tr>
<tr>
<td>713940</td>
<td>Fitness and Recreational Sports Centers</td>
</tr>
<tr>
<td>713950</td>
<td>Bowling Centers</td>
</tr>
<tr>
<td>713990</td>
<td>All Other Amusement and Recreation Industries</td>
</tr>
</tbody>
</table>

*Source: [www.census.gov/cgi-bin/sssd/naics/naicsrch](www.census.gov/cgi-bin/sssd/naics/naicsrch).*
Academics and sport industry professionals frequently discuss, quote, and cite the size of the sport industry in specific countries. For example, in 2015 it was estimated that the sport industry in the United Kingdom (UK) was a £20 billion ($31.7 million) industry supporting about 450,000 jobs (Cave, 2015). In the United States, the size of the sport industry grew from $47 billion in 1986 to $152 billion in 1995, a real annual growth rate of 8.8% (Rascher, 2001). King (2002) stated that the industry in the United States grew to $195 billion in 2001 (an annual growth rate of 4.24% since 1995). Milano and Chelladurai (2011) estimated that the industry’s size in 2005 fell somewhere in a range from a conservative number of $168.5 billion, which would indicate a slight decline in the industry’s size, to a liberal estimate of $207.5 billion, which would indicate modest growth. More recently, Plunkett Research (2015) estimated the industry’s size to be $485 billion. Did the U.S. sport industry really grow by $275 billion or more from 2005 to 2015? Were different industry definitions once again used in measurements of the size and scope of the industry? Or were different methods used in calculations of the size of the industry?

We can determine the size of any industry by calculating its gross product. We measure the overall size of an economy by its gross domestic product (GDP). GDP is the market value of the goods and services produced within the borders of a county, state, country, or other region in a given year. To determine the size of the sport industry, we calculate the gross domestic sport product (GDSP). GDSP is defined as the market value of a nation’s output of sport-related goods and services in a given year. This includes the value added to the economy by the sport industry, as well as the gross product originating from the sport industry.

Efforts to measure GDSP must avoid a double count (one of the guidelines for calculating GDP), that is, the duplication of dollars that could be accounted for in two or more ways. Double counting often results in errors in estimates of the sport industry, when secondary spending is included in the calculation. For example, players’ salaries should not be counted, because this amount is included in ticket prices. When organizations set ticket prices, they account for the salaries of professional athletes, as these are essentially a production cost or cost of goods sold (see Chapter 2). As an intermediary cost of production, salaries should not be counted separately from ticket revenue in calculations of industry size. To count them separately is to count them twice.

In the first major study on the size of the United States’ sport industry, Sports Inc. magazine calculated the industry’s size at $47 billion (Sandomir, 1988). However, the study did not follow U.S. Department of Commerce rules for computing GDP and made no effort to determine the economic impact of the industry on the United States (Meek, 1997). Meek performed a study that did avoid double counting and resulted in the figure of $152.2 billion for the size of the sport industry. Street and Smith’s SportsBusiness Journal determined that $194.64 billion was spent in sports during 2001 (King, 2002). In a subsequent description of this report’s methodology, Broughton (2002) noted that the amount reported was not a measure of the size of the industry but only a measure of sport-related spending. The author stated that when traditional economic standards were applied (i.e., avoidance of double counting), the size of the industry was measured to be $31.76 billion. Milano and Chelladurai (2011) followed the methodology of Meek and the U.S. Department of Commerce’s rules for calculating GDSP when they developed their ranged estimate of industry size (between $168.5 billion and $207.5 billion). In their ranged approach, all debatable GDSP expenditures were removed from the industry size estimate to arrive at the lower number, and all debatable expenditures were included in the higher number. Milano and Chelladurai’s moderate estimate of industry size is $189.4 billion. Here, the estimate includes fractions of the debatable expenses.

Exhibit 1.7 shows a ten-year comparison between Milano and Chelladurai’s study, which used 2005 data, and Meek’s study, which used 1995 data, adjusted for inflation. Data are compared in six areas: (1) entertainment and recreation, (2) products and services, (3) non-sports-related advertising, (4) sport investment, (5) sport net exports, and (6) sport-related government expenditures. The largest sector of the industry is sport products (e.g., Louisville Sluggers) and services (e.g., tennis lessons), accounting for over half of GDSP. Note that when we examine both studies in 2005 dollars, the industry in 2005 was actually smaller than it was in 1995, if we use Milano and Chelladurai’s moderate estimate of industry size. Only under their liberal estimate of industry size can growth in the industry be seen.
The structure of a firm affects the tax and legal obligations of that firm. Different structures offer different benefits. For example, a firm’s options for raising funds are based on its business structure, as is the personal legal liability of its managers and employees. As we will discuss in Chapter 5, several different structures are available to business entities. These structures include governmental, non-profit, sole proprietorship, partnership, limited liability corporation (LLC), subchapter S corporation, and C corporation. Each structure has unique advantages and disadvantages that affect the financial management of the organization.

Collegiate athletic departments are classified as governmental or non-profit businesses, depending on whether the department is a part of a state college or university, such as University of North Carolina-Chapel Hill, or is a part of a private university, such as Duke University.

### EXHIBIT 1.7 1995 and 2005 GDSP comparisons (in 2005 dollars).

<table>
<thead>
<tr>
<th>INDUSTRY SECTOR</th>
<th>1995 ESTIMATE (BILLIONS $)</th>
<th>MODERATE 2005 ESTIMATE (BILLIONS $)</th>
<th>LIBERAL 2005 ESTIMATE (BILLIONS $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entertainment and recreation</td>
<td>56.61</td>
<td>48.79</td>
<td>54.44</td>
</tr>
<tr>
<td>Products and services</td>
<td>119.38</td>
<td>105.68</td>
<td>112.19</td>
</tr>
<tr>
<td>Non-sport-related advertising</td>
<td>9.64</td>
<td>14.78</td>
<td>15.49</td>
</tr>
<tr>
<td>Sport investment</td>
<td>15.14</td>
<td>22.97</td>
<td>27.61</td>
</tr>
<tr>
<td>Sport net exports</td>
<td>−6.02</td>
<td>−3.53</td>
<td>−3.53</td>
</tr>
<tr>
<td>Sport-related government</td>
<td></td>
<td>0.66</td>
<td>1.31</td>
</tr>
<tr>
<td>expenditures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>194.74</td>
<td>189.34</td>
<td>207.50</td>
</tr>
</tbody>
</table>

Source: Meek (1997); Milano and Chelladurai (2011).

In professional sports, most franchises are operated as for-profit businesses. They are structured under various ownership models. After describing these ownership models we will discuss the structures of sport leagues, conferences, and associations.

### Franchise Ownership Models

Most franchises are formed under one of three ownership models (Foster, Greyser, & Walsh, 2005): single owner/private investor model, multiple owners/private investment syndicate model, or multiple owners/publicly traded corporation model.

#### Single owner/private investor model

In the single owner/private investor model, one individual, often an independently wealthy person, owns the firm. The owner may play an active role in the operation of the franchise, or, after selecting key managers, the owner may be hands off. For example, the Los Angeles Clippers are owned by former Microsoft CEO Steve Ballmer. Ballmer purchased the franchise in 2014 for $2 billion.

#### Multiple owners/private investment syndicate model

The most common model for team ownership is the multiple owners/private investment syndicate model. It is the most common for two reasons. First, the value of franchises has risen so high that it is rare for one individual to be able to afford to purchase a franchise on his or her own. Second, as discussed previously, the publicly traded corporation model has many disadvantages versus the private investment model—and one
league, the NFL, even forbids it.

When individuals pool their resources to purchase a franchise and incorporate as a partnership, LLC, or the like, they are forming an ownership group under the multiple owners/private investment syndicate model. For example, in 1995 a group of longtime friends and fans including Fred Hanser, William DeWitt, Jr., and Andrew Baur purchased the St. Louis Cardinals. Each ownership group is governed by an investment syndicate document, which outlines the decision rights of the owners, including who will represent them in league meetings. Sometimes the ownership group has a dominant individual who appears to be a single owner, as was the case for many years after an ownership group purchased the New York Yankees, and George Steinbrenner was viewed as the sole owner of the team. Any disputes that arise among the owners may be resolved through arbitration or legal action (see Sidebar 1.A).
In 2003, Time Warner was in the process of selling the Atlanta Hawks (National Basketball Association [NBA]), Atlanta Thrashers (National Hockey League [NHL]), and Philips Arena to a single buyer, David McDavid. However, questions were raised about McDavid’s ability to finance the purchase. At about the same time, Michael Gearon, Jr., and Rutherford Seydel spoke with Time Warner about the possibility of purchasing the assets. The response from Time Warner was that they could make the purchase if outside financing was not used and if the agreement could be completed within a week. Gearon and Seydel approached sports investment banker John Moag to help find additional partners. Bruce Levenson, Ed Peskowitz, and Steve Belkin were soon added to the investment group. With four additional minority partners, the Atlanta Spirit LLC was born. In total, nine men were members of the partnership, with five—Belkin, Levenson, Peskowitz, Gearon, and Seydel—holding majority interest. From the time Gearon and Seydel first met with Time Warner to discuss the purchase of the assets, only eight days elapsed until the partnership was formed (King & Lombardo, 2005).

The partnership agreement called for management by consensus, with the majority partners sharing three controlling votes: one for Belkin, one for Levenson and Peskowitz, and one for Gearon and Seydel. Belkin was to represent the group with the NBA, and Levenson was to represent the group with the NHL. The two would, according to the partnership agreement, be bound to act according to consensus (King & Lombardo).

An early sign of disagreement among the partners caused Belkin to have a “put” option placed into the ownership agreement, whereby he could sell his shares of the partnership for 85% above their fair market value beginning in June 2006. Disagreements over minor issues then arose, relating to the initial financing of the LLC, ticket allotment for the NBA All-Star Game, titles of partners in media guides and other publications, and player payroll budgets. Finally, the authority to trade players caused a split among the three voting groups of majority owners. The lack of a defined managing partner became a major issue (King & Lombardo).

When NBA Commissioner David Stern became aware of the issues between the partners, he asked the NBA’s executive vice president of legal and business affairs, Joel Litvin, to intervene. Stern was concerned that the disagreements among the majority owners could harm the Hawks’ basketball operations and, therefore, harm the NBA. When Litvin could not resolve the conflict, Stern met with the owners face to face and ordered the group to resolve their issues. After this meeting, Belkin, the Spirit’s representative to the NBA, vetoed a trade that the other partners favored. The trade was to bring Joe Johnson to the Hawks for two future first-round draft picks. Belkin cited his role as the NBA team governor as his reason for acting counter to the remaining partners’ preferences. He wrote,

\[\text{Both the NBA and NHL require that a single individual be designated by each team “to manage the business and affairs of the team and to act for and bind the team.” I served in that role as NBA Governor of the Hawks. I was fine with a “3-vote system” on all matters that did not conflict with league requirements and I abided by that system. (King & Lombardo, para. 48)}\]

The board of managers voted 2–0 to trade Joe Johnson and informed Belkin that they would remove him as NBA governor if he interfered with the trade. After his veto, the managing board removed Belkin as NBA governor, and on August 8, 2005, Belkin countered with a temporary restraining order. By August 19, Levenson, Peskowitz, Gearon, and Seydel agreed to buy out Belkin’s share and pay him more than the 85% premium to have him leave.

Three and a half years later, the buyout amount still had not been determined, because the contract outlining the buyout process was vague and the group could not agree on a process or a price. When Belkin agreed to the buyout in 2005, the price was to be determined by up to three appraisals (see Chapter 10). The first appraiser was to be hired by Belkin and the second by either party objecting to the findings of the first appraisal. However, both sides objected to the first appraisal, and the contract did not state what process should be followed if both objected. Both wanted to select the second appraiser. The parties had agreed to litigate contract disputes in Maryland, so a state circuit court judge heard the facts. The judge ruled that Belkin had the right to select the second appraiser. The judge also ruled that since Levenson, Peskowitz, Gearon, and Seydel had missed the deadline to pay the price set by the second appraiser, Belkin could buy them out at cost. This decision was overturned at the appellate level. A new trial then began in February 2009 (Swartz, 2009).

After six years of legal dispute, the owners finally settled out of court. Belkin’s 30% share of the teams was purchased by the remaining owners. Gearon and Levenson were named as managing partners of the Hawks, the Thrashers, and Philips Arena (Swartz, 2010). Shortly thereafter, the remaining owners
disclosed that the Atlanta Thrashers had incurred operating losses greater than $130 million from 2005 through 2010, while the franchise value dropped by more than $50 million. In June 2011, the Thrashers were sold for $170 million to True North Sports and Entertainment and relocated to Winnipeg. No Atlanta-area investors were interested in purchasing the team due to the past ownership issues. The $170 million sale price included a $60 million relocation fee, which was split by the remaining NHL teams. Therefore, the Atlanta Spirit netted only $110 million from the sale of the hockey team (Burnside, 2011).

Soon, the group began to seek to sell the Hawks, too. A failed attempt to sell the team occurred in late 2011. In September 2014 Levenson announced—after several offensive and racially insensitive emails were exposed in the press—that he was going to sell his controlling interest in the team (Lee, 2014). In January 2015 all owners announced that 100% of the Hawks and operating rights to Philips Arena were for sale. When the sale was announced, Levenson and his partners Peskowitz and Foreman owned 50.1% of the team; Gearon, Seydel, and Turner owned 32.3%; and Steven Price and his New York-based ownership group, which had bought a portion of the team during the summer of 2014, owned 17.6% (Vivlamore, 2015). By April, the Hawks and Philips Arena operating rights were sold to a group led by Anthony Ressler for $850 million (“Hawks announce sale,” 2015).

Multiple owners/publicly traded corporation model

The third model of ownership is the multiple owners/publicly traded corporation model. With the exception of the Green Bay Packers, this model is not used in the United States. Typically, it is employed by European professional soccer franchises, such as Manchester United, whose shares are traded on the New York Stock Exchange with the symbol MANU. Other examples include AS Roma (ASR) and Juventus (JUVE), whose shares are traded on the Italian Stock Exchange (Borsa Italiana); Borussia Dortmund shares are traded in Germany on the Xetra exchange. On the London Stock Exchange, shares in the Scottish Celtic Football Club (CCP) and Rangers Football Club (RFC) can be bought and sold. Under this model, a franchise is governed by a board of directors, elected by shareholder vote. The board appoints the team’s senior management. In the case of the Packers, the NFL restricts the franchise’s shareholders, as shares cannot be traded on the open market and anti-takeover provisions prevent any one individual from amassing a majority of the team’s shares and thereby becoming the team’s majority owner.

Although only one U.S. sport franchise is publicly owned by stockholders, some franchises are owned by publicly traded corporations, such as Comcast and Cablevision. For example, Comcast owns the Philadelphia Flyers. Corporations such as Time Warner, Disney, News Corp., Cablevision, and Anheuser-Busch have owned U.S. sport franchises in the past.

League Structures

The structure of a team’s league affects the financial management of a sport organization, as well. Leagues operate to ensure the viability of the league. Decisions made at the league level include admissions criteria, the structure of competition, revenue sharing, and player relations. These decisions affect the financial management of member teams (see Chapters 14 and 15), and the structure of the league also affects member teams’ financial management.

A league may be structured either as a single entity or with distributed club ownership (Foster, Greyser, & Walsh, 2005).

Single-entity ownership model

With a single-entity structure, a single group or an individual owns the league and all of the teams that compete within that league. This structure is frequently used with new or start-up leagues. For example, the American Basketball League (ABL) was owned by a group of investors, the Women’s National Basketball Association (WNBA) by the NBA, Major League Soccer (MLS) by a group of investors, and the XFL by World Wrestling Entertainment (WWE) and the NBC television network.

An advantage of the single-entity structure is that antitrust law does not apply, as it does to leagues that use the distributed club ownership model. Collusion, agreements that eliminate competition, and other violations of antitrust law are not possible when one entity owns a league and all of its teams. Therefore, single-entity leagues can place franchises in preferred cities and assign players to specific teams in specific cities. For example, the WNBA, in an effort to build a loyal following, assigned Lisa Leslie to the L.A. Sparks franchise. Leslie was a well-known collegiate player in southern California, as she had competed at USC. The league

40
also assigned Sheryl Swoops, a standout basketball star at Texas Tech, to the Houston Comets. The assignment of players to teams also allows a league to promote competitive balance within the league so that no one team dominates competition.

A financial advantage for single-entity leagues is that player salary costs are constrained. Players sign contracts with the league, so there is no bidding for players on an open market. In 2014, the average MLS salary was $226,000. Kaká was the league’s top earner at $7.17 million guaranteed, and 25 players earned the league minimum for players under the age of 25, $36,500. The league’s salary philosophy is to pay for impact players while constraining costs on defenders and goalkeepers (Keh, 2014). As another example, in 2008 the Arena Football League (AFL) was considering reorganizing as a single-entity league in the hope of reducing costs, including salary costs. The AFL had a $25 million operating loss prior to suspending its operations indefinitely in 2008 (Lombardo, 2008). The AFL resumed play in 2010 but did not change its structure.

A drawback to single-entity status is that it provides little economic incentive at the club level (Foster, Greyser, & Walsh, 2005). For the franchises, there is no benefit to operating well, as the benefits are completely shared with the other franchises in the league, although the losses are also equally shared. This is one of the reasons why the WNBA and NBA Development League began to move away from the single-entity structure and toward the distributed club ownership model (Lombardo).

In addition, single-entity leagues have been challenged in court under the Sherman Antitrust Act (1890). The Act forbids contracts and other actions among businesses in restraint of trade. In Fraser v. MLS (1998), players were seeking to end the practice of league-negotiated contracts. They felt that negotiating with the league eliminated competition for player services among teams and thereby reduced their earnings potential. In Fraser, the court reaffirmed that, for leagues structured as a single entity, the Sherman Act does not apply. The court affirmed that the league and its investors (team operators) functioned as a single entity and, therefore, were a single economic unit.

**Distributed club ownership model**

The distributed club ownership model is used by Major League Baseball (MLB), the NBA, the NHL, and the NFL. Under this league structure, each individual franchise has its own ownership group. League-wide revenues, such as those from national television contracts, are collected at the league level and distributed to each team to cover net costs. Leagues sometimes are structured as non-profit organizations governed by representatives from each team. Leagues operating as non-profits include the NHL and the PGA Tour. These entities qualify as 501(c) (6) corporations, as they work to promote their industries rather than operating as for-profit enterprises. Revenues earned are taxed, however. For example, money that goes to the NHL for television contracts and merchandise flows to its teams, which operate as for-profit entities and, therefore, pay taxes on this revenue. MLB and the NFL used to be structured as non-profits. However, MLB opted to forgo its non-profit status in 2007; the NFL did the same in 2015 (Harwell & Hobson, 2015). NASCAR and the NBA operate as for-profit companies.

Whether a league is structured as non-profit or for-profit, team representatives select a commissioner to run its daily operations. Leagues may own affiliated entities, as well. For example, the NFL owns and operates NFL Enterprises, which includes NFL.com and Sunday Ticket, and NFL Properties, the licensing arm of the league.

With this structure, conflicts related to the financial management of the league can arise. Large-market franchises and small-market franchises tend to have differing philosophies on revenue sharing, for example. League and club conflicts often arise over territorial rights. A player and a league may come into conflict, as well. Disputes often end up in court, and the resulting court decisions affect the structure of the distributed club ownership model.

Many of these disputes fall under antitrust law. In contrast to court decisions involving single-ownership leagues, courts have consistently ruled that leagues structured under the distributed club ownership model are subject to antitrust law. The only exception is MLB, which was granted an exemption from antitrust law in Federal Baseball Club v. National League (1922), a decision reaffirmed in Flood v. Kuhn (1972). Courts have stated that a degree of cooperation at the league level is warranted in order for the league to create its product, but they also have noted that teams conduct activities separate from the league, such as entering into local radio and television contracts. Hence, the teams and leagues are separate legal entities and subject to the Sherman Act. In NFL v. NASL (1982), the court ruled that the NFL was subject to U.S. antitrust law. The court reaffirmed this in McNeil v. NFL (1992) and Sullivan v. NFL (1994). In McNeil, the court found that the league’s “Plan B” free agency was more restrictive than reasonably necessary to maintain competitive balance within the league. Further, “Plan B” free agency caused economic harm to the players. This decision led to unrestricted free agency in the NFL. An earlier case, Mackey v. NFL (1976), led to the end of the league’s
reserve system, which essentially bound a player to one team over his career.

As for the NBA, the courts ruled in 1971 that the league was subject to antitrust law. Prior to Haywood v. NBA (1971), the NBA required graduating high school players to wait four years before becoming eligible to play in the league. The court’s decision in Haywood allowed high school graduates and college attendees (prior to graduation) to declare themselves eligible for the NBA draft.
FINANCIAL AND ECONOMIC FACTORS AFFECTING SPORT

Many factors affect the economics of sport, but five must be watched closely: (1) the impact of the current economic cycle on sport, (2) the effects of television revenues, (3) the relationship between sport teams and real estate holdings, (4) a continued push for sustainability in sport, and (5) the impact of politics on the governance of sport.

Economic Cycle

The economic cycle is made up of four stages—growth, peak, recession, and recovery—and typically lasts just under six years. As the economy cycles through periods of growth and contraction, the sport industry is affected.

Economic growth occurs when the economy is increasing in real terms (faster than the rate of inflation). Evidence of economic growth includes increases in employment, industrial production, sales, personal income, and GDP. During periods of economic growth, the sport industry has benefited greatly, as during the 1990s. Most leagues, both major and minor, added teams; new leagues, such as the WNBA and ABL, were formed; and teams and athletic departments across the country spent billions constructing new stadiums and arenas.

When the economy contracts, either declining or growing at a rate that is not higher than inflation, it can enter a recession or depression. A recession occurs when GDP is negative for two consecutive quarters (six months) and usually lasts for six to 18 months. An economic depression is an extreme recession, lasting two or more years.

When the economy contracts, the sport industry is affected, as during the economic downturns of 2001 and 2007–2009. The sport industry relies on the discretionary income of spectators and participants, and as a result is sensitive to changes in the economy. From December 2007 to June 2009 (dates established by the Bureau of Labor Statistics), the United States experienced the Great Recession. The impact of this recession can be seen in the statistics for 2005 to 2015 for employment in the arts, entertainment, and recreation industry, of which sport is a major part (see Exhibit 1.8). As the economy entered the recession and spending slowed in December 2007, many jobs within the industry were shed. From December 2007 to December 2010, approximately 115,000 jobs were lost.

Not only did a slowdown in spending by spectators and participants affect jobs within the industry, but leagues also ceased operation (e.g., the AFL), teams declared bankruptcy (e.g., the Phoenix Coyotes) or ceased operation (e.g., the Columbia Inferno), construction slowed or stopped altogether, and sponsorship revenue declined. SportsBusiness Daily noted the following impacts of the Great Recession:

- The Dallas Cowboys failed to have a naming rights deal signed by the completion of their new stadium in 2009. Although companies were interested, they were not willing to pay the price the team was seeking. Four years passed before the naming rights were finally sold.
- MLB teams cut ticket prices in 2009, hoping to keep fans coming to ballparks despite an unemployment rate approaching 10% nationwide during the summer.
- Automotive advertising spending was down $100 million at the end of 2008 (“Economy Could Affect,” 2008).

Some sport organizations were more affected than others, and some industry segments were affected more than others. In the following sections, we will discuss several sport industry segments that have been especially sensitive to changes in economic conditions.

EXHIBIT 1.8 Job growth in the arts, entertainment, and recreation industry (2005–2015).
United States Olympic Committee

When an economy slows, especially when the slowdown is coupled with a financial crisis, the renewal of sport sponsorships is affected (Last, 2009)—and sport has become more reliant than ever on revenue from corporate sponsorships. For the United States Olympic Committee (USOC), this was especially true during the Great Recession. The USOC receives no direct government funding, unlike other National Olympic Committees (NOCs) around the globe. Therefore, the USOC relies heavily on corporate support, and sponsorship revenue accounted for 45% of its $150 million budget in 2009. Unfortunately, in 2008, as the recession was deepening, most USOC sponsorship agreements expired following the Summer Olympic Games. Several corporations ended their sponsorships. Home Depot and Bank of America did not renew their 16-year sponsorships, and General Motors, a sponsor since 1984, did not renew. Kodak, which had been associated with the Olympic Games since 1896, ended its sponsorship, too. John Hancock also decided not to renew its sponsorship, although the company had been an Olympic sponsor since 1994. Each sponsorship agreement was worth between $4 million and $5 million on average per year. Considering the sponsorship losses from these companies alone, the USOC had to replace more than $16 million and as much as $20 million in annual revenue. Additional losses in revenue occurred, too. For example, Anheuser-Busch agreed to return as a sponsor, but it lowered the level of its commitment (Macur, 2009; Pells, 2009).

As the economy began to recover, the USOC added BP, Procter & Gamble, and Deloitte as sponsors prior to the 2010 Vancouver Olympics, thereby offsetting some of the earlier losses (Mickle, 2010). By the 2012 Summer Olympic Games, as the effects of the Great Recession waned, the USOC added new sponsors Kellogg’s and DeVry through 2016 and renewed BP and Nike. Combined, these sponsorship agreements were worth $38.8 million (Mickle, 2012). Chobani, Budweiser, and AT&T also renewed their agreements. In all, the USOC has 26 domestic sponsors.

Collegiate athletics

College athletics has also been significantly affected by changing economic conditions. For example, as the economy expanded during the late 1980s and through the 1990s, Stanford University built its athletic department endowment to over $500 million. In 2008, when the financial markets collapsed, Stanford saw the size of the endowment shrink 20% to 30%. As a result, the university eliminated 21 athletic department staff positions and reduced the department’s budget by $7 million.

Stanford was not alone in cutting sports during the latest recession. Prior to the 2009/2010 academic year, 30 NCAA schools did so, as well. The University of Washington eliminated men’s and women’s swimming, and the Massachusetts Institute of Technology cut eight teams. Although the University of Cincinnati did not drop programs, it eliminated scholarship funding for three men’s sports teams.

One aspect of college sports that did not appear to have been affected by the recession was coaching salaries. From 2007 to 2014, men’s head basketball coaching salaries increased 102%, increasing 93% for head football coaches. Even coaches of smaller teams saw increases in pay. Tennis coaches, for example, saw
their pay increase 20% over the same period (McGregor, 2014). Despite the overall increases in salary, not all coaches were unaffected by the economy. In 2009, for example, coaches from Arizona State University, the University of Arizona, Clemson University, and the University of Wisconsin took unpaid furloughs (Schlabach, 2009).

Some observers feared that economic slowdowns would further increase the disparity between the larger NCAA Division I–FBS schools and the smaller ones (Schlabach). This seemed to be the case in 2009, when not all athletic departments were affected by the downturn. Although most schools experienced a decrease in ticket revenue for 2009, larger programs were able to offset those losses. The University of Georgia expected ticket revenue for football to be down $2.5 million to $3.0 million in 2009. The university, however, had just signed an eight-year, $92.8 million marketing and media rights contract. Further, as a member of the SEC, the school received $11 million from the conference in 2009 and expected to receive an additional $6.2 million in 2010 as a result of the conference’s new television contract with CBS and ESPN. Other examples of larger schools not experiencing significant impact from economic downturns include the University of Michigan’s athletic department, which enjoyed a $9 million surplus at the end of fiscal year 2008. Also in 2008, the University of Florida was able to increase its athletic budget by $5.9 million, and the University of Texas’ football program generated $73 million in revenue during the 2008 football season (Schlabach).

For most big-time college athletic programs, the recession only temporarily slowed growth in budgets. Some colleges have used new funds to add sand volleyball teams. As a result, NCAA Divisions I–III have approved the sport for NCAA championship status. Twelve new college football teams began play in 2013, and 11 more athletic departments added teams over the following three years. Further, with the addition of the new College Football Playoff in 2014, bowl game payouts grew post-recession to just over $505 million, an increase of approximately $200 million per year. This growth was due mostly to increases in the media rights fees associated with the six bowls and national championship game belonging to the College Football Playoff (“College bowl payouts,” 2015). Finally, colleges raised a record $1.26 billion for their sports programs in 2014, the third year since 2011 that donations were above $1 billion. In 2014, 20 athletic departments raised a collective $700 million, which is just over half of the total raised during the year (Wolverton & Kambhampati, 2015).

Women’s professional sports

Women’s professional sports are extremely sensitive to changes in the economy (Kreidler, 2009). For example, after the 2008 season ended, the Houston Comets of the WNBA folded. The Comets were one of the league’s most successful franchises and one of six teams not owned by NBA-affiliated parties (see “Case Analysis: The Growth of a League” at the end of the chapter). The team’s demise created fear within the league and among its followers that NBA owners—who owned eight of the 13 teams remaining in the league at the time—would shut down teams that were not making money (or even possibly the league itself) in efforts to cut costs, as several NBA franchises were having financial difficulties. However, the only additional WNBA team to fold during the Great Recession was the Sacramento Monarchs. The Atlanta Dream was added to replace the Houston Comets, and the Detroit Shock moved to Tulsa in 2010. Overall, the WNBA lost only one franchise.

The Ladies Professional Golf Association (LPGA) also struggled during the Great Recession. The LPGA had difficulties renewing sponsorships as the recession began. This led to a decrease in the number of tour stops, from 37 events in 2008 to 29 in 2009. The financial situation became so bad that tour players removed LPGA Commissioner Carolyn Bivens from her position, replacing her with Michael Whan in January 2010. At the height of the recession, in 2010, the LPGA tour held only 24 events. As the economy improved, events were added back to the LPGA schedule, and by 2014 there were 33 tour events.

Part of the LPGA’s post-recession growth strategy was to diversify while focusing on international markets (Barragan, 2014). Of the nine events added between 2010 and 2014, four were added overseas; eight tournaments are now held in Asia. As a result of its international growth, the LPGA was able to increase its sponsorship base, adding Kia (South Korea), Sime Darby (Malaysia), Lotte (Japan/South Korea), and Swinging Skirts (Taiwan)—a non-profit organization of amateur golfers.

NASCAR

NASCAR also has proven vulnerable to changing economic conditions. Of the major North American sport leagues, NASCAR was affected the most by the Great Recession, mainly because of sponsorship losses and the impact of higher gasoline prices.

Just prior to the recession’s beginning, a top NASCAR team had to generate between $20 million and $25 million in revenues per year, of which $15 million to $20 million would come from the team’s primary
sponsors. When the economy slowed, sponsors became hard to find (Newton, 2008).

As the economy slowed and sponsor opportunities vanished toward the end of the 2007 season, Petty Enterprises, one of the best known and most historic NASCAR teams, explored the idea of merging its team with another team or selling to another team (Caraviello, 2007). The team had won 268 races between 1949 and 1999 but could no longer afford to compete. In another example, Chip Ganassi Racing shut down operation of its number 40 car during the 2008 season. The team could not find a sponsor for the car and decided to focus its efforts on its two remaining cars.

At the same time, higher gasoline costs affected NASCAR more than other leagues (Klayman, 2008). Many NASCAR fans travel long distances to see races, often traveling in recreational vehicles. High gasoline costs affected the ability of some fans to drive to the races. In 2008, the average percentage drop in ticket sales at NASCAR Sprint Cup races was in the mid–single-digit range as gas prices reached $4 per gallon.

Since the recession ended, Sprint Cup sponsorship has grown slowly, while the cost of fielding a competitive team has remained in the $20 million to $25 million range (Ryan, 2014). However, attendance and television ratings have yet to rebound to pre-recession levels (Pockrass, 2014). NASCAR’s biggest challenge moving forward is finding a new sponsor for its premiere series. After the 2016 season, Sprint will be leaving as the title sponsor of the NASCAR Sprint Cup Series. NASCAR will be looking for a sponsor willing to spend between $70 million and $75 million annually.

**Television Revenue**

Another important factor in sport finance is television revenue. It is a guaranteed form of revenue, with long-term contracts in place between leagues, conferences, teams, and networks. Fortunately for sport teams and leagues, television revenues somewhat insulate the industry from short-term slowdowns in the economy, such as the recession of 2007–2009. For example, the NFL’s television contracts extended through the 2011 season, while MLB’s ran through 2013 and the NBA’s went through 2016 (Last, 2009). The annual values of these contracts were $1.9 billion, $696 million, and $930 million, respectively.

Post-recession, long-term contracts will likely continue to provide protection. The English Premier League (EPL) sold its British television rights for $7.8 billion for the years 2016 to 2018 (Scott, 2015). The NFL’s current contracts extend through the 2022 season, while MLB’s run through 2021, and the NBA’s extend from 2016 through 2025. The annual values of these contracts are $4.9 billion, $1.55 billion, and $2.66 billion, respectively.

These figures do not include revenues from international broadcast rights, the Internet, or satellite/cable league packages. For example, the EPL sold its U.S. rights to NBC for $250 million per year through the end of the 2015/2016 season. The NFL receives $1.5 billion per year from DirecTV for exclusive rights to NFL Sunday Ticket, a package of out-of-market Sunday games, with a contract extending through 2022. MLB, tapping new revenue streams via its various digital media platforms, is expected soon to gross $1 billion in revenues (Brown, 2015).

At the collegiate level, the SEC extended its 15-year, $2.25 billion television contract with CBS and ESPN in 2014. At the same time, it created with ESPN the SEC Network. The league’s new television package will last for 20 years and is worth $400 million annually (Glass, 2014).

Television revenues have also provided NASCAR with some insulation. Even with attendance down at tracks and ratings in decline, the league was able to sign a ten-year agreement with NBC and Fox for $8.2 billion. The contract runs through 2025 (Pockrass, 2013).

**Real Estate**

The development of real estate surrounding sport venues has become a popular means to generate additional revenue. As teams in some communities have found it more difficult to fund stadiums and arenas with public tax dollars, teams have turned to real estate development to help meet the debt service for privately financed facilities. The most successful example is L.A. Live. This development, which encompasses 27 acres surrounding the Staples Center in Los Angeles, features complementary entertainment venues, including broadcast studios, restaurants, movie theaters, music clubs, and the Grammy Museum. The Anschutz Entertainment Group owns both the development and the Staples Center, as well as the Los Angeles Kings of the NHL and a portion of the Los Angeles Lakers. Both the Kings and the Lakers play home games in the Staples Center. L.A. Live has long-term leases with ESPN, Ritz Carlton, Regal Theaters, and the Grammy Museum, to name a few (Van Riper, 2009). Other successful examples of real estate developments around sport venues include Xfinity Live! in Philadelphia, Fourth Street Live! in Louisville, and Baltimore’s Power Plant Live!

Several team-owned real estate developments struggled or were delayed during the Great Recession. The
Tampa Bay Lightning’s ownership group was to develop 5.5 acres around the arena after it purchased the franchise in 2008. During 2009, however, the team lost money after debt service and was unable to break ground on the development. The Westgate Entertainment District in Glendale, Arizona, anchored by the Gila River Arena—home to the Arizona Coyotes—lost many shops and restaurants after the recession began. The Dallas Cowboys and Texas Rangers, which shared land in Arlington, Texas, had been set to develop Glory Park—a 1.2-million-acre parcel of housing, hotels, automobile dealerships, stores, and restaurants—but during 2008 the development was put on hold, with no deadline for breaking ground. (It must be noted that the Lightning and the Rangers are both highly leveraged, with the Rangers having a debt to franchise value ratio of 66%.) As a result of the delays on Glory Park, the Cowboys carry $623 million of debt on the team’s new stadium (Van Riper).

As the economy has improved, many stalled projects are finally being completed. The Lightning have begun development of their entertainment district, the Detroit Red Wings have incorporated a stadium district in the plans for their new arena, and the New York Islanders moved to Brooklyn to participate in the Barclays Center and Pacific Park district (Baker, 2015).

Sustainability

When sustainability or sustainable development is discussed today, it is typically in relation to the “green” movement. However, sustainability and venue construction and usage have been topics of discussion in the sport industry for many years. The 1987 Brundtland Report defined sustainability as meeting today’s needs without compromising future generations’ ability to meet their own needs. In sport, the glut of sport arenas built for mega-sporting events such as the Olympics or World Cup and even the overbuilding of publicly financed arenas in metropolitan areas have been questioned.

Previously, the New York City metropolitan area had five sporting arenas, with three of the five losing money: Izod Center, Prudential Center, and Nassau Coliseum. In New Jersey, the Devils left the Izod Center for the new, publicly subsidized Prudential Center and then asked the state to demolish the Izod Center in order to eliminate competition for events from the older arena. Further, it offered $2 million for the building to be closed. Officials from New Jersey announced the closing of the facility in March 2015, after a planned performance by the Ringling Bros. and Barnum & Bailey Circus (Sherman, 2015). The Izod Center, run by the New Jersey Sports and Exposition Authority, was also the home of the Nets. The Devils attempted to convince the Nets to move with them to the Prudential Center, in hopes that the newer arena would host more events and become profitable. However, the Nets moved to the new Barclays Center in Brooklyn. Meanwhile, Madison Square Garden underwent a $1 billion renovation, and the New York Islanders decided to leave the Nassau Coliseum for Brooklyn. When all five arenas were in operation, there were 100,000 seats to fill on a nightly basis within a 30-mile radius—not including the remaining stadiums and the performing arts complexes and theaters operating in the area (Bagli, 2009). Of the arenas still operating, Madison Square Garden has three anchor tenants, Barclays Center two, Prudential Center one, and Nassau Coliseum none. With an estimated 200 event dates needed per year to produce a profit, these four arenas are expected to struggle financially as they compete for event dates with each other. The Izod Center, the first casualty of the competition, lost both of its anchor tenants and saw the number of concerts held at the venue fall to eight to ten per year, down from 18 to 24 before Barclays and Prudential opened (Sherman).

Many other cities have experienced similar problems with sustainable development, though on a much smaller scale than New York’s. Glendale, Arizona’s Gila River Arena is losing money and must compete for events with Phoenix’s US Airways Center and Arizona State’s on-campus Wells Fargo Arena. In Minnesota, the Target Center, owned by the City of Minneapolis, competes directly with the Xcel Energy Center in St. Paul, a publicly subsidized facility. Both facilities have lost money in the past. Finally, in Columbus, Ohio, the NHL’s Blue Jackets sold money-losing Nationwide Arena to the Franklin County Convention Facilities Authority in 2012 for $42.5 million (Caruso, 2012). Nationwide Arena competes for events with Ohio State’s Schottenstein Center (Bagli).

Questions regarding the sustainable development of venues have also been raised in connection with Olympic sport. The Chinese government spent $43 billion on the 2008 Summer Olympic Games; however, many of the venues constructed for the Games proved to be too big and too expensive for the ongoing hosting of events. The National Stadium (Bird’s Nest) had only one event scheduled in 2009 and since that time has been used for little more than venue tours. With no anchor tenant, maintenance costs still amount to $11 million per year (Weissmann, 2012). The facility’s operators have tried to generate some revenue by erecting a snow park on the infield and creating a Segway racetrack. A baseball stadium that opened in spring 2008 has already been demolished.

According to Matheson (2008), the Olympics became an economic disaster for the Chinese, as sport-related
infrastructure projects led to little long-term economic growth. Improvements to airports, highways, and transit systems that were needed during the Games will provide long-term benefits, but the sports infrastructure cannot easily be converted to other uses.

Beijing is not alone in experiencing losses from unused facilities constructed for hosting specific international events and their attendees. Of the ten new stadiums built in South Korea to host the 2002 World Cup, most are unused today. Montreal finished paying for its Olympic Stadium 30 years after hosting the 1976 Games. The facility was largely unused when debt obligations were finally met. Full-service hotels in Lillehammer, Norway, built to handle the influx of visitors for the Games, struggled after the 1994 Winter Olympics. Forty percent had gone bankrupt a few years after the Games ended.

Politics

Since Federal Baseball (1922), the case in which the U.S. Supreme Court held that MLB is not subject to the Sherman Antitrust Act, sport and government have been intertwined. Changes in the nation’s political climate can have a significant impact on the industry. NASCAR, for example, benefited from its relationship with several members of Congress after Congress passed the financial services bailout bill in 2008. The bill included language that classified motorsports facilities as “amusement parks and other entertainment complexes.” Hence, track owners could depreciate the cost of new fixed assets over a 7-year period rather than a 15-year period, and taxes paid by track owners would be reduced in the years immediately following the capital expenditures (“Bailout Bill Includes,” 2008).

Changes to the depreciation schedule positively affected NASCAR. However, some potential laws debated in Congress could have a devastating impact on the sport industry. Important examples are legislative proposals relating to corporate sponsorships, the regulation of the cable industry, and changes to U.S. tax law.

Proposed legislation affecting corporate sponsorships

Former Senator John Kerry proposed the TARP Taxpayer Protection and Corporate Responsibility Act early in 2009 after celebrity website TMZ posted a story questioning the use of taxpayer funds at the Northern Trust Open (Newport, 2009). The Act would have prevented any Troubled Asset Relief Program (TARP) recipient from hosting, sponsoring, or paying for entertainment events unless the company receives a waiver from the Treasury Secretary (“Secretary of Golf,” 2009). The TMZ story stated that Northern Trust, recipient of $1.6 billion from TARP, held lavish parties, fancy dinners, and concerts with famous singers. Soon after publication of this story, former Representative Barney Frank sent a letter to Northern Trust, co-signed by 17 additional representatives, demanding that the company return the $1.6 billion. Columnists across the political spectrum, including Maureen Dowd and Bill O’Reilly, joined in the criticism (Newport). Ignored in the storm of criticism were the business benefits that the sponsorship brought to Northern Trust, such as providing access to decision makers in business, reaching potential new customers, and increasing the firm’s visibility.

Soon after the TMZ publication, Morgan Stanley, recipient of $10 billion in TARP funds, and Wells Fargo, recipient of $25 billion, announced changes to their golf sponsorships. Morgan Stanley decided to remain a sponsor of the Memorial Golf Tournament, but company executives did not entertain clients at the event. Wells Fargo, owner of Wachovia, reduced its presence at the Wachovia Championships held outside Charlotte, North Carolina, and temporarily renamed the tournament the Championship at Quail Hollow (Newport).

When this legislation was proposed, the banking industry was spending $900 million per year on sports sponsorship rights fees and $122.3 million annually on sports advertising. Although Congress did not pass legislation restricting sponsorship spending, the impact of the outcry in Congress was damaging. Similar complaints relating to “extravagant” spending by TARP recipients decimated the Las Vegas economy. Shortly after Barney Frank criticized Northern Trust, Wells Fargo, Citigroup, and US Bancorp canceled events, including employee events, in Las Vegas to avoid drawing attention from Congress. Even though studies have shown that there are benefits to employee reward programs, banks backed off the programs and either canceled them or moved events from destination locations such as Las Vegas to lower-profile cities, such as Cleveland or St. Louis (Nicklaus, 2009).

While legislation to restrict sponsorship spending was being proposed and financial institutions were being criticized for their “extravagant” sponsorship spending, the sport industry did little to support its partners (Lefton & Mickle, 2009). The sport industry must provide better support to its corporate backers or potentially face major losses of revenue. This happened to the hospitality industry in Las Vegas. There, the impact resulting from Congress’s actions was staggering. During the first 90 days of 2009, 340 events were cancelled, costing the local economy $131.6 million in non-gambling spending. Contributing to the pullout from Las Vegas was a statement by President Obama that companies should not go to Las Vegas on the
taxpayer dime (Spillman, 2009). Although sport sponsorship revenue is somewhat protected by the long-term nature of many sponsorship contracts, Lefton and Mickel argue that the sport industry must be proactive to protect the billions per year in sponsorship rights fee revenue that teams and leagues receive.

**Proposed legislation related to the cable television industry**

Legislation restricting sponsorship would certainly affect the sport industry negatively, but changes to the regulation of the cable television industry could have even more profound consequences. In 2004, Congressman Nathan Deal introduced the Video Programming Choice and Decency Act of 2004. This Act’s purpose was the reregulation of the cable television industry. Under Deal’s proposal, consumers would be guaranteed the choice of purchasing individual cable channels (à la carte pricing) rather than being forced to purchase a bundled package of channels. Supporting Deal and calling for change were the Concerned Women for America, the Parents Television Council, the Consumers Union, and the Consumer Federation of America (Weiner, 2009).

Since the 1984 Cable TV Act, cable companies have determined which channels are included in a bundle of packages (Weiner). The cable companies pay the cable channels based on the number of subscribers to a bundled package. Rates are set in negotiations between the channel and the cable company. As demand for a channel increases, the channel’s owner can charge the cable company more. For example, in 2014 ESPN charged cable and satellite operators an average of $6.04 per month per subscriber. This does not include the cost for ESPN2, the eighth most expensive cable channel, at $0.74 per month. It is estimated that by 2018 the cost for ESPN alone will be $8.38 per month (Molla, 2014). ESPN uses this subscription revenue to outbid leading sport programming competitors for the best sport properties. Terrestrial networks (as opposed to satellite or cable) CBS, Fox, and NBC must rely solely on revenues from advertisers. ESPN was able to outbid Fox by $100 million for the rights to carry the Bowl Championship Series (BCS) from 2011 to 2014 (Sandomir, 2008). The cable network then, in an exclusive negotiating window, agreed to pay $5.64 billion to broadcast the College Football Playoff (CFP) from 2014 through 2025 (Hinnen, 2012).

If Congress reregulates cable and allows consumers to choose channels on an individual basis, the potential impact on ESPN’s business model is unknown. Of the close to 100 million subscribers who receive the channel as part of a basic cable package, how many would be willing to pay for the channel if given the choice? If only half pay for the channel, how much would ESPN have to raise the subscription price to offset the loss in subscribers? Then, if the rate increases, how many additional consumers would decide not to pay the higher monthly rate for ESPN?

Television, ticketing, and sponsorships are the main revenue sources for many sport organizations. A legislative change to the business model of cable television might have a profound impact on the television revenue of all sport organizations. Consider that ESPN currently owns or shares the rights to Monday Night Football, the College Football Playoff, various collegiate properties, MLS, MLB, portions of three tennis majors, and golf’s Masters Tournament and British Open. If ESPN’s business model changes, the possible impact on rights fees is unknown— but if ESPN loses revenue and the ability to outbid competitors, the impact on the sport industry could be significant.

Senator John McCain has been supporting legislation that would allow consumers to select their cable channels à la carte (Ozanian, 2013). The Television Consumer Freedom Act was designed to lower cable costs so consumers who did not wish to purchase high-cost sport channels could choose not to. That bill did not pass. Congress, however, began discussing an overhaul of communications law in 2015, possibly including a move to à la carte pricing. More recently, Canada mandated à la carte pricing beginning in 2016 (D’Alessandro, 2015). The Canadian Radio-television and Telecommunications Commission ruled that, beginning in December 2016, satellite and cable providers must allow consumers to purchase a basic package of channels and then allow them to choose additional channels à la carte. The basic service would include local and educational channels and cost no more than $20 per month. Consumers would then be able to choose from individual channels or bundles containing a few channels.

**Changes to tax law**

Several potential changes to tax law could affect the sport industry in the United States. President Obama has proposed the elimination of the use of tax-exempt bonds to finance professional sport arenas and stadium construction. Part of his 2016 budget, the President’s proposal would save taxpayers an estimated $146 million (Povich, 2015). Congress, of course, has the final say. In the past 25 years, 22 NFL teams have played in venues built or renovated with tax-free bonds. An additional 64 teams across the NBA, MLB, and NHL currently play in stadiums or arenas financed in the same manner. It is estimated that tax-free subsidies for these venues have cost taxpayers $4 billion since 1986. If the tax subsidies were eliminated, the cost of
borrowing would increase, and the cost of building new venues would increase, as well (see Chapters 3, 7, and 9).

Another provision in President Obama’s budget proposal would eliminate the tax break that college sport ticket holders receive (Collins & Rubin, 2015). Currently, fans who pay a donation to receive tickets to a college sporting event can deduct 80% of the donation on their federal tax return. These donations are usually made to the athletic support group (ASG) and the university (see Chapter 14). In his budget proposal, President Obama estimated that the elimination of the deduction would generate $2.5 billion over the next ten years in higher taxes.

Since 2001, the so-called jock tax has been applied in more and more jurisdictions (see Chapter 15). When Michael Jordan won his first NBA Championship in Los Angeles, the California Franchise Tax Board notified Jordan that he would owe state income taxes for the days he spent in California playing in the finals. The State of Illinois then created its own tax, known as “Michael Jordan’s Revenge,” taxing athletes who live in other states but play games in Illinois. The practice of taxing athletes who live out of state but play within the state grew. It has been estimated that in 2012, professional athletes playing in California contributed $216.8 million in tax revenues for the state (Cicalese, 2015).

Changes in tax law are often instituted to facilitate changes in the way industries conduct business. Current tax law in the United Kingdom, for example, may limit the further globalization of sport, as it may limit the continued expansion of the NFL, NHL, and NBA into London if it is not changed. The NFL, for example, has played games in London consistently since 2007 and may be considering relocating a team to that city. Under the U.K.’s tax code, non-resident athletes can be taxed not only on the salary they earn while playing in London but also on their worldwide endorsement income. Typically, endorsement income is taxed only in the athlete’s home country, but both the United Kingdom and the United States tax the total endorsement income of any athlete who plays on their soil.

In the United Kingdom, non-resident athletes are taxed on endorsement income based on the ratio of the number of days spent training and competing in the country versus the number of days spent training and competing outside the country. The tax rate on this income could reach as high as 45% (the United Kingdom’s maximum tax rate in 2015). Currently, NFL players who compete in only one game in London are not greatly affected, and they can take a foreign tax credit on their U.S. income tax return for any taxes withheld by the United Kingdom.

If the NFL were to move a team to London, the amount of tax owed by players on that team would become a significant issue. With 8 to 12 games being played by the team in London, about half of a player’s salary could be taxed at the United Kingdom’s maximum rate of 45%. In the United States, the maximum tax rate in 2015 was 39.6%. Since the foreign tax credit benefit is limited to the income tax filer’s U.S. tax rate, a player whose team is based in London would pay more in taxes than a player whose team is based in the United States. Nitti (2012) provides an example of how a player would be affected, using maximum tax rates of 50% in the United Kingdom and 30% in the United States. Suppose Player X earns $8 million in salary with his London-based team, and $5 million of his salary is earned in the United Kingdom. In the United Kingdom, as a non-resident player he will be taxed at 50% and owe $2.5 million. In the United States, as a U.S. citizen he will owe federal tax at 30% on the full $8 million he earned. His U.S. tax bill would be $2.4 million. His foreign tax credit is limited to the $5 million he earned in the United Kingdom multiplied by his U.S. tax rate of 30%, or $1.5 million. Therefore, Player X would pay $900,000 to the United States ($2.4 million-$1.5 million) and $2.5 million to the United Kingdom, for a total of $3.4 million and an effective tax rate of 42.5%. Therefore, according to laws in place in 2012, he would pay $1 million more in taxes than a player who earned $8 million playing for a United States-based team. Add to this the fact that any endorsement income the player earned would be allocated to his U.K. earnings, according to the method previously discussed. For a London-based team in a league with a hard salary cap, it might be difficult to attract talented free agents, as the tax difference would reduce their net incomes significantly.
CONCLUSION

The sport industry is large and diverse, with many factors that affect financial management within the industry. Financial managers strive to maximize wealth by forecasting revenues, planning for expenses, arranging financing, and making investment decisions. However, a team owner’s objective might not be to maximize wealth. Goals other than wealth maximization have resulted in salary constraints, revenue sharing, and other control mechanisms under which financial managers in the industry must function.

In addition to debt and equity financing, sport organizations rely on retained earnings, government financing, and gift financing. These forms of financing will be used to varying degrees depending on the subsector of the industry in which the organization functions. The ownership structure of a team and the structure of the league will also affect financing decisions.

Growth in the sport industry is linked to the performance of the economy as a whole. Newer leagues are more likely to be affected by sudden changes in the economy, as are organizations without long-term guaranteed forms of revenue. Teams often attempt to bolster revenues through initiatives such as real estate development. Such initiatives, however, may further increase teams’ exposure to changes in the economy. Financial managers in sport must be aware of factors that might affect the operation of their organization and must be proactive to protect valuable sources of revenue.

concept CHECK

1. What are the five forms of financing, and how is each used within sport?
2. What is financial management? How does financial management differ in the sport industry as compared to other industries?
3. Why does the definition of the sport industry affect the calculation of its size? How should the industry be defined?
4. Which has the greater impact on financial management: the structure of a league or the structure of a team?
5. Many factors affect the economics of sport. What are some not discussed in the chapter? How do they affect financial management within the industry?
6. Why is sustainability in the sport industry linked to the green movement?
7. What legislative actions currently being considered in Congress might affect the financial management of sport?

The Growth of a League

For many years, women’s professional basketball struggled for consistency in the United States. Since 1978, when the Women’s Professional Basketball League (WBL) was formed, leagues have had difficulty surviving beyond a few seasons. The WBL lasted for only three seasons, and it was ten years before a second professional league, the Liberty Basketball Association (LBA), was launched. The LBA folded after only one exhibition game. A year later, another league was created: the Women’s World Basketball Association. Although this league was more successful than the LBA, it too folded shortly into its first season. Finally, 1996 saw the launch of the American Basketball League, and the Women’s National Basketball Association launched a year later. The ABL lasted for two and a half seasons (Jenkins, 2009). The WNBA entered its 19th season in 2015.

The WNBA began as a single-entity league in 1996, with its first season starting in June 1997. It was formed by the NBA Board of Governors and owned by the league. Since its founding, the number of franchises and the franchise locations have fluctuated. The league’s first 16 players were dispersed to the inaugural eight teams, and the rest of the players were selected by the teams via a draft (“History of the WNBA,” 2015). The Women’s National Basketball Players Association (WNBPA) was formed soon thereafter and negotiated its first collective bargaining agreement (CBA) with the WNBA in 1999. This was the first CBA in women’s professional sports. Under this CBA, rookie minimum salary increased by 75%, and veteran minimum salary doubled. Year-round health coverage and a retirement plan were provided. Contracts became guaranteed, and players earned a collective share of league licensing income (“About the WNBPA,” 2015).

The WNBA introduced a draft lottery in 2001, and in 2003 the league and the WNBPA signed a new
CBA. This CBA created the first free agency system in women’s sports (“About the WNBPA”). The most significant change during this time frame, however, was the NBA Board of Governors’ vote to allow individual team ownership, moving the league from a single-entity model to a distributed club ownership model. Further, teams could be owned by non-NBA owners and could be located in non-NBA markets. On January 28, 2003, the Mohegan Tribe, located in Connecticut, became the first non-NBA owner in league history when it was awarded the Orlando Miracle franchise (“WNBA’s Greatest Moments,” 2015).

In 2005, the Chicago Sky became the second WNBA franchise to be owned and run by a non-NBA entity (the team’s first season was 2006), and the Washington Mystics were transferred from Wizards owner Abe Pollin to Lincoln Holdings, LLC (“WNBA’s Greatest Moments”). Sheila Johnson then became the first female owner in the league. The Los Angeles Sparks became independently owned in 2006, as did the Houston Comets in 2007, although the Comets folded prior to the 2009 season. The sixth independently owned team was the expansion team Atlanta Dream, which began play in 2008 (“WNBA Expands,” 2007). The Tulsa Shock became independently owned, as well, when they relocated from Detroit.

The league also began to move toward profitability. Its first television agreement under which it would receive a rights fee was an eight-year agreement (2009–2016) signed with ABC, ESPN, and ESPN2. Teams including the Phoenix Mercury and Los Angeles Sparks sold sponsorship rights to their uniforms, with LifeLock appearing on Phoenix’s uniform and Farmers Insurance on the Sparks’ uniform.

In 2008, as the league continued to move away from its single-entity status and closer to profitability, the third CBA was signed. This six-year agreement set the WNBA salary cap at $803,000 per team in 2009 and increased it to $900,000 by 2013. For players with three-plus years of WNBA experience, the minimum salary was $51,000. The maximum salary for a player with six or more years was $99,500. Rookies received a minimum of $35,190 (Women’s National, 2008). After the 2009 season, the Sacramento Monarchs folded, and the league has played with 12 teams since then. Seven of the 12 are owned by entities outside the NBA.

The fourth CBA was signed in 2014 and continues through 2021. This CBA added a 12th roster spot to each team. Maximum salary was set at $107,000 in 2014 and increases during the term of the CBA. The minimum salary was set at $37,950, with veterans with over three years’ experience receiving a minimum of $50,000. A soft salary cap of $750,000 per team was set. Teams can exceed the cap by 4% (“WNBA salaries 2015,” 2015).

The league’s viability is still a subject of concern. The Sparks lost money each year after the team was purchased from the league in 2006. The team was scheduled to lose more than $1 million in 2014, when it was put up for sale. Magic Johnson purchased the team after it had been on the market for two months (D’Hippolito, 2014?). After the 2014 season, the WNBA expected six teams to be profitable.

Case questions

1. Why was the WNBA structured as a single-entity league when it was founded? What advantages and disadvantages did the structure provide to the league?
2. What impact did the first CBA have on the WNBA, and how did each of the CBAs affect the league’s profitability?
3. What factors have caused the WNBA to move away from the single-entity structure?
4. For new leagues, why is the single-entity structure appealing? At some point, do start-up leagues have to move away from this structure? Why or why not?

References

Notes

* The authors used data from the U.S. Census Bureau’s Economic Census to develop their estimate of industry size. Unfortunately, the Economic Census is conducted only every five years, and the data available were collected in 2012. The full report on the size of the industry will not be released until 2016. Until that time, Milano and Chelladurai’s is the best estimate of industry size in the United States.

* Congress has estimated that the NFL’s move to for-profit status will generate an additional $10 million annually in tax revenue.
KEY CONCEPTS

accounts receivable
accrual basis accounting
acid-test ratio
assets
balance sheet
cash basis accounting
contingent liabilities
cost of goods sold (COGS)
credits
current liabilities
current ratio
debits
debt ratio
double-entry bookkeeping
earnings before interest and taxes (EBIT)
expenses
fiscal year
generally accepted accounting principles (GAAP)
income statement
interest coverage ratio
inventory turnover ratio
leverage
liabilities
liquidity
long-term liabilities
market value
net profit margin ratio
owners’ equity
price-to-earnings ratio (P/E ratio)
quick ratio
return on equity ratio
revenues
statement of cash flows
T-accounts
total asset turnover ratio
The 2003 publication of *Moneyball: The Art of Winning an Unfair Game* popularized the use of objective, evidence-based decision making in the sport industry. Michael Lewis’s book details the inner workings of the front office of the Oakland Athletics baseball club and how Athletics General Manager Billy Beane and his staff used objective data and statistical analysis to gain a competitive advantage over other Major League Baseball teams, most of which could afford to outspend the Athletics dramatically for talent.

For the sport industry, as in other industries, the use of analytics and objective decision making in financial analysis is vital. Just as baseball general managers use analytical tools—such as on-base plus slugging percentage (OPS), value over replacement player (VORP), and wins above replacement player (WAR or WARP; see Chapter 15)—to scrutinize players’ production and value objectively, financial analysts use accounting data, summarized in documents such as balance sheets and income statements, to compute metrics that allow them to examine the financial strength and performance of an organization. The results of this type of financial analysis provide insights to a variety of the organization’s stakeholders, including its management, customers, current and potential investors, lenders, and suppliers. Each of these stakeholders may be concerned with the past, present, and likely future financial performance and status of the organization. Just as a baseball executive is disadvantaged by not fully understanding objective statistical analysis (as described in *Moneyball*), so too is a manager in the sport industry who does not grasp the tools of financial analysis.

This chapter will provide a foundation for understanding financial analysis. It focuses first on a brief primer regarding standard accounting principles and double-entry bookkeeping. Second, this chapter introduces financial statements, such as the balance sheet, that use accounting data to provide a summary of financial performance. The final portion of the chapter focuses on the computation of financial ratios that provide objective interpretations of the data provided by key financial statements.
Most business organizations, including those in the sport industry, utilize a system of accounting known as double-entry bookkeeping. As its name suggests, this system requires that every entry on an account have a corresponding entry to a different account. Double-entry bookkeeping is required under generally accepted accounting principles (GAAP), which is a standard set of guidelines and procedures for financial reporting. This section will briefly explain the use of T-accounts and double-entry bookkeeping, in order to provide the background necessary to understand financial statements and ratios.

During startup, an organization creates a chart of accounts, which specifies the individual accounts to which its financial transactions will be recorded. The major types of accounts are liability accounts, for legal debts or obligations; equity accounts, to track funds contributed by the owner plus retained earnings or losses; asset accounts, for funds or items (such as real estate) that the organization possesses; and expense accounts, to track money that is spent in the course of operating the organization.

To record financial transactions and track the organization’s revenues and expenses, accountants historically have used T-accounts. Today, large organizations often rely on industry-specific accounting information systems, and small companies use computer software (such as QuickBooks) to create entries to accounts that are then used in the automatic generation of financial statements. Though computerized software is available and has simplified the accounting process, an understanding of T-accounts will aid a manager’s comprehension of double-entry bookkeeping and balance sheets, income statements, and statements of cash flows, which are discussed later in this chapter.

A T-account is created on a ledger. Credits reflect increases to liability or equity accounts, and they are entered on the right-hand side of the ledger. Debits show increases to asset or expense accounts, and these are entered on the left-hand side of the ledger (see Exhibit 2.1). The “T” suggests the division of the ledger page into right- and left-hand columns. In the past, the ledger page was an actual sheet of paper on which figures were written by hand; now, financial data are stored in a database, but some software packages still display the numbers in a form that resembles a ledger page.

In double-entry bookkeeping, any entry on one account—for example, a debit in an organization’s cash account—must be accompanied by a corresponding simultaneous entry in another account, so that the net result across the accounts is zero. In other words, the accounts must balance. See Sidebar 2.A.
FINANCIAL STATEMENTS

Just as a general manager or coach/manager reviews statistical records in order to evaluate the performance of a sports team, the manager of a business organization examines data to evaluate the organization’s financial health and performance. The primary source of this type of data is the company’s financial statements. Financial statements are the equivalent of box scores or statistics sheets, allowing managers to assess the organization’s financial status.

The three basic financial statements are the balance sheet, the income statement, and the statement of cash flows. Each of these is examined in this chapter. These financial statements are constructed from the organization’s accounting records. Their preparation typically follows generally accepted accounting principles, or GAAP, as mentioned earlier.

Publicly traded companies—those whose stock is traded on one of the many stock exchanges that exist in the United States (such as the New York Stock Exchange [NYSE] and National Association of Securities Dealers Automated Quotations [NASDAQ]) and internationally (such as the Toronto, London, and Tokyo stock exchanges)—are required to release their financial statements to the public regularly. Public companies in the United States release annual reports to the Securities and Exchange Commission (SEC) through a Form 10-K. These reports, which can also include information about a company’s history, products, market segment, research and development, and subsidiary activities, are widely available online through companies’ websites, as well as through resources such as Yahoo Finance and the SEC’s EDGAR database. As with publicly traded companies, non-profit philanthropic organizations are also required to provide their financial statements on a regular basis and make them available to the public. This rule applies to collegiate athletic departments in the United States, as we will discuss in Chapter 14. Private firms, including the vast majority of North American professional sport organizations, are generally not required to disclose financial statements or other related information to the public.

EXHIBIT 2.1 The effects of debits and credits on the various account types.

<table>
<thead>
<tr>
<th>ACCOUNT TYPE</th>
<th>DEBIT THE ACCOUNT FOR</th>
<th>CREDIT THE ACCOUNT FOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset</td>
<td>Increases +</td>
<td>Decreases −</td>
</tr>
<tr>
<td>Expense</td>
<td>Increases +</td>
<td>Decreases −</td>
</tr>
<tr>
<td>Revenue</td>
<td>Decreases −</td>
<td>Increases +</td>
</tr>
<tr>
<td>Liability</td>
<td>Decreases −</td>
<td>Increases +</td>
</tr>
<tr>
<td>Equity</td>
<td>Decreases −</td>
<td>Increases +</td>
</tr>
</tbody>
</table>
Understanding double-entry bookkeeping through a tennis club’s T-accounts

To understand how double-entry bookkeeping and T-accounts work, let’s examine transactions for a tennis club by looking at the T-account form shown in (A).

(A)  

<table>
<thead>
<tr>
<th>T-account</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>Every month, the club mails a monthly membership bill to one of the club’s members, Customer A. The monthly membership fee is $200. This bill constitutes a transaction, which is recorded as a debit, or increase, in the tennis club’s accounts receivable account. The accounts receivable account reflects money owed to the club by its customers for services or products provided on credit (meaning a promise to pay within a defined period of time). Accounts receivable appears as a short-term asset on the tennis club’s balance sheet, as will be explained later in the chapter when we discuss financial statements. The second entry to be made for this transaction is a credit, representing an increase, in the membership revenue account. This account will appear on the club’s income statement, also to be discussed later in this chapter. This first transaction (marked 1) is shown in T-account form (B).</td>
<td></td>
</tr>
<tr>
<td>(1) $200</td>
<td></td>
</tr>
</tbody>
</table>

(B)  

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>(1) $200</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Membership Revenue</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td></td>
<td>(1) $200</td>
</tr>
</tbody>
</table>

The club also has a cash account (or bank account), which is an asset account. Form (C) presents the T-account for cash.

(C)  

<table>
<thead>
<tr>
<th>Cash</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>$5,000</td>
<td></td>
</tr>
</tbody>
</table>

The cash account shown in (C) is the current balance of the account, indicating that the tennis club currently has $5,000 cash in the bank—probably in a checking account. If Customer A writes a check to the tennis club to pay her $200 monthly membership fee, this transaction (marked 2) is recorded in the T-accounts as shown in (D).

(D)  

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>(1) $200</td>
<td>(2) $200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cash</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
<td><strong>Credits</strong></td>
</tr>
<tr>
<td>$5,000</td>
<td>(2) $200</td>
</tr>
</tbody>
</table>

The club’s accounts receivable account is credited with $200, as Customer A has now paid her bill and no longer owes that amount to the club. The accounts receivable account now has a zero balance, reflecting the fact that nothing is currently owed to the club. The club’s cash account is debited $200 (an increase), as the amount that Customer A paid is deposited in the checking account. At the end of the financial reporting period (monthly for many organizations), the T-account entries are finalized and
financial reports are prepared. These reports provide each account’s end-of-period total, as shown in (E).

(E)

<table>
<thead>
<tr>
<th>Membership Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
</tr>
<tr>
<td>(1) $200</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Accounts Receivable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Debits</strong></td>
</tr>
<tr>
<td>$0</td>
</tr>
</tbody>
</table>

| Cash |
| **Debits** | **Credits** |
| $5,200 |

The T-accounts show that the tennis club has generated $200 in membership revenue, which will be reflected on the club’s income statement. Accounts receivable has a zero balance, as discussed previously. Finally, the cash account grows to $5,200, and this will be reflected on the club’s balance sheet.

This example and the information it conveys provide an extremely basic illustration of accounting principles and double-entry bookkeeping. Further accounting background, including courses and readings, is essential for individuals who intend to work in the financial operations of sport organizations, but this material is beyond the scope of this text.

To illustrate concepts relating to financial statements, as well as other concepts discussed in this chapter, we will examine financial statements for Under Armour, a Baltimore-based apparel company perhaps best known for its performance sportswear. Under Armour is a publicly held corporation whose stock is traded on the New York Stock Exchange. As such, Under Armour is required to release its financial data to the public on both a quarterly and an annual basis. We will present the company’s financial statements from its 2014 annual report. The statements are keyed and will be discussed throughout the chapter.

<table>
<thead>
<tr>
<th>SIDE BAR 2.B</th>
</tr>
</thead>
</table>
Publicly traded companies in the sport industry

Shares of stock in dozens of sport industry organizations are available for trade on various stock exchanges, including both well-known exchanges, such as the NYSE and NASDAQ, and smaller ones, such as the American Stock Exchange (AMEX). Examples of publicly traded sport organizations include sports apparel and sporting goods companies such as Nike, Reebok, and Callaway Golf; media companies, including Walt Disney (which owns ESPN), The Madison Square Garden Company (MSG), and Comcast; and motorsports companies such as International Speedway Corp. and Speedway Motorsports, each of which owns and operates NASCAR racetracks. Not represented among publicly traded companies are professional sport franchises. Currently, no major North American professional team is a publicly traded corporation, although some teams are subsidiaries, or parts, of publicly traded corporations. In the 1980s and '90s, certain franchises—such as the Boston Celtics, Florida Panthers, and Cleveland Indians—sold stock through major exchanges; however, each of those teams has since privatized its ownership.

The Balance Sheet

The balance sheet is a picture or snapshot of the financial condition of an organization at a specific point in time. The balance sheet is unique among the financial statements in that it represents the organization’s financial condition on the date on which it is prepared (thus the reference to a snapshot or picture), whereas the other two financial statements reflect the organization’s financial performance over a period of time.

The balance sheet is organized in three primary sections: assets, liabilities, and owners’ equity. A company’s assets are what it owns including items such as cash, inventory, and accounts receivable, or the money a company is owed by customers. Liabilities are the organization’s financial obligations or debts owed to others. Owners’ equity, which is also referred to as shareholders’ equity or stockholders’ equity, is an estimated measure of the ownership value of the company; it includes paid-in capital and retained earnings (see Exhibit 2.2).

On the balance sheet owners’ equity is equal to the company’s assets minus its liabilities. Stated differently, the balance sheet is always truly “in balance” as the assets—the first half of the statement—must equal the total of the liabilities and owners’ equity—the second half of the balance sheet. This balance is assured through the use under GAAP of double-entry bookkeeping where each transaction is entered or recorded twice once on the debit side of the accounting records and once on the credit side as discussed earlier in this chapter. Hence the balance sheet can be viewed through the lens of T-accounts as shown below where assets are listed on the debit (left) side of the T, while liabilities and owners’ equity are listed on the credit (right) side.

EXHIBIT 2.2 Under Armour balance sheet.
The result of this accounting system is a “balanced sheet,” where the sum of the organization’s assets is equal to the combined sum of its liabilities and owners’ equity. Exhibit 2.2 shows Under Armour’s balance sheet as of December 31, 2014. Note on Exhibit 2.2 that Under Armour’s assets of just over $2 billion at the end of 2014 were equal to the total of its liabilities and shareholders’ equity:
accounting, as it pertains to the income statement, is that sales made during a particular time period cannot be
incurred; they are included as expenses at the time the related goods or services are delivered. Accrual basis accounting,
partnerships are required by GAAP to follow accrual basis accounting. The limitation of cash basis accounting,
Some sole proprietorships and other businesses utilize cash basis accounting, but most corporations and
companies. For example, if Under Armour makes a major sale in fiscal year (FY) 1 but does not yet occupy
land bought decades ago would be listed as an asset on the balance sheet at the price that was paid for the land when it was
purchased, even if that land has increased in value many times since then. Second, the assets listed on the
balance sheet often do not include intangible assets, such as branding, management expertise, or product
positioning. Nike’s balance sheet, for example, does not account for the value of its brand and the “swoosh”
mark developed through countless marketing campaigns over the past 30-plus years. Under Armour does list
intangible assets, such as branding, on its balance sheet (Exhibit 2.2, 6). Intangible Assets and Goodwill on its sheet
(Exhibit 2.2, 6). Third, the balance sheet does not include contingent liabilities, debts that may or may not occur, such as the result of ongoing litigation against the
company. Contingent liabilities are frequently disclosed in a notes or footnotes section associated with the
balance sheet and other financial statements, as in the balance sheet for Under Armour (Exhibit 2.2, 6, refers
to Note 7, which shows rent due in future years from executed lease agreements for stores that the company
does not yet occupy).

If you compare Under Armour’s balance sheet in Exhibit 2.2 to that of its sports apparel rival Nike, which
appears at the end of this chapter (Exhibit 2.6), you may notice considerable differences in terminology. GAAP establishes standard procedures for accounting and the reporting of information on financial
statements, but it allows considerable flexibility for companies to report their financial data in a manner that is
appropriate for their particular business enterprise. If you find terminology in a balance sheet or another
financial statement unfamiliar or confusing, note that many of these terms and concepts will be explained
throughout this chapter.

The Income Statement

The income statement, also referred to as the statement of earnings, operating statement, or profit-and-loss
statement, shows the organization’s income over a specified period of time and is typically issued on an
annual or quarterly basis. For the specified time period, the income statement lists the organization’s revenues,
or income generated from business activities, such as the sale of goods or services, and the organization’s
expenses, or funds flowing out of the organization as costs of doing business. Exhibit 2.3 shows Under
Armour’s income statement from its 2014 annual report. When expenses are subtracted from revenues, the
resulting figure is the organization’s net income (or net loss, if expenses were greater than revenues over the
period of time). Net income is frequently referred to as profits or earnings (Exhibit 2.3, 6).

An organization’s books may be kept on a cash basis or an accrual basis, and it is important to note the
differences between these two methods and the resulting impact on the income statement. Cash basis
accounting recognizes transactions when money is either received or paid out. Accrual basis accounting,
on the other hand, accounts for income when it is earned and expenses when they are incurred, rather than when
the money is exchanged. For example, if Under Armour makes a major sale in fiscal year (FY) 1 but does not
actually receive payment until FY 2, under accrual basis accounting, the sale is included as revenue on Under
Armour’s FY 1 income statement. (A fiscal year is a 12-month period over which a company budgets its
money; it may or may not begin in January, and so the term fiscal year distinguishes it from the calendar
year.) Under cash basis accounting, the money would be included as revenue only when it is received in FY 2.
Some sole proprietorships and other businesses utilize cash basis accounting, but most corporations and
partnerships are required by GAAP to follow accrual basis accounting. The limitation of cash basis
accounting, as it pertains to the income statement, is that sales made during a particular time period cannot be

\[
\text{assets} = \text{liabilities} + \text{shareholders' equity}
\]

\[
$2,095,083,000 = \$744,783,000 + \$1,350,300,000
\]
recognized on the income statement if payment has not yet been received, even if payment is forthcoming. Under accrual basis accounting, the lag time between when a transaction is made and when payment is exchanged is acknowledged through another financial statement, the statement of cash flows, to be discussed later in this chapter.

EXHIBIT 2.3 Under Armour income statement.

![Under Armour income statement]

The birth and growth of Under Armour

The corporate history of Under Armour (UA) is not a long one, as UA started in 1996, but it is one of tremendous growth. UA founder and CEO Kevin Plank was a football player at the University of Maryland in the 1990s. Like many athletes, Plank tired of sweating through cotton t-shirts each practice and workout, and of wearing shirts that were heavy and wet as a result. In 1995, as a senior, he found a fabric similar to the skin-tight compression shorts players wore and had some shirts made from that fabric. Plank refined the shirts through trial and error, testing his product on fellow University of Maryland athletes. Plank graduated in 1996 and launched UA. The company sold 500 shirts in its first year, resulting in $17,000 in sales. UA has grown quickly since then, with sales (net revenues) of $25 million in 2001, $430 million in 2006, $1.835 billion in 2012, and $3.084 billion in 2014. In the past decade, the company has sought to make its footwear as big as its apparel business; expand its markets in Europe, Latin American, and the Asia Pacific; and diversify its consumer audience to appeal to everyone from high school athletes to deer hunters to dancers. In 2015, the company plans to establish the world’s largest digital health and fitness community by creating the Under Armour Connected Fitness platform (Under Armour, 2014).

Although it may be unlikely that UA will continue to grow at a rapid rate, the company is poised to remain a formidable competitor in the sports apparel industry for the foreseeable future.

Experts disagree about whether income statements truly reflect actual earnings or profit (Higgins, 2009; Shapiro & Balbirer, 2000). One reason why they might not is that when firms account for depreciation (the reduction in value of an asset due to age or use, discussed in Chapter 5), a number of options are available, and the approach chosen can greatly influence expenses, and thus net income or loss, on the income statement. A related issue is taxation. Accounting decisions—particularly in regard to depreciation and inventory—are frequently influenced by the goal of minimizing taxes. This can result in financial statements, especially income statements, that lack objectivity. Another issue is how the company accounts for expenditures in the areas of research and development (R&D) and advertising. These two areas represent investments in the future revenues of the company, yet they are typically accounted as expenditures when they are spent rather than in the future, when their benefits are reaped. If a company makes cuts in these areas in difficult times, the result may be an increased net income (or decreased net loss) in the short term. Such action could, however, be harmful to the long-term future of the company.

The Statement of Cash Flows

For any company to be successful in the long term, it must generate more cash than it spends, a condition known as positive cash flow. Negative cash flows may be sustainable in the short term, but few companies can survive long periods of spending more than they generate. The income statement and balance sheet, however, do not provide insight into this simple fact.

Whereas the income statement provides information about the revenues and expenses flowing into and out from an organization, the statement of cash flows tracks cash in and cash out. The ability to track cash coming into and going out of the business is of particular importance to an organization that uses accrual basis accounting. The cash flows statement provides information as to whether the company has sufficient cash on hand to meet its debts and obligations, which is not provided by the balance sheet or the income statement of firms that use accrual basis accounting. In addition to revealing differences between accrual basis accounting and cash transactions, the statement of cash flows is free from the influence of non-cash expenses, such as depreciation—unlike the income statement. On the income statement, the depreciation of an asset such as a stadium or an office building is listed as an expense, yet depreciation does not reflect any true monetary expenditure. The statement of cash flows provides a simpler examination of cash generated and spent. Exhibit 2.4 is Under Armour’s statement of cash flows from its 2014 annual report. As is evident in Exhibit 2.4, Under Armour had more cash available at the end of 2014 than at the end of 2013.

Whereas the balance sheet states the status of the company’s assets, liabilities, and equity at a single point in time, without showing trends over time, the statement of cash flows examines cash transactions over a period of time and so can provide additional context for the information in a balance sheet.

Cash flow statements are typically organized in three sections: operations, investing, and financing; these appear in Exhibit 2.4, respectively. Operations refers to the organization’s cash flows from normal business operations, such as cash flowing in from the sale of products or services, or cash flowing out to pay employees’ salaries. Investing activities include the buying and selling of fixed assets, such as the
purchase of property, *Financing* refers to the company’s debt and equity financing, such as the sale of stock or repayment of a loan.
FINANCIAL RATIOS

Just as the general manager of a baseball team can take a sheet of statistics and compute various figures, such as batting average, slugging percentage, and earned run average, in order to evaluate teams and players, a business manager can utilize accounting data provided in the financial statements discussed above in order to make similar types of analyses. For example, instead of dividing at bats by hits to find batting average, the business manager might divide net income by shareholders’/owners’ equity to calculate a metric called return on equity. The remainder of this chapter focuses on the computation and analysis of similar measures, known as financial ratios. Reasons why financial managers engage in ratio analysis include:

1. To evaluate how well a company is operating in the current time period,
2. To compare its current performance to its past performance,
3. To compare its current and historical performance to industry standards, and
4. To study the efficiency of its operations.

Financial ratios provide key information about the condition and performance of a company and are, therefore, vital for managers to understand. This chapter will focus on many of the most important and commonly used ratios. These ratios are organized into five sections based on their type: liquidity, asset management, financial leverage, profitability, and market value. Exhibit 2.5 summarizes these ratios.

EXHIBIT 2.4 Under Armour statement of cash flows.
EXHIBIT 2.5 Summary of key financial ratios.
Recall that liquidity refers to the ability to convert an asset into cash quickly. Liquidity ratios measure an organization’s ability to pay its short-term liabilities or debts with its short-term assets. A company that lacks sufficient short-term assets, such as cash, inventory, and accounts receivable, to pay off debts that are coming due in the near future may be forced to refinance its debts or borrow additional money in order to meet its financial obligations.

**Current ratio**

The most commonly used liquidity measure is the current ratio. The current ratio measures the organization’s ability to meet its current liabilities (those due within a year) with its current assets. The following formula is used to calculate the current ratio:

\[
\text{current ratio} = \frac{\text{current assets}}{\text{current liabilities}}
\]

Both current assets and current liabilities are found on the balance sheet. By using data from Exhibit 2.2, we can calculate Under Armour’s current ratio for December 31, 2014, as follows:

\[
\text{current ratio} = \frac{\$1,549,399,000}{\$421,627,000} = 3.67
\]

(We add three zeroes to each of the values from the balance sheet because the figures in Exhibit 2.2, except for stock share information, represent thousands.) The current ratio suggests that Under Armour has the ability to cover its short-term liabilities more than three times over with current assets.

In general, a higher current ratio figure is preferable, as it represents a healthy ability to cover debts with assets such as cash and accounts receivable. The higher a company’s current ratio, the less likely it is that the
company will need to convert longer-term assets into cash or borrow money to cover liabilities. It is possible, however, for a current ratio to be too high. This may represent inefficient company management that is not maximizing the use of its cash balance or that is carrying excessive inventory (Helfert, 2002; Shapiro & Balbirer, 2000). A current ratio near 2:1 is commonly viewed as a good target for many companies (Helfert). With this standard, Under Armour’s current ratio of 3.67 may be considered overly high.

It should be noted, however, that current ratio values—as well as most other financial ratios—must be evaluated in context, especially when we are using them as comparative tools. The first context in which financial ratios should be viewed is against other firms within the same industry. Before we make a judgment as to whether Under Armour’s current ratio is excessive, we should compare it to that of rival companies, such as Nike. Another important context for comparison is the company’s own history. We examine financial ratios relative to their values in previous time periods to evaluate trends in the company’s financial position.

**Quick/acid-test ratio**

Another frequently used measure of liquidity is the quick ratio, also known as the acid-test ratio. Like the current ratio, the quick ratio provides information about the organization’s ability to meet its current liabilities with current assets. The quick ratio, however, does not include inventory among current assets. If a company faces a financial emergency and needs to convert assets into cash in order to meet pending obligations, inventory is likely to be difficult to convert into cash as quickly as other assets. It may take months for a company to sell its inventory at full value, or the company may have to discount the inventory deeply to sell it rapidly. According to Higgins (2009), sellers may receive 40% or less of an inventory’s book value through a liquidation sale. Because inventory is viewed as the least liquid of a company’s current assets, the quick ratio is often useful as a more conservative alternative to the current ratio.

The quick ratio is simply a modified version of the current ratio. It is calculated as follows:

\[
\text{quick ratio} = \frac{\text{current assets} - \text{inventory}}{\text{current liabilities}}
\]

The inventory value is found on the balance sheet (Exhibit 2.2, A). Under Armour’s quick ratio for December 31, 2014, is calculated as follows:

\[
\text{quick ratio} = \frac{($1,549,399,000 - $536,714,000)}{421,627,000} = 2.40
\]

Under Armour can cover its short-term liabilities 2.40 times over with its current assets other than inventory. For an apparel company with significant inventory, this signifies that Under Armour is not overly encumbered with short-term debt and has sufficient assets to cover that debt if necessary.

**Asset Management Ratios**

How effectively a company utilizes its assets and resources to generate sales revenue is important information for business managers. All companies have a limited amount of resources. Those that are most efficient and effective in using those limited resources to produce sales are likely to be successful. Several ratios measure companies’ asset management. These ratios are also sometimes referred to as turnover ratios or activity ratios. Two of the most common are the total asset turnover ratio and the inventory turnover ratio.

**Total asset turnover ratio**

One measure of how efficiently an organization is utilizing its assets to make money is the total asset turnover ratio. This ratio requires information from both the company’s balance sheet and its income statement, in the following formula:

\[
\text{total asset turnover ratio} = \frac{\text{net sales}}{\text{average total assets}}
\]

The net sales value, sometimes labeled as net revenues, is found on the income statement (see Exhibit 2.3, A); for Under Armour in 2014, this figure was $3,084,370,000. Total assets, which includes both current assets and long-term assets, is listed on the balance sheet. To find average total assets, we average the company’s total assets at the beginning and at the end of the period of interest, often the fiscal year. For Under Armour, these asset values are given in Exhibit 2.2, B. Total assets at the end of 2014 were $2,095,083,000. The beginning-of-period total assets are assumed to be identical to total assets at the end of the previous period—in this case, December 31, 2013—which were $1,577,741,000. We average these two figures to find
the average total assets value. The entire calculation proceeds as follows:

\[
\text{total asset turnover ratio} = \frac{\$3,084,370,000}{\frac{\$2,096,083,000 + 1,577,741,000}{2}} = \frac{\$3,084,370,000}{\$1,836,412,000} = 1.65
\]

In 2014 Under Armour’s revenues exceeded assets by a considerable amount, suggesting that the company is using its assets efficiently. As with other ratios, these values should be compared to the organization’s own historical values, as well as to those of industry competitors.

**Inventory turnover ratio**

Another ratio that is useful in evaluating asset management is the inventory turnover ratio, which measures how often a company sells and replaces its inventory over a specified period of time, typically a year. For some firms, particularly those in manufacturing and retail, this is an especially important ratio, as inventory is often a large asset for these companies. A manufacturer—like Under Armour—that must sell a high volume of relatively low-priced products in order to be profitable must turn over its existing inventory frequently. If the inventory is sitting in warehouses and on shelves rather than being sold in a timely manner, it will be difficult for the company to be financially successful.

Inventory turnover ratio is calculated with the following formula:

\[
\text{inventory turnover ratio} = \frac{\text{cost of goods sold}}{\text{average inventory}}
\]

Cost of goods sold (COGS) includes those costs that are directly attributable to the production of goods or products to be sold, including raw materials and labor costs (Exhibit 2.3). Cost of goods sold, sometimes labeled cost of sales, is typically listed immediately after net sales (or net revenues), near the top of the income statement. Recall that inventory is found on the balance sheet and that we calculate average inventory by finding the average of the inventory values at the beginning and the end of the time period of interest (Exhibit 2.2).

By using data from Exhibits 2.2 and 2.3, we calculate Under Armour’s inventory turnover ratio for 2014 as follows:

\[
\text{inventory turnover ratio} = \frac{\$1,572,164,000}{\frac{\$536,714,000 + \$469,006,000}{2}} = \frac{\$1,572,164,000}{\$502,860,000} = 3.13
\]

To interpret this figure, we may say that Under Armour turned over, or sold and replenished, its inventory slightly greater than three times during 2014. Of course, in general, a higher value is preferred. Once again, note that this value is difficult to interpret without comparisons to industry competitors and the company’s own history. This particular ratio is especially industry specific. Industries in which very low-cost items are sold, such as groceries, are likely to see their inventory turn over much more rapidly than industries in which high-priced luxury items are sold, such as jewelry or yachts. Inventory turnover ratio values should reflect these differences. In the apparel industry, a common benchmark for the inventory turnover ratio is a value of four, as apparel companies often sell seasonal merchandise for the four seasons—winter, spring, summer, and fall. The value of 3.13 for Under Armour in 2014 does not quite reach this standard, although we should note that as a sports apparel company, Under Armour sells many exercise and sports apparel products that are not necessarily season specific.

**Leverage Ratios**

Leverage refers to how a company chooses to finance its operation with debt versus equity. A company that relies extensively on borrowing money to operate is considered to be heavily leveraged. Such a company faces greater risk of financial problems than one not so reliant on debt.

**Debt ratio**

\[
\text{Debt ratio} \quad = \quad \frac{\text{total liabilities}}{\text{total assets}}
\]
A useful financial leverage ratio is the debt ratio, sometimes referred to as the debt-to-assets ratio. The debt ratio is a quite simple yet telling measure of an organization’s leverage. It is calculated with the formula:

\[
\text{debt ratio} = \frac{\text{total liabilities}}{\text{total assets}}
\]

Both total liabilities and total assets are found on the balance sheet. Total assets (Exhibit 2.2) is equal to current plus long-term assets, and total liabilities (Exhibit 2.2) is equal to current plus long-term liabilities. A low debt ratio is generally preferable, as a higher value signifies heavier borrowing and increased financial risk. This ratio is unique among those presented in this chapter; with all other ratios, a higher value is preferred to a lower one. From the data in Exhibit 2.2, we calculate Under Armour’s debt ratio for December 31, 2014 as follows:

\[
\text{debt ratio} = \frac{\$744,783,000}{\$2,095,083,000} = 0.355 \text{ or } 35.5\%
\]

Under Armour’s debt was a little more than one-third of the value of its assets. Note that the debt ratio is often reported in percentage form, in this case 35.5%. Money borrowed from creditors makes up 35.5% of the value of Under Armour’s assets.

**Interest coverage ratio**

Another tool for understanding a company’s financial leverage is the interest coverage ratio, sometimes called the times interest earned ratio. As the name of this ratio implies, the interest coverage ratio measures a firm’s ability to pay the interest on its debt. Consider this on an individual level: persons who carry a debt balance on a credit card—as millions do—know that, while they might not be able to pay the full balance by the next payment due date, they must at least pay a minimum amount, which is often approximately equivalent to the interest on the balance. This concept applies at the organizational level, as well. Many companies may not be able to pay the full amount of debt owed in the short term, but a company that cannot at least pay the interest on its debt is at risk for significant financial problems. The interest coverage ratio measures a company’s ability to pay interest on debt out of income or earnings. It is calculated with the following formula:

\[
\text{interest coverage ratio} = \frac{\text{earnings before interest and taxes (EBIT)}}{\text{interest expense}}
\]

The interest coverage ratio formula involves a term that is common in financial analysis and accounting: earnings before interest and taxes (EBIT). EBIT, found on the income statement (Exhibit 2.3), is defined as follows:

\[
\text{EBIT} = \text{operating revenue} - \text{operating expenses} + \text{non-operating income}
\]

The interest expense value is also found on the income statement (Exhibit 2.3). When a company reports no non-operating income, EBIT is often used synonymously with the terms operating income or operating profit. By using data from Under Armour’s income statement (Exhibit 2.3), we calculate the company’s interest coverage ratio for 2014 as follows:

\[
\text{interest coverage ratio} = \frac{\$353,955,000}{\$5,335,000} = 66.35
\]

Note that Under Armour’s income statement labels EBIT as income from operations (Exhibit 2.3). The interest coverage ratio value of 66.35 suggests that Under Armour can cover its interest expense more than 66 times over with its earnings or operating income.

**Profitability Ratios**

A primary purpose of a for-profit business is, of course, to generate a profit. A number of financial ratios measure the profitability of a company. We will discuss two of the most useful profitability ratios: net profit margin and return on equity. These ratios evaluate the performance of the company and its management in controlling expenses and generating profit.

**Net profit margin ratio**

A widely used profitability ratio is net profit margin. The net profit margin ratio, the percentage of total sales or revenues that was net profit or income, measures the effectiveness and efficiency of the organization’s
operations. A higher value indicates that the company is efficient in its production and operations. A low net profit margin may reflect inefficient operations and poor management, as well as a company that would be at risk financially if sales were to decline. Net profit margin is calculated as follows:

\[
\text{net profit margin} = \frac{\text{net income}}{\text{sales or revenues}}
\]

Both net income (Exhibit 2.3) and sales or revenues (Exhibit 2.3) may be found on the income statement. Recall that net income is essentially the “bottom line” of the income statement itself and is traditionally listed near or at the end of the income statement. The sales or revenues value is commonly listed at the beginning of the income statement. From data in Exhibit 2.3, we calculate Under Armour’s net profit margin for 2014 as follows:

\[
\text{net profit margin} = \frac{\$208,042,000}{\$3,084,370,000} = 6.75\%
\]

Net profit margin is reported in percentage form, as it represents the percentage of sales that returned to the company’s owners in the form of profits on their capital. Under Armour’s net profit margin for 2014 was slightly less than 7%. In other words, Under Armour spent 93% of the money generated by sales in 2014 on everything from manufacturing to employee pay to advertising, while slightly less than 7% was returned to the owners as profit. Again, we must compare this value to the company’s own history and to industry competitors in order to draw valid conclusions.

**Return on equity ratio**

Another important measure of profitability is the return on equity ratio, which measures the rate of return a company’s owners or shareholders are receiving on their investment. Like net profit margin, return on equity bases a measure of efficiency on net income. The return on equity ratio, however, compares net income to shareholders’ or owners’ equity instead of to revenues. The formula is:

\[
\text{return on equity} = \frac{\text{net income}}{\text{shareholders’ or owners’ equity}}
\]

As stated earlier, net income is typically found near the end of the income statement (Exhibit 2.3). Shareholders’ or owners’ equity is found on the balance sheet (Exhibit 2.2). Under Armour’s return on equity for 2014 is calculated as follows, from data in Exhibits 2.2 and 2.3:

\[
\text{return on equity} = \frac{\$208,042,000}{\$1,350,300,000} = 15.41\%
\]

Like net profit margin, return on equity is reported in percentage form, as it represents the percentage of ownership stake or equity that the company’s owners realized as profit during a period of time. Under Armour’s return on equity for 2014 was more than 15%. To examine profitability further, some investors examine a similar measure known as return on assets, which is also sometimes referred to as return on investment. The formula for return on assets is similar to return on equity, except that total assets is used as the denominator in the calculation instead of shareholders’/owners’ equity.

**Market Value Ratios**

The final set of financial ratios that we will consider is helpful in estimating the book value of a company. The two ratios discussed in this section, market value and price-to-earnings ratio, are quick methods to estimate company’s value. Valuation is discussed further in Chapter 10.

**Market value ratio**

Perhaps the quickest method of estimating the value of a company is to find its market value according to the stock market. A company’s market value may be computed with the following formula:

\[
\text{market value} = \frac{\text{price per share of common stock}}{\text{number of outstanding shares}}
\]

Although this method for estimating a company’s worth is convenient and easy, it is not necessarily the most precise method. One notable problem is that stock prices often reflect investors’ speculation about the future potential of a company rather than its present performance (see the discussion of valuation in Chapter
To estimate the value of Under Armour, we can refer to stock information found on the company’s balance sheet in the stockholders’ equity section (Exhibit 2.2). Under Armour had 177,295,988 shares of common stock outstanding at the end of 2014. (Be careful not to add zeroes to the figures for share information. All values on Under Armour’s balance sheet are given “in thousands, except per share amounts”—this refers to stock share information.)

Stock price is not available on any of Under Armour’s financial statements. Fortunately, numerous sites on the Internet, including Under Armour’s own website, provide historical stock price data. Under Armour’s stock closed at $67.90 at the end of trading on December 31, 2014, on the New York Stock Exchange. Therefore, the market value of Under Armour on that date was:

\[
\text{market value} = 177,295,988 \text{ shares} \times \$67.90 = \$12,038,397,585.20
\]

According to the stock market, Under Armour was worth more than $12 trillion as of the end of 2014. It is highly unlikely that Under Armour’s primary investors could sell the company for that high amount, however; its high market value reflects the speculative nature of the stock market.

**Price-to-earnings ratio**

The price-to-earnings ratio, or P/E ratio, is a widely used measure of corporate performance and value, particularly among stock market investors. The P/E ratio estimates how much investors will pay for each dollar of a company’s earnings (Harrington, 2003). One of the strengths of the P/E ratio is that its scaled nature allows comparisons of the market values of companies of all sizes. The P/E ratio is calculated with the following formula:

\[
\text{price-to-earnings ratio} = \frac{\text{price per share of common stock}}{\text{earnings per share}}
\]

To calculate the P/E ratio, we must first determine earnings per share. We can do this by using the following formula:

\[
\text{earnings per share} = \frac{\text{net income}}{\text{number of outstanding shares of common stock}}
\]

Recall that net income is found on the income statement (Exhibit 2.3), and outstanding stock share information is found on the balance sheet (Exhibit 2.2). Once we have found earnings per share, we divide the stock price by earnings per share to find the P/E ratio. By using data from Exhibits 2.2 and 2.3, along with the December 31, 2014, stock price, we determine Under Armour’s P/E ratio as follows:

\[
\text{price-to-earnings ratio} = \frac{567.90}{(\$206,042,000 / 177,295,988)} = \frac{567.90}{1,173} = 57.89
\]

Under Armour’s stock price at the end of 2014 was more than 57 times the company’s earnings.

When calculating the P/E ratio, be careful in your use of the data. In this example, we multiplied the net income figure by 1,000, because the income statement gives net income in thousands. The stock share data, however, should not be multiplied by 1,000. Doing so would result in a wildly inaccurate P/E ratio value.

In general, a higher P/E ratio is preferred, but not always. A high P/E ratio can signify subpar earnings or net income, which, of course, is not desirable. Because stock price is a component of the P/E ratio formula, P/E ratio values are heavily influenced by investors’ speculation about a company’s potential for growth and success in the future, reflected in the stock price. Companies with high P/E ratio values are often perceived to have high growth potential. In this regard, a P/E ratio says as much about investors’ beliefs about the future of a company as it does about present performance (Higgins, 2009). Under Armour’s high P/E ratio may represent positive beliefs on the part of investors, but it could also signify merely that the stock is trading at an overly high value given the company’s actual financial performance.
CONCLUSION

The ability to examine, understand, and calculate financial statements and financial ratios is vital for a financial manager in the sport industry—or any industry, for that matter. Financial statements are comparable to box scores or statistical data that the manager/coach or general manager must be able to read and comprehend in order to understand the performance of players and the team. Financial ratios are analytical tools that help managers evaluate statistical data, just as a calculation tool such as earned run average or slugging percentage helps a baseball executive, or a quarterback’s passer rating helps a football executive. This chapter discussed several categories of financial ratios and provided two important examples for each category. Remember that the ratios discussed in this chapter represent just a few important and commonly used financial ratios, and many more are available to help you analyze companies’ performance. Bear in mind that financial ratios should not be examined in isolation, but rather must be compared to the company’s own historical data and to competitors’ ratios. These provide the context necessary for understanding a company’s performance and condition.

concept CHECK

1. What is a T-account and how is it utilized in double-entry bookkeeping?
2. What are the three major sections of the balance sheet? For each of these sections, provide at least one example of the items that would be found there.
3. What is the primary difference between an income statement and a statement of cash flows?
4. What is the purpose of computing financial ratios?
5. If an organization’s current ratio value is below 1.00, what might that suggest about the organization?
6. What information do leverage ratios provide?
7. Why is the price-to-earnings ratio so widely used among investors?
8. This chapter repeatedly states that financial ratios are most valuable when viewed in comparison to the organization’s historical ratio values and competitors’ values. Why is this context valuable when examining financial ratio values?

PRACTICE problem

Exhibits 2.6 and 2.7 provide an income statement and balance sheet from Nike’s 2014 annual report. For the purposes of this problem and the case analysis that follows, use the data provided (May 31, 2014) to compute the ten financial ratios discussed in this chapter for Nike. For the financial ratios that employ stock data, use Nike’s Class B common stock and a price per share of $76.91.

EXHIBIT 2.6 Nike income statement.

| NIKE, Inc. Consolidated Statements of Income | Year Ended May 31 |
| (in millions, except per share data) | 2014 | 2013 | 2012 |
| Income from continuing operations: | | | |
| Revenues | $27,799 | $25,313 | $23,331 |
| Cost of sales | 15,353 | 14,279 | 13,183 |
| Gross profit | 12,446 | 11,034 | 10,148 |
| Demand creation expense | 3,031 | 2,745 | 2,607 |
| Operating overhead expense | 5,735 | 5,051 | 4,472 |
| Total selling and administrative expense | 8,766 | 7,796 | 7,079 |
| Interest expense (income), net (Notes 6, 7, and 8) | 33 | (3) | 4 |
| Other expense (income), net (Note 17) | 103 | (15) | 54 |
### Income Statement

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2013</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income before income taxes</td>
<td>3,544</td>
<td>3,256</td>
<td>3,011</td>
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<tr>
<td>Income tax expense (Note 9)</td>
<td>851</td>
<td>805</td>
<td>754</td>
</tr>
<tr>
<td>Net Income from Continuing Operations</td>
<td>2,693</td>
<td>2,451</td>
<td>2,257</td>
</tr>
<tr>
<td>Net Income (Loss) from Discontinued Operations</td>
<td>—</td>
<td>21</td>
<td>(46)</td>
</tr>
<tr>
<td>NET INCOME</td>
<td>$2,693</td>
<td>$2,472</td>
<td>$2,211</td>
</tr>
</tbody>
</table>

Earnings per share from continuing operations:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic earnings per common share (Notes 1 and 12)</td>
<td>$3.05</td>
<td>$2.74</td>
<td>$2.45</td>
</tr>
<tr>
<td>Diluted earnings per common share (Notes 1 and 12)</td>
<td>$2.97</td>
<td>$2.68</td>
<td>$2.40</td>
</tr>
</tbody>
</table>

Earnings per share from discontinued operations:

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic earnings per common share (Notes 1 and 12)</td>
<td>—</td>
<td>$0.02</td>
<td>$(0.05)</td>
</tr>
<tr>
<td>Diluted earnings per common share (Notes 1 and 12)</td>
<td>—</td>
<td>$0.02</td>
<td>$(0.05)</td>
</tr>
</tbody>
</table>

### Dividends declared per common share

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Dividends declared per common share</td>
<td>$0.93</td>
<td>$0.81</td>
<td>$0.70</td>
</tr>
</tbody>
</table>

**Source:** Nike (2014).

**EXHIBIT 2.7 Nike income statement.**

### NIKE, Inc. Consolidated Balance Sheets

<table>
<thead>
<tr>
<th></th>
<th>May 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>ASSETS</td>
<td></td>
</tr>
<tr>
<td>Current assets:</td>
<td></td>
</tr>
<tr>
<td>Cash and equivalents</td>
<td>$2,220</td>
</tr>
<tr>
<td>Short-term investments (Note 6)</td>
<td>2,922</td>
</tr>
<tr>
<td>Accounts receivable, net (Note 1)</td>
<td>3,434</td>
</tr>
<tr>
<td>Inventories (Notes 1 and 2)</td>
<td>3,947</td>
</tr>
<tr>
<td>Deferred income taxes (Note 9)</td>
<td>355</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets (Notes 6 and 17)</td>
<td>818</td>
</tr>
<tr>
<td>Total current assets</td>
<td>13,696</td>
</tr>
<tr>
<td>Property, plant and equipment, net (Note 3)</td>
<td>2,834</td>
</tr>
<tr>
<td>Identifiable intangible assets, net (Note 4)</td>
<td>282</td>
</tr>
<tr>
<td>Goodwill (Note 4)</td>
<td>131</td>
</tr>
<tr>
<td>Deferred income taxes and other assets (Notes 6, 9, and 17)</td>
<td>1,651</td>
</tr>
<tr>
<td>TOTAL ASSETS</td>
<td>$18,594</td>
</tr>
</tbody>
</table>

**LIABILITIES AND SHAREHOLDERS’ EQUITY**

|                                |        |        |
| Current liabilities:           |        |        |
| Current portion of long-term debt (Note 8) | $7  | $57   |
| Notes payable (Note 7)         | 167     | 98     |

81
## Accounts payable (Note 7)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
1,930 & 1,669 \\
\end{array}
\]

## Accrued liabilities (Notes 5, 6, and 17)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
2,491 & 2,036 \\
\end{array}
\]

## Income taxes payable (Note 9)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
432 & 84 \\
\end{array}
\]

## Liabilities of discontinued operations (Note 15)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
- & 18 \\
\end{array}
\]

## Total current liabilities
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
5,027 & 3,962 \\
\end{array}
\]

## Long-term debt (Note 8)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
1,199 & 1,210 \\
\end{array}
\]

## Deferred income taxes and other liabilities (Notes 6, 9, 13 and 17)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
1,544 & 1,292 \\
\end{array}
\]

## Commitments and contingencies (Note 16)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
- & - \\
\end{array}
\]

## Redeemable preferred stock (Note 10)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
- & - \\
\end{array}
\]

## Shareholders’ equity:
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
\end{array}
\]

### Common stock at stated value (Note 11):
- Class A convertible — 178 and 178 shares outstanding
  \[
  \begin{array}{l|c|c}
  \text{Current Year} & \text{Prior Year} \\
  - & - \\
  \end{array}
  \]
- Class B — 692 and 716 shares outstanding
  \[
  \begin{array}{l|c|c}
  \text{Current Year} & \text{Prior Year} \\
  3 & 3 \\
  \end{array}
  \]

### Capital in excess of stated value
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
5,865 & 5,184 \\
\end{array}
\]

### Accumulated other comprehensive income (Note 14)
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
85 & 274 \\
\end{array}
\]

### Retained earnings
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
4,871 & 5,620 \\
\end{array}
\]

## Total shareholders’ equity
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
10,824 & 11,081 \\
\end{array}
\]

## TOTAL LIABILITIES AND SHAREHOLDERS’ EQUITY
\[
\begin{array}{l|cc}
\text{Current Year} & \text{Prior Year} \\
$18,594 & $17,545 \\
\end{array}
\]

**Note:** Nike indicates the “Notes to Consolidated Statements,” found at the URL in the reference citation, are an integral part of the statement.

**Source:** Nike (2014).

## Financial Analysis Comparison of Nike and UA

According to the National Sporting Goods Association (2013), sporting goods in the United States is a nearly $60 billion industry. Sports apparel and athletic footwear are two of the largest categories of this industry. Under Armour is a fast-growing competitor in the sports apparel and athletic footwear categories, in which Nike has long been recognized as the leader. Use the financial ratios for Nike that you computed in the Practice Problem and the financial ratios for Under Armour provided throughout this chapter to compare the financial health of Nike and Under Armour. Answer the following questions.

### Case Questions

1. In what ratio areas is Nike stronger than Under Armour?
2. In what ratio areas is Under Armour stronger than Nike?
3. If you were an investor considering purchasing stock in either Nike or Under Armour, which company would you choose? Explain and support your answer.
4. If you were a bank manager or other investor considering a request to loan money to either Nike or Under Armour, to which company would you choose to provide a loan? Explain and support your answer.

## References


KEY CONCEPTS

auction-rate bond
beta coefficient
capital asset pricing model (CAPM)
central revenues
coefficient of variation (CV)
correlation coefficient
covariance
default risk premium (DRP)
deferred compensation
diversifiable risk
dollar return
expected rate of return
expected return on a portfolio
inflation
inflation premium (IP)
interest
interest rate risk
investment risk
level of risk
liquidity premium (LP)
loan pool
local revenues
London Interbank Offered Rate (LIBOR)
market risk
maturity risk premium (MRP)
nominal interest rate
nominal risk-free rate
portfolio
probability distribution
rate of return
real risk-free rate
reinvestment rate risk
relevant risk
required rate of return
revenue sharing
risk
risk averse
risk-free rate
risk of time
risk premium
security market line (SML)
stand-alone risk
standard deviation (SD)
synthetic fixed-rate bond
volatility
Introduction

Risk is often overlooked in sport management. It affects many areas of finance, including interest rates, bond rates, estimates of cash flows, the cost of capital, and capital structure. A good understanding of risk will greatly assist with financial analysis, as well. Risk measures the chance that some unfavorable event will occur. In finance, we often examine the risks of assets. The choice to invest in an asset suggests that the return on the investment is expected to be proportional to the risk involved with the investment (Groppelli & Nikbakht, 2012). The measurement of risk is, therefore, paramount for prudent financial management.

Unfortunately, little has been written about financial risk in sport. Perhaps this is due to the general feeling that the business of sport, especially professional sport, is recession proof. In a *Wall Street Journal* article, Last (2009) asked, “Are pro sports too big to fail?” (p. W11). As the U.S. economy slowed in 2008, some in sport declared that the industry was indeed recession proof. In general, the belief was that during periods of economic uncertainty people turn to sport to escape the economic realities of life. Last probed this idea in his *Wall Street Journal* article.

Beginning with the idea that in a struggling economy the weak go out of business first, Last noted that minor professional sports have shown signs that an economic slowdown can have a significant impact. The Arena Football League, in existence since 1987, canceled its 2009 season. Shortly thereafter, the league declared bankruptcy. Subsequent to Last’s article, the league’s assets were purchased by a new entity, Arena Football One, on December 8, 2009, and the league relaunched on April 2, 2010 (“Key dates,” 2013). Also in 2009, the LPGA tour eliminated three tour events and cut $5 million in prize money, and the WNBA saw the Houston Comets, its premier franchise, cease operations, as discussed in Chapter 1.

During the same time period, however, the major professional sport leagues showed some signs of strength. Television ratings for NFL regular season games were strong in 2008. During the 2009 off-season, the top three free agents in professional baseball signed for a combined $423 million. This was a 7.1% increase from 2008. Professional baseball attendance in 2008 was only slightly below its all-time high of 79.5 million in 2007. Although teams and leagues laid off employees in 2008 and 2009, and some NFL teams struggled to sell out playoff games in January 2009, teams continue to build new stadiums and fans continue to pay more for parking, concessions, and tickets.

So, what is risk? Is sport affected by recession as any other industry would be affected? How does risk affect the financial management of sport teams, leagues, and properties? This chapter discusses risk and how concepts related to risk apply in sport.
RELATIONSHIP BETWEEN RATE OF RETURN AND RISK

When a sport organization makes an investment, it expects that the money invested today will earn more in the future. The gain or loss of an investment over a period of time is the rate of return. Measuring return allows the organization to know the financial performance of its investment. We can measure the return on any type of investment—from an investment in a new player to the investment in a stadium renovation. The easiest way to measure the return of an investment is in dollar terms. Dollar return is simply the result of subtracting the amount invested from the amount received:

\[
\text{dollar return} = \text{amount received} - \text{amount invested}
\]

However, this method of measuring return is problematic. First, the size or scale of the investment is important. Without knowing the size of the investment, we cannot meaningfully evaluate the sufficiency of the return. Second, the timing of the return is important (see the discussion of time value of money in Chapter 4). Hence, the preferred method is to calculate a measure called the rate of return, or percentage return, rather than dollar return. Rate of return corrects for differences in the scale of investments, and, when calculated on an annual basis, it also solves the timing problem. Rate of return is calculated as follows:

\[
\text{rate of return} = \frac{\text{amount received} - \text{amount invested}}{\text{amount invested}}
\]

This formula standardizes the investment’s return by measuring the return per investment unit.

In a more technical definition, risk measures the volatility of rates of return (Groppelli & Nikbakht). When investing in a new facility, for example, the organization should forecast the expected cash flows, or return, of the new project and how those cash flows will impact the organization’s overall finances. Obviously, those forecasts could turn out to be wrong, because investments do not always return what we expect. The less certain we are that an investment will return what we expect, the higher the rate of return we demand will be, in order to compensate for the risk. As risk increases for the stadium project, the rate of return required to invest in that project also increases. Exhibit 3.1 illustrates this relationship.

EXHIBIT 3.1 Relationship between risk and return.

Volatility is the amount of fluctuation that occurs in a series of similar investment returns and the degree to which those returns deviate from the average. More volatility translates into greater risk.

Time is a factor in risk. Cash today is worth more to an investor than the same cash in the future, because the future is uncertain (see Sidebar 3.A). When money is invested, there is always uncertainty as to whether the investment will be repaid. Similarly, when a bank lends money, it takes the risk that the loan may not be repaid. The investor or lender must be compensated for risking today’s cash, or it will lack incentive to make the investment or loan. For example, if a friend asks you to lend him money to help finance the purchase of a minor league baseball franchise, you might decide to lend him $1 million in cash. You are giving up the safety
of having that $1 million in cash today in exchange for an uncertain future return. The franchise might lose money and your friend might not be able to repay your investment. As a result, you might ask that the $1 million be paid back one year from now, along with an additional $70,000 return for your $1 million investment. The rate of return would be 7%, which is the $70,000 additional return divided by the initial investment amount of $1 million. To convince you to give up the safety of your $1 million cash, your friend will have to pay an additional $70,000, to compensate for the risk associated with the future return on your money. The financial principle underlying the request for an additional $70,000 is that there is more risk in the future than the present. There is also more risk in larger investments, all else being equal. If you were asked to invest $2 million, your risk would increase and you likely would ask for a return greater than 7%. The rate of return required increases as risk increases.

SIDEBAR 3.A
Risk and deferred compensation

Today’s dollar is worth more than tomorrow’s. In professional sport, risk affects players as they negotiate salary, especially when deferred compensation is part of the negotiation. Deferred compensation, or deferred salary, is salary whose payment is delayed under contractual terms. In the National Football League, teams structure contracts with deferred compensation due to strict salary cap rules that limit the amount a team can spend on player payroll in a given season. In other leagues, teams sometimes take a “buy now, pay later” approach and use deferred salaries to do so. One of these teams, the Arizona Diamondbacks, nearly went bankrupt as a result. According to Birger (2009), the Diamondbacks almost became the first team to win a major sports championship one year and declare bankruptcy the next. Financial problems arose because the team overspent on free agents. Over its first seven years of operation, the Diamondbacks lost $353 million. Due to resulting cash flow shortages, the team’s management convinced free agents to accept contracts with large, backloaded deferred salary payments. In 2009, the team still owed just over $58 million to players who were no longer with the organization.

Bernard Gilkey is one player owed deferred salary. He will collect paychecks from the Diamondbacks until his 51st birthday. Gilkey played just 161 games with the team from 1998 to 2000 and earned approximately $12 million. He receives his pay in installments and earns between 2% and 7% interest each year on the money he is owed. Gilkey’s annual payments will be for as much as $1 million and will end in 2017 (Rovell, 2009).

The Diamondbacks paid off $16 million in deferred salary in 2009. Further, they paid $15 million, $14 million, and $13 million in 2010, 2011, and 2012, respectively. In 2013 the team paid less than $1.5 million in deferred salary (Rovell, 2009; “#20 Arizona Diamondbacks,” 2011).

Agent David Falk has referred to deferred salary as “funny money” (Conrad, 2006), as the deferred portion of a player’s contract is not always guaranteed (especially in the NFL). Even if deferred salary is guaranteed, if a team declares bankruptcy a player may never be paid in full. Mario Lemieux, a player for the NHL’s Pittsburgh Penguins, knows this well. On October 13, 1998, the Pittsburgh Penguins filed Chapter 11 bankruptcy. As a result, 200 individuals and businesses became unsecured creditors (Anderson, 2005).

At the time the Penguins declared bankruptcy, they owed $114.3 million. Of that amount, $55.2 million was secured debt (e.g., money owed to banks) and $1.4 million was priority debt (e.g., money owed to the IRS). The unsecured debt was $57.7 million, and the three largest unsecured creditors were Lemieux, Fox Sports Net, and SMG (Anderson). Under U.S. bankruptcy law, unsecured creditors are paid last, and they often receive less than 50% of what is owed. As a major creditor (Lemieux held over half of the team’s unsecured debt), Lemieux had a large incentive to find a way to salvage the $32.5 million in deferred compensation owed to him (Sandomir, 1999). Four plans were presented to the bankruptcy judge. The unsecured creditors committee backed Lemieux’s plan, under which Lemieux offered to forgive $7.5 million of debt owed to him and transfer another $20 million of debt into equity, so that only $5 million of his claim remained. The court approved Lemieux’s plan on June 24, 1999 (Anderson). Although Lemieux received only $5 million of the deferred salary owed to him (15.4% of the original amount owed), he also received controlling interest in the Penguins. Lemieux became one of only a few former players to own a major league team (Sandomir). Ten other players were unsecured creditors at the time of the bankruptcy filing, as well. Combined, they were owed $7.4 million (Anderson).

During the period in which Lemieux, together with Ron Burkle, has co-owned the Penguins, the team has won the Stanley Cup, sold out 286 straight games (entering the 2013/2014 hockey season), and moved into the new CONSOL Energy Center (“Front office,” 2013). At the beginning of the 2013 season, Forbes ranked the Penguins the eighth most valuable NHL franchise, at $480 million (“Pittsburgh Penguins,” 2013).

The most famous (or perhaps infamous) deferred payment involves Bobby Bonilla, the New York Mets, and Bernie Madoff, the financier who was sentenced to 150 years in prison for running the biggest Ponzi scheme* in U.S. history and defrauding his investors out of $65 billion. In 2011, the Mets began to pay Bonilla, a 47-year-old former player, $1.19 million each year for 25 years. This series of payments resulted from an agreement between the Mets and Bonilla on January 3, 2000, when the Mets bought out the final year of Bonilla’s contract with the team, worth $5.9 million. Bonilla was to be paid the amount owed, plus a compounded 8% rate, beginning in 2011 (Sielski, 2010).

In the short term, the Mets freed up cash to sign several free agents in 2000, who earned a combined
$15.1 million that year. The team reached the World Series for the first time since 1986. But since 2000, the team has had little success and reached the post season only one time. Now that Bonilla’s payments have come due, Sielski argues that the Mets’ short-term gain was not worth its long-term risk, as the team will pay Bonilla $29,831,205 in principal and interest over the 25-year period.

The Mets did plan to mitigate the long-term financial risk posed by Bonilla’s salary deferral. Team owner Fred Wilpon, close friends with Bernie Madoff, made many investments with Madoff beginning in 1985. As Wilpon built teams through the 1980s and into the 1990s, he used money from Madoff investments—returning about 18% annually—to fund player acquisition. The Mets then began placing liquid assets into Madoff accounts and paid expenses with proceeds from the money Madoff “earned” the team. When Wilpon agreed to the structure of Bonilla’s buyout, he thought he would make more from the deferral than Bonilla. The Mets’ investments in the Madoff account would have had to earn an 8% return on the $5.9 million investment to pay Bonilla. With the Madoff account supposedly returning double-digit amounts, the Mets calculated that they would generate a profit of between $60 million and $70 million from the deferral (Winegardner, 2012).

The Mets and owner Wilpon were not fortunate, however. Three years before the payments to Bonilla were to begin, the Madoff Ponzi scheme was exposed. Wilpon’s investments and much of his income evaporated. Lured to the deferment of $5.9 million by the prospect of increasing it 10 times, the Mets had no money set aside to pay the amount they had guaranteed Bonilla. Without an emergency loan from MLB, the Mets might have had to enter bankruptcy (Winegardner).

*Ponzi schemes lure investors by promising them unusually higher than normal returns on investments. The person running the Ponzi scheme uses money from new investors to pay off returns promised to older investors. To the old investors, this makes their investments seem profitable, though no profit is actually being made. They are simply being given what the new investors bring in. The investment strategies that are supposedly used to produce the amazing profits are often held as secrets, which the person running the scheme claims to do in order to protect the business. Later in the scheme, the con artist merely tells the investors how much they are “making,” without providing any actual returns. Ponzi schemes collapse when new investors become hard to find and the flow of cash to older investors dries up, too many current investors request their returns at one time, or the operator takes the investment money and runs.
MEASURING RISK

One way to measure risk is to determine the chance of making a profit or loss by investing in a project or asset. The simplest way to do this is to break the risk into two components: level of risk and risk of time (Groppelli & Nikbakht, 2012).

Level of Risk

Level of risk is a comparative evaluation of risk, determined by comparing the risk of one asset or firm to that of another. For example, the risk associated with an NFL franchise is much less than that of a franchise in another major professional sport league. This is true because a high percentage of the league’s income is guaranteed via long-term television contracts and because the league has strict rules that control its largest expense, player salary. As this example suggests, level of risk may be viewed as variability of income. Similarly, within a league, for example MLB, the risk of owning a franchise such as the Boston Red Sox is much less than that of a franchise in a small market, such as Kansas City. Some franchises have a low level of risk, while others have a high level.

Risk-free investments are short-term investments deemed to have no chance of loss. For example, U.S. Treasury securities with a 90-day maturity are backed by the federal government’s guarantee to pay. The interest paid on risk-free investments that provide a guaranteed return is termed the risk-free rate. (Interest is the cost of borrowing money.) As the level of risk for an investment increases above zero, the risk-free rate increases by a risk premium, the difference between rate of return for the risky investment and the risk-free rate. Therefore, total risk includes the risk-free rate plus a risk premium, or

\[ \text{total risk} = \text{risk-free rate} + \text{risk premium} \]

Exhibit 3.2 lists differences in rates of return for bonds based on their level of risk. (For a discussion of bonds, see Chapter 7.) As all the bonds listed in the exhibit are 30-year bonds, the difference in interest rates is attributable to the bonds’ level of risk. The 30-year U.S. Treasury bond yields less than the 30-year AAA-rated corporate bond because less risk is associated with investing in U.S. Treasury bonds. Investors will seek a risk premium, here 1.04%, for AAA-rated corporate bonds because they carry a greater risk than do U.S. Treasury bonds.

EXHIBIT 3.2 Risk premiums and level of risk.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>RISK-FREE RATE</th>
<th>TIME RISK PREMIUM</th>
<th>LEVEL OF RISK PREMIUM</th>
<th>INTEREST RATE (TOTAL RISK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Year US Treasury Bonds</td>
<td>0.02%</td>
<td>2.92%</td>
<td>0.00%</td>
<td>2.94%</td>
</tr>
<tr>
<td>30-Year Municipal Bonds (AAA Insured)</td>
<td>0.02%</td>
<td>2.92%</td>
<td>0.21%</td>
<td>3.15%</td>
</tr>
<tr>
<td>30-Year Municipal Bonds (AA)</td>
<td>0.02%</td>
<td>2.92%</td>
<td>0.76%</td>
<td>3.70%</td>
</tr>
<tr>
<td>30-Year Corporate Bonds (AAA)</td>
<td>0.02%</td>
<td>2.92%</td>
<td>1.04%</td>
<td>3.98%</td>
</tr>
</tbody>
</table>

Note: Rates as of June 2015.

The risk associated with owning a sport franchise affects the franchise’s cost of borrowing money. Franchises with lower risk have a lower discount rate or required rate of return; that is, they pay lower rates to borrow money. Therefore, the return for a low-risk franchise will receive a better valuation in the marketplace than the same return generated by a high-risk franchise. In essence, the market rate reflects the chance that the investors will receive their money back. An investment in a large-market Major League Baseball team is more likely to be paid back than an investment in a small-market team, so the large-market team offers a lower return. Similarly, investments in NFL franchises are less risky than investments in franchises in other major sporting leagues, and NFL franchises find it easier and less expensive to borrow money.
The impact of a franchise’s level of risk on its ability to borrow was clear during the Great Recession, which the Bureau of Labor Statistics indicates began in December 2007 and ended in June 2009. From September 2008 through May 2009, only teams in large markets or with strong brands were able to execute debt deals. Franchises that were able to acquire or extend debt included the Pittsburgh Steelers, New York Yankees, and Dallas Cowboys. In May 2009, the Orlando Magic became the first mid-tier team to receive a loan in a nine-month period, a $100 million loan from Goldman Sachs. The team, however, paid a high rate for the loan—450 interest points over LIBOR. (LIBOR, the London Interbank Offered Rate, is a benchmark interest rate based on the rate that banks in the London interbank market pay to borrow unsecured funds from one another.) Prior to the credit market freeze in 2008, the Magic likely would have had to pay only 200 interest points over LIBOR (Kaplan & Lombardo, 2009).

Risk of Time

The second component of risk is the risk of time, the fact that risk increases as the length of time funds are invested increases (Groppelli & Nikbakht, 2012). Exhibit 3.3 illustrates the impact of time on risk. In this table, the risk-free rate is 0.02%, which was the auction rate of 90-day Treasury bills on June 1, 2015. As all of the securities in the table are issued by the federal government, the differences in interest rate, which reflects total risk, are attributable to the risk of time. As the length of time between issue date and maturity date increases, the risk premium increases. This increase reflects the risk of time.

EXHIBIT 3.3 The impact of time on risk.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>RISK-FREE RATE</th>
<th>RISK PREMIUM</th>
<th>INTEREST RATE (TOTAL RISK)</th>
</tr>
</thead>
<tbody>
<tr>
<td>90-Day Treasury Bills</td>
<td>0.02%</td>
<td>0.00%</td>
<td>0.02%</td>
</tr>
<tr>
<td>52-Week Treasury Bills</td>
<td>0.02%</td>
<td>0.24%</td>
<td>0.26%</td>
</tr>
<tr>
<td>2-Year Government Notes</td>
<td>0.02%</td>
<td>0.62%</td>
<td>0.64%</td>
</tr>
<tr>
<td>5-Year Government Notes</td>
<td>0.02%</td>
<td>1.53%</td>
<td>1.55%</td>
</tr>
<tr>
<td>10-Year Government Notes</td>
<td>0.02%</td>
<td>2.17%</td>
<td>2.19%</td>
</tr>
<tr>
<td>30-Year Government Bonds</td>
<td>0.02%</td>
<td>2.92%</td>
<td>2.94%</td>
</tr>
</tbody>
</table>

Note: Rates as of June 2015.
DETERMINANTS OF INTEREST RATES

The interest rate on a given debt security, called the nominal interest rate, consists of the real risk-free rate of interest plus multiple risk premiums. These include risk premiums based on the risk of time and the level of risk, which reflect the riskiness of the security itself, and premiums reflecting inflation (the devaluation of money over time) and liquidity (the marketability of the security—how quickly it can be turned into cash). (These premiums are defined and discussed below.) The nominal interest rate, or quoted interest rate, on a marketable security is expressed as:

nominal interest rate = \( k = k^* + IP + DRP + LP + MRP \)

where:
- \( k^* \) = real risk-free rate of interest
- IP = inflation premium
- DRP = default risk premium
- LP = liquidity premium
- MRP = maturity risk premium

The real risk-free rate of interest, \( k^* \), is the rate of interest on a riskless security if inflation were not expected. It can also be viewed as the rate of interest on a short-term U.S. Treasury bill in an inflation-free environment. In Exhibit 3.3, the real risk-free rate is 0.02%. The nominal, or quoted, risk-free rate of interest, \( k_{RF} \), on a security such as a U.S. Treasury bill is the real-risk free rate (\( k^* \)) plus an inflation premium (IP). Therefore,

nominal risk-free rate = \( k_{RF} = k^* + IP \)

The inflation premium (IP) is the portion of an investment’s return that compensates the investor for loss of purchasing power over time. We calculate it by determining the expected average inflation rate over the life of the security. (See Chapter 4.)

To account for the risk that a borrower might default, a default risk premium (DRP) is added to the nominal interest rate. If the borrower defaults, the investor will receive less than the promised return. The default risk of U.S. Treasury securities is zero, so these securities have no default risk premium. As the riskiness of the borrower increases, the default risk increases. The greater the default risk, the higher the default risk premium and the higher the interest rate. (This concept is similar to the level of risk discussed earlier and illustrated in Exhibit 3.2.)

The terms of a bond contract and the financial strength of the entity issuing the bonds are factors in default risk. Moody’s Investor Service, Fitch Ratings, and Standard and Poor’s Corporation (S&P) all assign quality ratings to bond issues. These ratings measure the likelihood that the bond will go into default. The highest ratings are Aaa (Moody’s) and AAA (Fitch and S&P). These bonds are very safe, with little default risk.

Exhibit 3.4 provides an overview of the bond ratings used by the three agencies.

Another premium included in the nominal interest rate is the liquidity premium (LP), also referred to as the marketability premium. It is added for securities that are not liquid. A security is considered liquid if it can be sold in a short amount of time at a reasonable price.

Because an increase or decrease in interest rates affects the value of outstanding securities, the maturity risk premium (MRP) accounts for the risk of a change in the value of a security resulting from changes in interest rates. Interest rate risk is the risk that interest rates will increase, causing a decline in the value of the security. Increases in interest rates affect long-term securities more than short-term securities, so interest rate risk is higher for long-term securities. Hence, the maturity risk premium increases as the security’s yield to maturity (the rate of return anticipated on the security) increases.

EXHIBIT 3.4 Guide to bond ratings.

<table>
<thead>
<tr>
<th>AGENCY</th>
<th>FITCH</th>
<th>S&amp;P</th>
<th>MOODY’S</th>
<th>RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>AAA</td>
<td>Aaa</td>
<td>Highest credit quality, with smallest degree of risk</td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>AA</td>
<td>Aa</td>
<td>Very high credit quality and very low credit risk</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>A</td>
<td>A</td>
<td>High credit quality and low credit risk; economic</td>
<td></td>
</tr>
</tbody>
</table>
situation can impact risk

<table>
<thead>
<tr>
<th>Rating</th>
<th>Rating</th>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BBB</td>
<td>BBB</td>
<td>Baa</td>
<td>Good credit quality, with moderate credit risk</td>
</tr>
<tr>
<td>BB</td>
<td>BB</td>
<td>Ba</td>
<td>Speculative, with questionable credit quality</td>
</tr>
<tr>
<td>B</td>
<td>B</td>
<td>B</td>
<td>Highly speculative, with high credit risk</td>
</tr>
<tr>
<td>CCC</td>
<td>CCC</td>
<td>Caa</td>
<td>Substantial credit risk, with poor credit quality</td>
</tr>
<tr>
<td>CC</td>
<td>CC</td>
<td>Ca</td>
<td>Very high level of credit risk, usually in default on deposit obligations</td>
</tr>
<tr>
<td>C</td>
<td>C</td>
<td>C</td>
<td>Exceptionally high level of credit risk, typically in default, with low potential recovery values</td>
</tr>
</tbody>
</table>

Declining interest rates also pose a risk, called reinvestment rate risk. This primarily affects short-term bills, and it increases as the maturity of the bill decreases. This risk reflects the fact that the investor may lose income if at the time the funds are reinvested the interest rate on the bonds has gone down.

For any investment, if we know the real risk-free rate of interest and the risk premiums, we can calculate the nominal interest rate. As previously discussed, the nominal interest rate on a marketable security is:

\[
\text{nominal interest rate} = k = k^* + IP + DRP + LP + MRP
\]

To calculate the nominal interest rate \( k \) for a five-year U.S. Treasury bond, we add the real risk-free rate of interest \( k^* \), inflation premium \( IP \), default risk premium \( DRP \), liquidity premium \( LP \), and maturity risk premium \( MRP \). Treasury securities have essentially no default or liquidity risk, so \( DRP = 0 \) and \( LP = 0 \). Hence, for a Treasury bond with \( k^* = 0.5\% \), \( IP = 3.4\% \), and \( MRP = 0.2\% \),

\[
k = k^* + IP + DRP + LP + MRP
\]

\[
= 0.5\% + 3.4\% + 0\% + 0\% + 0.2\%
\]

\[
= 4.1\%
\]

The nominal interest rate for this five-year U.S. Treasury bond is 4.1\%.
RISK AND INVESTMENT RETURNS

Investment risk measures the likelihood of low or negative future returns. As the chance for a low or negative investment return increases, the riskiness of the investment increases. Typically, investment risk focuses on the future performance of a company’s stock, so this concept applies directly to publicly traded companies. In North America, the Green Bay Packers are the only publicly traded major league team. Collegiate sport teams are subsets of larger governmental or non-profit educational entities and, therefore, are not publicly traded. In major professional sports, International Speedway Corporation (ISCA) and Speedway Motorsports Inc. (TRK), both affiliated with NASCAR and its major tracks, are publicly traded. In addition, the major sporting goods manufacturers are publicly traded. However, the concept of investment risk can be applied beyond publicly traded companies, especially in consideration of stand-alone risk.

Stand-Alone Return and Risk

One approach to analyzing investment return and risk is to consider the investor’s risk as if only one asset were held. This is stand-alone risk. When analyzing the investment, we examine the stand-alone expected rate of return and stand-alone risk in isolation from other investments.

Calculating stand-alone expected rate of return

A potential investor who is considering buying a professional sport franchise, for example, should not invest unless the expected rate of return is high enough to compensate for the perceived risk of the investment. According to data from Forbes, the average value of an NFL franchise increased 6.4% in 2013, 5.8% in 2012, and 2.0% in 2011. The three-year average increase was 4.7%. Just after the 2013 season ended, Buffalo Bills owner Ralph Wilson passed away (Pelissero, 2014), and five months later his family sold the team to Terry and Kim Pegula, owners of the Buffalo Sabres (Isidore, 2014). The three-year average increase in the Bills’ value from 2011 to 2013 was 2.9%. Since the expected rate of return was 1.8% less than the league’s average increase, the Pegulas might have been hesitant to purchase the franchise; therefore, they sought a discount on the team’s price as compared to the average price of an NFL franchise. Because investment risk, or the uncertainty of future cash flows, is a component of value, a lower team value reflects greater risk. The Pegulas purchased the Bills for $1.1 billion just prior to the start of the 2014 season, when the average team value was $1.43 billion (Ozanian, 2014).

This example provides a simple analysis of expected rate of return. A more thorough analysis involves evaluating probabilities. A probability distribution is a list of all possible outcomes (projected returns) of an investment, with a probability assigned to each outcome. The sum of all probabilities must equal 1.0. Exhibit 3.5 lists the probabilities of investment returns in two NFL franchises. The expected rate of return for an investment is the sum of each possible outcome multiplied by its probability. For Franchise X, the expected rate of return of $142.8 million is the sum of the three probable returns. Each probable return is the product of the projected return and the probability of that outcome occurring. The expected rate of return for Franchise Y, $139.5 million, was calculated in the same way. Mathematically, the expected rate of return \( \bar{r} \) is expressed as follows:

\[
\text{expected rate of return} = \bar{r} = \sum_{i=1}^{n} P_k_i
\]

where \( i = \) a specific occurrence*

\( n = \) the number of occurrences*

\( P_i = \) the probability of occurrence

\( k_i = \) the possible outcome

* \( i \) and \( n \), as part of summation, will not be defined in subsequent formulas.

EXHIBIT 3.5 Projected returns and probabilities for two franchise investments (millions).

<table>
<thead>
<tr>
<th>PROBABLE OUTCOME</th>
<th>PROJECTED RETURN ((k))</th>
<th>WEIGHT OR PROBABILITY ((P))</th>
<th>PROBABLE RETURN ((P \times k))</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFL Franchise X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
For NFL Franchise X, the investor estimates a 35% chance of a low return of $134.5 million, a 50% chance of an average return of $142.4 million, and a 15% chance of a high return of $163.5 million (see Exhibit 3.5). The expected rate of return for Franchise X is calculated as follows:

\[
E_{\text{Franchise X}} = \sum_{i=1}^{n} PK_i \\
= 0.35(134.5) + 0.50(142.4) + 0.15(163.5) \\
= $142.80
\]

Note that the return that is actually earned during a given period of time is the realized rate of return \( (\hat{E}) \). The realized rate of return usually differs from the expected rate of return.

When the number of possible outcomes is practically unlimited, we use a continuous probability distribution to calculate the expected rate of return. The standard deviation (SD, denoted by \( \sigma \)) is a measure of variability in a distribution of numbers and, in the case of an investment, indicates the riskiness of the investment. A lower-risk investment will take the form of a tighter, or more peaked, distribution curve. Investments with probability distributions that have wider dispersion from the expected value are riskier. In Exhibit 3.6, the distribution with the tallest peak is the one with the lowest standard deviation (\( \sigma = 0.3 \)) and the lowest risk.

The standard deviation of a probability distribution is calculated as follows:

\[
\text{standard deviation} = \sigma = \sqrt{\sum_{i=1}^{n} (k_i - \hat{E})^2 P_i}
\]

where \( k_i \) = the outcome of a specific occurrence
\( \hat{E} \) = the expected return
\( P_i \) = the probability of the return

We calculate the standard deviation of the investment in Franchise X as follows:

EXHIBIT 3.6 Continuous probability distributions.
1. Find the expected rate of return ($\hat{k}$) from the previous calculation:

$$\hat{k}_{\text{Franchise X}} = \$142.8 \text{ million}$$

2. Subtract the expected rate of return ($\hat{k}_{\text{Franchise X}}$) from each possible outcome ($k_i$) to obtain a list of deviations (see Exhibit 3.5 for each possible outcome for Franchise X):

- Deviation$_1 = k_1 - \hat{k}_{\text{Franchise X}}$
- Deviation$_2 = (134.5 - 142.8) = -8.3$
- Deviation$_3 = (142.4 - 142.8) = -0.4$
- Deviation$_4 = (163.5 - 142.8) = 20.7$

3. Calculate the variance ($\sigma^2$) of the probability distribution. To do this, take the square of each deviation, multiply this value by the probability of its corresponding outcome, and sum these values:

$$\sigma^2 = .35(-8.3)^2 + .5(-0.4)^2 + .15(20.7)^2$$

$$= 24.11 + 0.08 + 64.27$$

$$= 88.46$$

4. Take the square root of the variance:

$$\sigma = \sqrt{88.46} = 9.41$$

**Calculating stand-alone risk**

The coefficient of variation (CV) measures the stand-alone risk of an investment. It is useful when we are comparing the expected returns on two alternative projects whose returns are not the same. A lower CV suggests less risk, since the CV indicates risk per unit of return. To calculate the CV, we divide the standard deviation ($\sigma$) by the expected return ($\hat{k}$):

$$\text{coefficient of variation (CV)} = \frac{\sigma}{\hat{k}}$$

Return to Exhibit 3.5 to view the expected rates of return for two possible investments. For Franchise X, $\hat{k} = \$142.8$ million and $\sigma = 9.41$. For Franchise Y, $\hat{k} = \$139.47$ million and $\sigma = 13.66$. With this information, we can calculate the CV for each investment:

$$\text{CV}_X = \frac{\sigma}{\hat{k}_X} = \frac{9.41}{142.8} = .066$$

and
The CVs of the two alternatives confirm that the lower-risk investment for the potential team owner is Franchise X, as it has less risk per unit of return.

Investors tend to be risk averse: when presented with two investment alternatives with the same expected rate of return, most investors will select the alternative with the lower risk. Hence, most investors will seek a higher rate of return for riskier investments and require a risk premium.

**Portfolio Return and Risk**

By holding more than one asset, an investor can eliminate some of the risk inherent in the individual assets. Hence, most financial assets are held in portfolios—combinations of assets held by individual investors—and investors are concerned with portfolio return and portfolio risk.

An investor chooses assets with the goal of maximizing the return of the overall portfolio while minimizing overall risk. To do so, the investor examines both the expected rate of return and risk of each individual asset and the degree to which each asset affects the rate of return and risk for the entire portfolio.

**Calculating portfolio expected rate of return**

To calculate the expected return on a portfolio \( \hat{k}_p \), we sum the weighted average of the expected returns of each asset:

\[
expected \ return \ on \ a \ portfolio = \hat{k}_p = \sum_{i=1}^{n} w_i \hat{k}_i
\]

where \( w_i \) = the weight (percentage) of the total portfolio invested in an individual asset

\( \hat{k}_i \) = the expected rate of return of the asset

For example, suppose Portfolio 1 is valued at $1 million, with $200,000 invested in each of five companies, and the following returns can be expected for the stocks held in the portfolio:

<table>
<thead>
<tr>
<th>STOCK</th>
<th>( \hat{k} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>10.0%</td>
</tr>
<tr>
<td>Company B</td>
<td>9.5%</td>
</tr>
<tr>
<td>Company C</td>
<td>11.5%</td>
</tr>
<tr>
<td>Company D</td>
<td>3.5%</td>
</tr>
<tr>
<td>Company E</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

To calculate the expected return on Portfolio 1, we proceed as follows:

\[
expected \ return \ on \ a \ portfolio = \hat{k}_p = \sum_{i=1}^{n} w_i \hat{k}_i
\]

\[
= w_A \hat{k}_A + w_B \hat{k}_B + \ldots + w_E \hat{k}_E
\]

\[
= 0.2(10.0\%) + 0.2(9.5\%) + 0.2(11.5\%) + 0.2(3.5\%) + 0.2(6.0\%)
\]

\[
= 8.1\%
\]

If the owner of Portfolio 1 decided to invest in the Bills, with an average annual return of 2.9%, the expected return of the portfolio would decrease. Suppose the portfolio’s owner purchased $1,000,000 of the Bills. The portfolio now would be as follows:

**PORTFOLIO A: STOCK**

<table>
<thead>
<tr>
<th>STOCK</th>
<th>( \hat{k} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>10.0%</td>
</tr>
<tr>
<td>Company B</td>
<td>9.5%</td>
</tr>
<tr>
<td>Company C</td>
<td>11.5%</td>
</tr>
<tr>
<td>Company D</td>
<td>3.5%</td>
</tr>
<tr>
<td>Company E</td>
<td>6.0%</td>
</tr>
</tbody>
</table>
The total value of the portfolio would now be $2 million, with $200,000 invested in each of companies A through E and $1 million invested in the Bills. Each of assets A through E makes up 10% of Portfolio 1 and has a weight of 0.1. The investment in the Bills has a weight of 0.5. Now, 

\[ \hat{\kappa}_p = w_1\hat{\kappa}_1 + w_2\hat{\kappa}_2 + \ldots + w_n\hat{\kappa}_n \]

\[ = 0.1(10.0\%) + 0.1(9.5\%) + 0.1(11.5\%) + 0.1(3.5\%) + 0.1(6.0\%) + 0.5(7.0\%) \]

\[ = 7.55\% \]

### Calculating portfolio risk

Calculating a portfolio’s risk (\( \sigma_p \)) is not as simple as computing the weighted average of the individual assets’ standard deviations. The portfolio risk is actually smaller than the weighted average of the individual assets’ standard deviations—this is why portfolios are so attractive to investors. A portfolio’s risk depends not just on the standard deviations of the individual assets’ risks but also on the correlation (degree of relationship) between those risks. If securities are added to a portfolio that have low standard deviations but that have the same patterns of movement and dispersion around the expected rate of return as the assets already held in the portfolio, the risk of the portfolio will remain unchanged.

The correlation coefficient (\( r \)) measures the degree of the relationship between two variables. In portfolio analysis, the correlation coefficient measures how closely the returns of an asset move relative to the returns of the other assets held in the portfolio. The measure ranges from +1.0, where the two variables move in the exact same way, to −1.0, where the two variables move exactly opposite to each other. When there is no correlation between the variables, \( r = 0.0 \). Typically, the correlation between assets in a portfolio is positive but less than +1.0.

Correlations reflect the degree to which two assets change together. A correlation cannot be calculated for an entire portfolio. We can, however, calculate multiple correlations between various combinations held within a portfolio. More usually, when we analyze a portfolio, we select one individual asset to be represented by one variable, with the rest of the portfolio represented by the second variable.

A general rule on diversification states that as an investor adds assets to a portfolio, the riskiness of the portfolio decreases, as long as the assets are not perfectly positively correlated. If the assets already in the portfolio are highly correlated, diversifying the portfolio does little to reduce its risk if the new asset is perfectly positively correlated with the existing portfolio. By adding assets that are not perfectly correlated to the existing portfolio mix, the investor can eliminate some but not all risk. A truly riskless portfolio does not exist.

The correlation coefficient of two assets is calculated as follows:

\[
\text{correlation coefficient of two assets} = r_{x,y} = \frac{\sum_{i=1}^{n} (\bar{k}_x - \bar{\kappa}_x)(\bar{k}_y - \bar{\kappa}_y)}{n\sigma_x\sigma_y}
\]

where \( \bar{k} \) = the actual rate of return

\( \bar{\kappa} \) = the expected rate of return

\( \sigma \) = the standard deviation

The volatility \((\bar{k} - \bar{\kappa})\) of the two assets \((x,y)\) relative to each other is measured in the numerator. In the denominator, the product of the two assets’ standard deviations standardizes the covariance—the degree to which two variables change together—between the assets (Groppelli & Nikbakht, 2012). Because the covariance is standardized, the correlation coefficient helps the investor find the assets that move differently from those already held in a portfolio. Groppelli and Nikbakht add that the equation can also be expressed as

\[
\text{correlation coefficient of two assets} = r_{x,y} = \frac{\text{covariance}(x,y)}{\sigma_x\sigma_y}
\]

**Exhibit 3.7** illustrates the concept of covariance. The chart depicts the rates of return for stocks X and Y over a five-year period. The two stocks represent a perfectly negative correlation \((r = -1.0)\). When the rate of return rises for Stock X, Stock Y’s return falls. When Stock Y’s return rises, Stock X’s return falls.

EXHIBIT 3.7 The rates of return for stocks X and Y over a five-year period.
The key to building a portfolio that reduces overall risk is that it must not contain assets that are all highly positively correlated. Holding a well-diversified portfolio is less risky than holding a stock as a solitary asset, and holding two highly negatively correlated assets is less risky than holding a stock as a solitary asset. Brigham and Houston (2013) add that almost half of the riskiness of an individual stock can be eliminated if that stock is held in a well-diversified portfolio (one containing 40 or more stocks). Note, however, that a completely diversified portfolio will lose money if the whole market is in decline, as a diversified portfolio will move as the market moves.

Analyzing the relation between portfolio rate of return and portfolio risk

Capital asset pricing model. The capital asset pricing model (CAPM) provides a means to analyze the relationship between risk and rate of return. A stock or bond’s required rate of return is the profit that an investor would require in order to consider the investment worth purchasing, given its riskiness. The CAPM is built on the notion that this required rate of return is equal to the risk-free rate of return plus a risk premium, with the risk reflecting the portfolio’s diversification. Under this model, the relevant risk of a stock is its contribution to the riskiness of a diversified portfolio.

CAPM divides risk into two components: diversifiable risk and market risk. Diversifiable risk is the portion of a stock’s risk that can be removed through a well-diversified portfolio. This type of risk is caused by events that are unique to the company issuing the stock. Market risk is the portion of a stock’s risk that cannot be eliminated. It is caused by factors that affect most organizations similarly (the economy, inflation, interest rates, and so forth). Market risk is measured by the degree to which the stock moves with the market. Market risk, therefore, is the relevant risk under CAPM. It determines the impact of an individual stock on the overall portfolio’s risk.

CAPM incorporates the concept of the beta coefficient ($\beta$), or the volatility of a stock compared to market return, in its model (see the next section for more information about the beta coefficient). In addition to a stock’s beta, the model factors in the average investor’s risk aversion to determine the return that an investor would require from a particular stock. Groppelli and Nikbakht (2012) add that, although CAPM is primarily applicable to the analysis of securities, investors and managers can also use the model to evaluate the risk and return merits of an organization’s investments and assets. For a majority of the businesses in the sport industry, CAPM would most likely be used in this fashion. The following discussion provides an example of how a manager in the sport industry would be likely to use CAPM.

The security market line (SML) formula for evaluating the merit of an investment expresses the risk/return relationship as follows:
For example, to evaluate an investment in a new arena, the organization would first estimate the nominal risk-free rate ($k_{RF}$) based on U.S. Treasury securities. For an arena with a 30-year useful life, the nominal risk-free rate ($k_{FR}$), based on the interest rate of a 30-year U.S. Treasury bond, is currently 2.94% (see Exhibit 3.2). Next, it is necessary to calculate the beta ($\beta$) of the organization’s portfolio of assets. We will assume that this value is 1.3. Finally, the organization will estimate the market’s expected rate of return ($k_M$). We will assume a value of 8.0%. This is the forecaster’s best guess at how the market will perform, on average, over the next year, based on past performance. For example, the growth rate of the S&P 500 was approximately 7% from 1950 through 2012. By using the SML equation, we calculate the required return on the investment in the facility as follows:

$$\text{required return on investment} = k_i = k_{RF} + (k_M - k_{RF})\beta$$

If the franchise can earn 9.52% on the equity capital—the money the firm is reinvesting in itself by investing in the arena—the owners of the team should be willing to invest in the new facility, based on its risk and return merits as evaluated under CAPM. Earnings would likely come from increased revenues generated by the new arena, especially from luxury suites, club seats, naming rights, and personal seating licenses.

Beta coefficient. As discussed above, CAPM incorporates the concept of beta ($\beta$). Beta reflects the degree to which a stock increases or decreases with the increase or decrease of the overall market. An average-risk stock is a stock that tends to move with the market. Such a stock has a beta of 1.0. A stock that is twice as volatile as the market will have a beta of 2.0, and a stock that is half as volatile will have a beta of 0.5. As volatility increases, risk increases. Therefore, stocks with betas greater than 1.0 are riskier than the market, and those with betas less than 1.0 are less risky than the market. Beta is the most relevant measure of any stock’s risk.

Betas for securities are available from sources such as Bloomberg. Exhibit 3.8 lists the beta coefficients for the stocks of 16 companies in the sport industry. The table reveals that the stocks of sporting goods retail organizations have risk greater than the market ($\beta > 1.0$), whereas most of the stocks of sporting goods manufacturers have risk less than the market, with betas at or well below 1.0. All listed sport and entertainment organizations also have betas less than 1.0, while two of the three motorsports companies listed do, as well.

The beta of a portfolio is the weighted average of the betas of the individual securities:

$$\beta_p = \sum_{i=1}^{n} w_i \beta_i$$

where $w_i$ = the weight of the $i^{th}$ security

For example, suppose an investor has a portfolio of three sport-related stocks:

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>BETA</th>
<th>WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speedway Motorsports</td>
<td>0.79</td>
<td>40%</td>
</tr>
<tr>
<td>Foot Locker</td>
<td>1.29</td>
<td>30%</td>
</tr>
<tr>
<td>Under Armour</td>
<td>0.06</td>
<td>30%</td>
</tr>
</tbody>
</table>

For this portfolio,

$$\beta_p = \sum_{i=1}^{n} w_i \beta_i$$

$$= w_1 \beta_1 + w_2 \beta_2 + w_3 \beta_3$$

$$= .4(0.79) + .3(1.29) + .3(0.06)$$

$$= 0.721$$
The beta for this portfolio indicates that it has a below-average risk.

**EXHIBIT 3.8 Beta coefficients for sport-related companies (June 2015).**

<table>
<thead>
<tr>
<th>Motorsports</th>
<th>SYMBOL</th>
<th>BETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Speedway Corp.</td>
<td>ISCA</td>
<td>1.60</td>
</tr>
<tr>
<td>Speedway Motorsports Inc.</td>
<td>TRK</td>
<td>0.79</td>
</tr>
<tr>
<td>Dover Motorsports Inc.</td>
<td>DVD</td>
<td>0.88</td>
</tr>
<tr>
<td>Sporting Goods Retail</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dick’s Sporting Goods</td>
<td>DKS</td>
<td>1.17</td>
</tr>
<tr>
<td>Hibbett Sports, Inc.</td>
<td>HIBB</td>
<td>1.44</td>
</tr>
<tr>
<td>Foot Locker, Inc.</td>
<td>FL</td>
<td>1.29</td>
</tr>
<tr>
<td>Finish Line, Inc.</td>
<td>FINL</td>
<td>1.79</td>
</tr>
<tr>
<td>Zumiez, Inc.</td>
<td>ZUMZ</td>
<td>1.88</td>
</tr>
<tr>
<td>Sporting Goods Manufacturers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nike, Inc.</td>
<td>NKE</td>
<td>0.49</td>
</tr>
<tr>
<td>Under Armour, Inc.</td>
<td>UA</td>
<td>0.06</td>
</tr>
<tr>
<td>Callaway Golf Co.</td>
<td>ELY</td>
<td>1.03</td>
</tr>
<tr>
<td>Crocs Incorporated</td>
<td>CROX</td>
<td>0.79</td>
</tr>
<tr>
<td>Columbia Sportswear Co.</td>
<td>COLM</td>
<td>1.91</td>
</tr>
<tr>
<td>Sport and Entertainment Organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World Wrestling Entertainment, Inc.</td>
<td>WWE</td>
<td>0.76</td>
</tr>
<tr>
<td>Live Nation Entertainment, Inc.</td>
<td>LYV</td>
<td>0.57</td>
</tr>
<tr>
<td>Electronic Arts Inc.</td>
<td>EA</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*Source: Yahoo! Finance (2015).*
Groppelli and Nikbakht (2012) discuss sources of risk that may affect an organization’s returns. They divide risk into three categories: external business activity, industry and company risk, and global risk. Risk related to external business activity arises from economic conditions, political developments, and inflation. Examples of industry and company risk include risks common to a particular industry, technological changes, and environmental and social concerns. Finally, global sources of risk include changes to regulations regarding import and export activities, expropriation, and changes in exchange rates.

This section discusses how some of these risks, including economic conditions, political developments, and global issues, affect sport.

**Economic Conditions**

One source of risk related to external business activity is the economic conditions of the time. Although the sport industry was once considered recession proof, the so-called Great Recession, which began in late 2007, did affect teams and leagues, as likely will future economic downturns. An economic slowdown, especially when coupled with troubles in the credit market, can have a major impact on financial management in sport.

**Capital Finance**

As lending standards tighten in a credit crisis, the economy’s impact on the bond market affects teams’ and cities’ capital financing endeavors. In 2008, for example, debt became more expensive as a result of the recession and accompanying banking crisis. During this time, the Arlington, Texas, city council sought to refinance a portion of the municipal bonds that it had used to finance part of the Dallas Cowboys’ new stadium. The municipal bonds were initially issued in 2005 as synthetic fixed-rate bonds, bonds that have elements of both a fixed-rate bond and a variable-rate bond. Their interest rate ranged from 3% to 4%. The tightening credit market caused an increase in the interest rate during the spring of 2008, to 7%. Three months later, the rate climbed to 8%, and it peaked at 9% during the summer of 2008, resulting in a $500,000 increase in Arlington’s monthly interest payment (Schrock, 2008). The city sought to refinance the bonds at a fixed rate of approximately 6% (“Cowboys, city council,” 2008). In total, the city was seeking to refinance $164 million of the synthetic fixed-rate bonds.

After encountering difficulty refinancing, the city decided to attempt to refinance only a portion of the bonds. Arlington converted $104 million of the $164 million to a fixed rate of approximately 6%. The city also financed $10 million in closing costs, which included bond insurance and fees required to terminate the previous financing agreement. The remaining $60 million was left on the fluctuating rate. Due to the changes in the bond market, the debt service costs to the city increased by $44 million over the life of the issue (Ahles & Schrock, 2008).

At about the same time, Jerry Jones, the Dallas Cowboys’ owner, announced that the team had refinanced $435 million worth of debt for AT&T Stadium. The variable rates from the initial offering had fluctuated dramatically during the year, increasing the required bond payments and the cost of the overall project. This led the Cowboys to refinance at a fixed rate of 5% (“Cowboys refinance $435m,” 2008).

Both the city of Arlington and the team were affected by the risk associated with variable-rate bonds. The tightening credit market led to an increase in rates, raising the total cost to finance the project and affecting the operating budgets of the team and the city.

Auction-rate bonds, a common method of financing facility construction, can also be negatively impacted by changes in the bond market. An auction-rate bond is a form of long-term debt that acts like short-term debt, in which interest rates are reset through auctions held no more than 35 days apart (Schnitzler, 2008). They are supposed to reduce the borrowing costs for long-term financing, as these costs are linked to short-term interest rates rather than 20- or 30-year interest rates (see Exhibit 3.3 for examples of how rates vary for various bond terms). In 2007, the New York Giants sold seven series of bonds totaling $650 million. The March 24, 2008, auction, however, failed to attract enough bidders. When there are not enough bidders for this type of bond, a penalty interest rate is calculated based on the terms of the offer. The team was obliged to pay 22% interest on $53 million in bonds. Additionally, the team began paying 11.5% on the $70.85 million in bonds that were successfully auctioned that day. As a result, the Giants chose to redeem $100 million of the bonds (“NFL Giants redeeming,” 2008).

The State of Indiana financed the entire $700 million Lucas Oil Stadium with auction-rate bonds. As a result, like the Giants, the state was exposed to the risk of drastic changes in interest rates. Unlike the Giants, however, the maximum interest rate the state had to pay was 15% (Schnitzler, 2008).
In addition to affecting capital finance, a recession can also have an effect on operating budgets. In 2009, for example, MLB attendance was down 6.6% from 2008 (Brown, 2010). During this period, to keep fans coming to games, sport organizations resorted to discounting tickets and providing ticket promotions. These included two-for-one tickets, family nights, gas card deals, e-savers, dollar nights, college nights, and “economic stimulus plans” for fans (Fisher, 2008). With the combination of fewer fans coming to games and the fact that those who were attending were taking advantage of discounts and promotions, revenues from ticket sales were down for most clubs in 2009. Short-term advertising and sponsorship revenues also decreased. However, for professional teams and major college programs, long-term contracts with sponsors and media rights partners softened the full impact of the slowing economy, as discussed in Chapter 1.

For sport organizations, risk is reduced when revenues are guaranteed. Teams with greater percentages of guaranteed income have less risk than those with lower percentages of guaranteed income. For many sport organizations, their most significant revenue comes from sources protected by long-term contracts (“Struggling economy likely,” 2008). For example, during the Great Recession the Southeastern Conference signed a long-term media rights deal with CBS and ESPN that significantly increased member school revenues, despite the slowdown in the economy and the struggle to sell season tickets that some schools faced. Similarly, in 2009 the NBA had just completed the first year of an eight-year, $7.5 billion deal with ESPN, ABC, and Turner (Kaplan & Lombardo, 2009).

However, the timing of the expiration of long-term contracts does affect leagues. For example, in 2009 the PGA Tour lost five automotive title sponsors and was threatened with losing more. Thirteen of its events were sponsored by banks, investment firms, and credit card companies. As long as financial markets remained in turmoil, the PGA Tour and other sport organizations were at risk of losing sponsors. In the case of the PGA Tour, each sponsorship agreement was worth approximately $32 million over four years (“Struggling economy likely”).

League loan pools

League loan pools are also affected by economic conditions. Because the risk of an individual franchise is greater than the risk of an entire league (this is similar to the risk of an individual asset being greater than the risk of a portfolio), leagues borrow to create loan pools that provide capital to affiliated franchises at reduced cost. The NBA, for example, created its loan pool in 2003 and renewed the $1.96 billion debt in May 2009. Seventeen NBA teams borrowed from the fund. Due to the condition of the credit markets in 2009, the cost to borrow from the pool rose from 75 points over LIBOR to approximately 175 points over LIBOR (i.e., by 1%). The NBA was fortunate, however. When the credit markets froze after the collapse of Lehman Brothers in September 2008, the NFL and MLB were unable to renew their loan pools (Lombardo & Kaplan, 2011). As their loans “termed out,” the leagues had to convert them into term loans and begin to pay accelerated principal payments, and teams that borrowed from league funds, therefore, had to begin to repay the league (Kaplan & Lombardo). Like the NBA, the NHL was also able to renew its loan pool in May 2009. At that time the NHL’s loan pool totaled $200 million; the loan pools of the NBA, NFL, and MLB each totaled approximately $2 billion (Kaplan, 2009).

Political Developments

Changes in the political environment can also affect financial risk in sport. Policy decisions at the local, state, and national levels directly impact the business of sport. For example, at the local and state levels, policy is set regarding the public funding of venues, state income tax rates for athletes, and amusement tax rates on ticket revenues. Federal policy on sport often includes antitrust regulations and labor relations laws. Over time, policy may shift as the attitudes and beliefs of the electorate change and as the values of society shift. Financial managers must be aware how changes in the political environment may affect the sport industry.

The Great Recession impacted sport as public policy shifted as a result of the economic crisis. In 2008, with the federal government bailouts of the financial sector and the automobile industry, members of Congress asked whether sponsorship spending by firms receiving taxpayer support is a prudent use of public money (“Struggling economy likely”). In 2009, companies in the financial sector had $2.47 billion in obligated payments for naming rights to U.S. and Canadian sports venues (Leighton & Mickle, 2009).

In 2008, banking was the fourth largest category in sport sponsorship spending, at $900 million. Additionally, banks spent $122.3 million on advertising in sport (Leighton & Mickle). Exhibit 3.9 lists the amounts banks were spending, as of 2014, on sport-related naming rights.

Exhibit 3.9
EXHIBIT 3.9 Banks and naming rights.

<table>
<thead>
<tr>
<th>VENUE</th>
<th>TOTAL VALUE (MILLIONS)</th>
<th>YEARS</th>
<th>AVERAGE/YR. (MILLIONS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Citi Field</td>
<td>$400</td>
<td>20</td>
<td>$20.0</td>
</tr>
<tr>
<td>Barclays Center</td>
<td>$200</td>
<td>20</td>
<td>$10.0</td>
</tr>
<tr>
<td>Bank of America Stadium</td>
<td>$140</td>
<td>20</td>
<td>$7.0</td>
</tr>
<tr>
<td>Lincoln Financial Field</td>
<td>$139.6</td>
<td>20</td>
<td>$7.0</td>
</tr>
<tr>
<td>TD Garden</td>
<td>$119.1</td>
<td>20</td>
<td>$6.0</td>
</tr>
<tr>
<td>Prudential Center</td>
<td>$105.3</td>
<td>20</td>
<td>$5.3</td>
</tr>
<tr>
<td>M&amp;T Bank Field</td>
<td>$75</td>
<td>15</td>
<td>$5.0</td>
</tr>
<tr>
<td>RBC Center</td>
<td>$80</td>
<td>20</td>
<td>$4.0</td>
</tr>
<tr>
<td>Citizens Bank Park</td>
<td>$95</td>
<td>25</td>
<td>$3.8</td>
</tr>
<tr>
<td>EverBank Field</td>
<td>$16.6</td>
<td>5</td>
<td>$3.3</td>
</tr>
<tr>
<td>BankAtlantic Center</td>
<td>$27</td>
<td>10</td>
<td>$2.7</td>
</tr>
<tr>
<td>Chase Field</td>
<td>$66.4</td>
<td>30</td>
<td>$2.2</td>
</tr>
<tr>
<td>Comerica Park</td>
<td>$66</td>
<td>30</td>
<td>$2.2</td>
</tr>
<tr>
<td>PNC Park</td>
<td>$40</td>
<td>20</td>
<td>$2.0</td>
</tr>
<tr>
<td>Wells Fargo Center</td>
<td>$40</td>
<td>29</td>
<td>$1.4</td>
</tr>
<tr>
<td>Scotiabank Place</td>
<td>$20.5</td>
<td>15</td>
<td>$1.4</td>
</tr>
</tbody>
</table>


After financial services firms received bailout money from the Troubled Asset Relief Program, the political landscape changed and revenue to sport from the financial services sector was put at risk. Citigroup’s naming rights deal for the Mets ballpark in particular drew fire and attracted attention to banks’ expenditures on sport sponsorship. The total value of Citigroup’s deal with the Mets was $400 million, or $20 million per year for 20 years. As New York City struggled to deal with the credit crisis in 2008, the bank received $45 billion in federal TARP funding. This led U.S. Representative Barney Frank to state, when questioning the Citigroup naming rights agreement, “I don’t think anybody has ever opened a bank account or decided to buy a CD because a bank’s name is on the stadium” (Lefton & Mickle, 2009, para. 14).

Although banks had stated that TARP funds were not used and would not be used for sponsorship spending, Congress continued to focus on the “wasteful” use of taxpayer resources. Dennis Kucinich, a congressional representative from Ohio, led the charge. He stated,

People in my district are struggling to survive, they’re losing jobs, they’re losing their homes, whole industries are at risk, and someone’s getting a bailout and they can spend huge amounts of money to put their name on the stadium. It’s just not right. It shows a lack of appreciation for the climate we’re in. … Once you start getting funds from the United States taxpayers, it’s not a private matter any more. You’re now playing in the federal league. (Lefton & Mickle, paras. 43–44)

Global Issues

As business becomes more global, financial managers face new issues. In North America, the league most affected by global issues on a consistent basis is the National Hockey League. This league has the highest percentage of Canadian franchises. Most of the Canadian franchise revenue is earned in Canadian dollars, whereas the NHL’s collective bargaining agreement requires that all player contracts be paid in U.S. dollars. As a result, most of the expenses of these franchises are in U.S. dollars. As the Canadian dollar strengthens relative to the U.S. dollar, a Canadian team’s revenue increases while its expenses decrease. As a result, Canadian teams become more profitable. But when the U.S. dollar strengthens again, the Canadian teams’
primary expense, player salaries, increases and reduces the profits of these franchises. Fluctuations in the exchange rate between the Canadian dollar and U.S. dollar, therefore, affect the profitability not only of the Canadian teams but also of the U.S. teams and the league as a whole.

As with other issues examined in this section, the Great Recession had an impact here, too. For the 2008/2009 NHL season, the salary cap rose to $56.7 million (“NHL salary cap,” 2008), increasing for the fourth straight year. As the salary cap is tied directly to overall league revenues, the increase in the cap was attributable to record attendance (ticket revenues are the source of a majority of team and league revenues) and the strength of the Canadian dollar. While the Canadian dollar remained strong compared to the U.S. dollar, which weakened during the Great Recession, the cap continued to rise (Burnside, 2008). The collective bargaining agreement with the players includes not only a salary cap but also a salary floor, the minimum amount a team can spend on player payroll. The salary floor grew to $40.7 million for the 2008/2009 season. Some teams in smaller, nontraditional U.S. markets complained that they could no longer turn a profit, even with revenue sharing. These teams included the Phoenix Coyotes (who were in bankruptcy at the time), the Atlanta Thrashers (who were sold and relocated to Winnipeg in 2011), the Nashville Predators, the Florida Panthers, and the Columbus Blue Jackets (“NHL owners growing,” 2008).

In Europe, differing income tax rates between countries impacts team profitability and quality. For example, in England, the top income tax rate rose to 50% in 2010. Because of the high tax rate and fluctuations in currency value (e.g., the British pound versus the euro), Premier League players could have seen their salary decrease by a third in 2010 as compared to 2009 (Gibson, 2009). However, players in Europe often structure their contract values based on net (after tax) earnings; therefore the EPL teams had to make up the difference in salary resulting from the tax increase, so that the players’ net salaries remained the same. Also, European players typically ask EPL clubs to pay them in euros. Hence, like the NHL, EPL clubs have to account for fluctuations in exchange rates. With the 2010 tax rate increase and players’ demand to be paid in euros, it became more costly for teams to do business in the EPL as compared to other European countries, such as Spain. For a net salary of €3 million (or £2.59 million), an EPL team would have a €6.8 million salary expense, when taxes and currency fluctuations were accounted for. A team in La Liga (Spain) would have an expense of €4 million to pay a player the same net amount. Hence, in 2010 the cost of signing a player in England was 70% higher than the cost of signing the player to the same net contract in Spain. When income tax rates rise and exchange rates fluctuate, the fear in England is that higher player costs will end the league’s dominance in Europe.
Revenue Sharing and Risk

Each individual franchise or athletic department operates within its own financial environment, facing risk that sometimes is unique to that franchise or department. However, franchises and athletic departments also cooperate in several ways even while their teams are competing on the field, and one of the ways is in financial management. In both college athletics and professional sport, leagues use revenue sharing to support weaker franchises and maintain the competitive balance within the league. A byproduct of revenue sharing is that each individual organization’s risk is lessened. Revenues are shared through pools under several models, discussed below. See Sidebar 3.B for a discussion of revenue sharing in the NHL.

Revenue Pools

Each league has two basic pools of revenue that may or may not be shared by teams within the league: central and local. Central revenues are revenues paid directly to the league. These revenues are then distributed to member organizations. Typically, net costs of operating the league, association, or conference are deducted prior to distribution. In professional sport, the degree to which teams share central revenues is governed by the league’s collective bargaining agreement. In collegiate sport, central revenue sharing is a product of NCAA membership agreements and conference affiliation (Foster, Greyser, & Walsh, 2005). For example, the revenue from the CBS television contract to broadcast the NCAA Men’s Basketball Tournament goes first to the NCAA. Then, based on a predetermined formula, the NCAA sends the revenue to member institutions. For NCAA Division I — FBS schools, a majority of the revenue from football broadcasts flows through conference offices. Similarly, revenue from the SEC’s television contract with CBS and ESPN is sent to the conference, which deducts expenses and forwards the revenue to member institutions.

Sidebar 3.B
Reducing risk at the franchise level

Over the past 15 years, leagues have moved to reduce risk at the franchise level. MLB increased the sharing of local revenues, and the NFL began modestly sharing local revenues. The league that changed its revenue sharing model most drastically, however, was the National Hockey League. Prior to locking out the players in 2004, the owners of franchises and league management decided that the financial structure of the league needed modification. During the 2002/2003 NHL season, with total revenues of $1.996 billion and total expenses of $2.269 billion, the league had an operating loss of $273 million. As the league lacked a salary cap, player costs had risen to 75% of total league revenues. This was the highest percentage for player salary of all leagues in North America. Further, 19 NHL franchises lost an average of $18 million. For the 11 teams making a profit that year, the average profit was $6.4 million. Only two teams earned over $10 million.

When the NHL lockout ended, the league had implemented a hard salary cap and had increased revenue sharing. Player salary was capped at 54% of league revenues, if league revenues were below $2.2 billion. The cap amount increased slightly if league revenues increased above the $2.2 billion mark. The sharing of local revenues was increased to assist small-market teams that were struggling financially under the old system.

As of 2015, the NHL salary cap is determined by calculating the midpoint of total hockey-related revenues (as defined in the league’s collective bargaining agreement). The players receive 50% of hockey-related revenues. The salary cap is set at 15% above the midpoint of these revenues, with a salary floor at 15% below the midpoint. All teams in the league must spend to at least the salary floor. The NHL’s salary cap was expected to be approximately $71 million during the 2014/2015 season, with the salary floor at $52 million (Rosen, 2013).

Local revenues, such as those from teams’ home ticket sales, local television and radio, advertising, and sponsorship, are also shared. The specific revenues that are shared and the degree to which they are shared vary by league. For example, in the NFL a supplemental revenue sharing fund was created to help maintain competitive balance in the league. The highest-revenue teams would share a variety of local revenues with teams in the lowest quarter of revenues, with as much as $200 million moving from the wealthier clubs to the poorer ones. After the signing of the 2011 CBA, changes in the agreement narrowed the financial gap between clubs so that in 2013 only one franchise was qualified to receive funds from the supplemental revenue sharing fund. That franchise was expected to receive between $5 million and $10 million from the fund (Kaplan, 2013).

As another example, MLB teams pay 34% of net local revenues into a pool of money which is then divided equally among all teams. The difference between what a team pays in and what it receives is either a net payment into the revenue sharing pool or a net receipt. Additional supplemental monies may be shared, as well, under the league’s supplemental revenue sharing plan as defined in its CBA. Approximately $400 million is sent from the highest- to the lowest-revenue franchises.

Revenue Sharing Models

Each league uses one of three models for sharing revenue (Foster, Greyser, & Walsh). Under the first, the league provides increased revenue allocations to teams with low local revenues. MLB uses this model, as does the NBA.

Under the second model, the league provides equal allocations to all teams in the league. For the most part, this is how the NFL currently shares revenue, especially with the phaseout of the supplemental revenue sharing system discussed previously. Under the current CBA, players receive approximately 45% to 47% of all revenues; the percentage shared with players varies by revenue source. The league’s central revenues are shared equally among all clubs. The players receive a lower share of local revenues, and very little of local revenue is now shared among clubs. Under the NFL’s old CBA, players received 59.9% of all league revenues, both central and local. Because of the great disparity in revenues generated locally within the NFL, under the old CBA the owners had to provide higher revenues to clubs with smaller local revenue pools.

EXHIBIT 3.10 Comparison of revenues of two NFL teams.
By examining revenues for two NFL franchises, Team X and Team Y, we can see why a group of owners sought to change the revenue sharing model. Team X is located in a medium/large market with a newly renovated stadium, and Team Y is located in a small market with an older facility. Revenues for each team are shown in Exhibit 3.10.

The salary cap under the old CBA, which was set at a percentage of total revenues, affected Team Y more than Team X, because Team Y earned less in local revenue. With a $105 million cap, Team X’s ratio of player salary to total revenue is 0.53 ($105,000,000/$200,000,000). For Team Y, the ratio is 0.66 ($105,000,000/$160,000,000).

At the college level, the SEC uses an equal allocation formula for distributing conference media revenues to member institutions. Most college conferences distribute revenues in a similar fashion.

The third revenue sharing model favors teams that generate higher revenue. The Premier League, the elite football (soccer) league in England, uses this model. Franchises are rewarded for the effective financial management of their clubs.
Risk affects the financial management of all sport organizations. Interest rates, bond rates, estimates of cash flow, and the cost of capital are all affected by changes in risk, as are rates of return. Because cash today is worth more to an investor than the same cash in the future, risk premiums compensate investors for risking today’s cash. These premiums include an inflation premium, default risk premium, liquidity premium, and maturity risk premium.

An investment may be evaluated as a stand-alone investment or as a part of a larger portfolio of investments. For a stand-alone investment, the expected rate of return must be higher than the perceived risk. When considering whether to add an investment to a portfolio, the investor will examine how the new asset would affect the risk and return of the portfolio. The goal is to maximize the return of the portfolio while minimizing risk. Diversification is an important approach to reducing the risk of a portfolio. Financial managers use the capital asset pricing model to analyze the relationship between risk and rate of return for securities. CAPM allows the manager to analyze diversifiable and market risk by incorporating the beta coefficient of a security or a portfolio of securities, by using the security market line formula. Typically, CAPM is used to analyze securities; however, an investor or manager can use it to evaluate the risk and return merits of an organization’s investments and assets.

Managers in sport organizations must be aware of risks that may affect the organization’s finances. Leagues have been proactive in reducing the risks that member clubs face—but there is no risk-free investment. Managers must strive to analyze risk carefully to protect the organization’s financial assets.

**Concept CHECK**

1. How does risk affect the financial management of sport organizations?
2. Describe the process of determining a nominal interest rate.
3. Of MLB, the NBA, and the NHL, which league has the most risk, and which has the least? Why?
4. What must players and agents understand about risk? How should an agent structure a player’s contract if it contains deferred compensation?
5. What risk factors should a team consider when deciding whether to build and fund a new venue? How are the risk factors different if a municipality is funding the construction?
6. If you were advising an investor interested in purchasing a sport franchise, what advice would you give?
7. Among NCAA men’s basketball teams, which team would you expect to have the highest value? Why? How do you think conference affiliation affects value among these teams?

**PRACTICE problems**

1. You have the opportunity to purchase NFL Franchise A. The probability distribution of expected returns for the franchise is as follows:

<table>
<thead>
<tr>
<th>PROBABILITY</th>
<th>RATE OF RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1</td>
<td>−20%</td>
</tr>
<tr>
<td>0.2</td>
<td>0%</td>
</tr>
<tr>
<td>0.4</td>
<td>7%</td>
</tr>
<tr>
<td>0.2</td>
<td>15%</td>
</tr>
<tr>
<td>0.1</td>
<td>25%</td>
</tr>
</tbody>
</table>

What is the expected rate of return for an investment in Franchise A? What is the standard deviation?

2. An owner of several sport assets holds the following portfolio:

<table>
<thead>
<tr>
<th>ASSET</th>
<th>INVESTMENT</th>
<th>BETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team A</td>
<td>$100,000,000</td>
<td>0.5</td>
</tr>
<tr>
<td>Team B</td>
<td>$100,000,000</td>
<td>1.0</td>
</tr>
<tr>
<td>Facility A</td>
<td>$100,000,000</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>$300,000,000</td>
<td></td>
</tr>
</tbody>
</table>
What is the beta of this portfolio?

3. Boggs Sports Holdings has a total investment of $500 million in five companies:

<table>
<thead>
<tr>
<th>INVESTMENT (IN MILLIONS)</th>
<th>BETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>$130</td>
</tr>
<tr>
<td>Company B</td>
<td>$160</td>
</tr>
<tr>
<td>Company C</td>
<td>$70</td>
</tr>
<tr>
<td>Company D</td>
<td>$90</td>
</tr>
<tr>
<td>Company E</td>
<td>$50</td>
</tr>
<tr>
<td>Total</td>
<td>$500</td>
</tr>
</tbody>
</table>

What is the beta of this portfolio?

4. For the portfolio described in Problem 3, if the risk-free rate is 10% and the market risk premium is 5%, what is Boggs’ required rate of return?

5. You have been hired as the manager of a portfolio of ten sport assets that are held in equal dollar amounts. The current beta of the portfolio is 1.9, and the beta of Asset A is 2.1. If Asset A is sold and the proceeds are used to purchase a replacement asset, what beta would the replacement asset have to have in order to lower the portfolio beta to 1.6?

6. The Sports Investment Fund has a total investment of $5 million in the following portfolio:

<table>
<thead>
<tr>
<th>INVESTMENT</th>
<th>BETA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset A</td>
<td>$900,000</td>
</tr>
<tr>
<td>Asset B</td>
<td>$1,100,000</td>
</tr>
<tr>
<td>Asset C</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Asset D</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$5,000,000</td>
</tr>
</tbody>
</table>

The market’s expected rate of return is 10%, and the risk-free rate is 4%. What is the required rate of return?

7. Following is a distribution of returns:

<table>
<thead>
<tr>
<th>PROBABILITY</th>
<th>RETURN</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4</td>
<td>$35</td>
</tr>
<tr>
<td>0.5</td>
<td>$24</td>
</tr>
<tr>
<td>0.1</td>
<td>−$15</td>
</tr>
</tbody>
</table>

What is the coefficient of variation of the expected dollar return?

---

### Risk and Team Values

Risk directly affects the values of professional teams. Groppelli and Nikbakht (2012) state that to maximize the value of a firm, managers must focus on increasing the growth rate of cash flows and reducing the risk or uncertainty of those cash flows. One measure of an organization’s risk is its credit rating. According to Fitch Ratings (2002), factors affecting the risk of cash flows and, therefore, the credit rating of leagues and teams, include player salary restraints, national television contracts, revenue sharing among member clubs, league influence on team financial matters, debt limits, and the relationship with the players’ union.

**Exhibit 3.11** compares the average franchise value for the NFL and MLB from 2010 through 2014. The fact that the average value of an NFL franchise is more than 75% greater than that of the average MLB franchise in 2014 is due in part to differing levels of risk.

Fitch Ratings discussed the factors that led to its conclusion that the NFL has the highest credit rating of all leagues. Primarily, the NFL is best able to withstand economic slowdowns that affect sponsorships, naming rights agreements, and the disposable income of fans. Its risk is reduced by lucrative long-term sponsors, and its revenue is more stable and predictable.
contracts with its media partners, strong relations with the NFL Players Association (NFLPA), and the willingness of team owners to be proactive in working together for the betterment of the league. The teams cooperate on merchandising and licensing revenues and have agreed to the creation of a league-funded loan pool to help individual franchises build new stadiums that will increase local revenues. Further, the league is the most competitively balanced from top to bottom, thanks to its hard salary cap. The hard cap controls the largest team expense, reducing the risk of team financial losses and improving the league’s creditworthiness. The NFL also limits the debt that a franchise can incur, reducing risk for both the league and its teams.

Fitch Ratings rates the creditworthiness of MLB lower than that of the NFL because the MLB is exposed to greater risk. Although revenue sharing has increased under the latest MLB CBA, teams share only a small percentage of overall television revenue. Each team is able to negotiate and keep most (or, for some teams, all) of its local television revenues. The league does not have a hard salary cap, and although labor relations have improved greatly, MLB and the players association have a history of poor relations.

Fitch Ratings notes that as MLB moves its economic model closer to that of the NFL, its risk will decrease and its rating will improve. This can be seen in the narrowing gap between franchise values of the NFL and MLB from 2011 to 2013. During that time frame, MLB values increased at a greater rate than NFL values, as MLB had secured more money from its television rights deals and increased the value of Major League Baseball Advanced Media (MLBAM) and the revenues derived from MLBAM. MLB’s television rights deals with Fox, TBS, and ESPN are now worth more than twice what the league was receiving under its previous rights deals (Ozanian, 2013). However, after the NFL’s new broadcasting deals with NBC, ESPN, CBS, and Fox began in 2014, revenues received by each team from media rights increased $80 million per year (Ozanian, 2014). This new revenue resulted in NFL team values growing 22% in 2014, while MLB values grew 9%.

The importance of acquiring and securing revenue sources and the impact of doing so on risk and value is evident in an examination of collegiate football teams (see Exhibit 3.12). Forbes calculates the value of NCAA Division I – FBS teams in its reporting on the revenues of athletic programs. Exhibit 3.12 lists the 20 most valuable football teams in 2014. The average value of these teams was $88.8 million. The list clearly indicates that teams in conferences with higher cash flows and lower risk or uncertainty of those cash flows are more highly valued than teams in conferences without lucrative long-term media contracts. (In Notre Dame’s case, the team itself has secured these contracts.) For example, the SEC has nine of the 20 most valuable teams, according to Forbes. The league has a lucrative contract to broadcast football games nationally, and revenue from that contract flows back to its member schools. Further, the league launched the SEC Network in partnership with ESPN in August 2014. Notre Dame’s contract with NBC provides similar revenues. The Big 10, with five teams listed, created its own television network to generate revenues for member institutions.

A recent history of winning has little impact on a team’s value. Texas has struggled for several years but is ranked as the most valuable program. Florida has struggled since Urban Meyer left, but the team benefits from its membership in the SEC. The value of the Florida football team is $5 million greater than that of the University of Washington team—which is the highest-valued Pac 12 team.
case questions

1. What current economic conditions might affect the credit rating of a team or league?
2. Which teams’ credit ratings might be most negatively affected during a recession?
3. What must the NFL do to maintain its high credit rating?
4. What can MLB do to improve its credit rating?

EXHIBIT 3.11 Average value (in millions) of NFL and MLB franchises from 2010 to 2014.

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFL</td>
<td>$1,020</td>
<td>$1,040</td>
<td>$1,100</td>
<td>$1,170</td>
<td>$1,430</td>
</tr>
<tr>
<td>MLB</td>
<td>$491</td>
<td>$523</td>
<td>$605</td>
<td>$744</td>
<td>$811</td>
</tr>
</tbody>
</table>

*Source*: Data compiled from Forbes.com,

Exhibit 3.12 Valuations of college football teams in 2014 (millions).

<table>
<thead>
<tr>
<th>UNIVERSITY</th>
<th>CONFERENCE</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>Big XII</td>
<td>$131</td>
</tr>
<tr>
<td>Notre Dame</td>
<td>Independent</td>
<td>$122</td>
</tr>
<tr>
<td>Michigan</td>
<td>Big 10</td>
<td>$117</td>
</tr>
<tr>
<td>Alabama</td>
<td>SEC</td>
<td>$107</td>
</tr>
<tr>
<td>LSU</td>
<td>SEC</td>
<td>$103</td>
</tr>
<tr>
<td>Auburn</td>
<td>SEC</td>
<td>$97</td>
</tr>
<tr>
<td>Tennessee</td>
<td>SEC</td>
<td>$94</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Big XII</td>
<td>$93</td>
</tr>
<tr>
<td>Ohio State</td>
<td>Big 10</td>
<td>$87</td>
</tr>
<tr>
<td>Georgia</td>
<td>SEC</td>
<td>$83</td>
</tr>
<tr>
<td>Florida</td>
<td>SEC</td>
<td>$82</td>
</tr>
<tr>
<td>Penn State</td>
<td>Big 10</td>
<td>$80</td>
</tr>
<tr>
<td>Texas A&amp;M</td>
<td>SEC</td>
<td>$78</td>
</tr>
<tr>
<td>Washington</td>
<td>Pac 12</td>
<td>$77</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Big 10</td>
<td>$73</td>
</tr>
<tr>
<td>Michigan State</td>
<td>Big 10</td>
<td>$72</td>
</tr>
<tr>
<td>South Carolina</td>
<td>SEC</td>
<td>$72</td>
</tr>
<tr>
<td>Arkansas</td>
<td>SEC</td>
<td>$71</td>
</tr>
<tr>
<td>USC</td>
<td>Pac 12</td>
<td>$69</td>
</tr>
<tr>
<td>Oregon</td>
<td>Pac 12</td>
<td>$68</td>
</tr>
</tbody>
</table>
REFERENCES


Source: Data compiled from Forbes.com (2014).
Time Value of Money
KEY CONCEPTS

annuity
compound interest
customer price index (CPI)
default
discount rate
future value (FV)
nominal value
perpetuity
present value (PV)
real value
simple interest
time value of money
Imagine a sports agent asking clients if they would rather have a payment of $100,000, $102,000, $110,000, or $120,000. The obvious choice is to take the $120,000. But if the agent were to ask a client if he wanted $100,000 immediately, $102,000 to be paid one year from now, $108,000 in 18 months, or $120,000 in three years, which should the athlete choose? The choice can be made properly only with an understanding of the yearly, monthly, or even daily changes in the purchasing power of money—known as the time value of money. A variety of financial and economic concepts—including inflation, risk, future value of money and annuities, liquidity, present value of money and annuities, and interim compounding—must be understood before the time value of money can be applied to real-world sport management problems. Each of these concepts affects the answers to questions such as the one posed at the beginning of this paragraph.
INFLATION

If someone were to travel back in time to 1955, she would experience instant sticker shock. Prices for nearly all items would be lower—just ask someone 30 years older than you about what it used to cost to buy things. A dollar could purchase more goods or services in the 1960s than in the 2010s. This loss of purchasing power, or real value, is the result of inflation. Prices tend to increase over time, and the value of money tends to decrease, even though the nominal value, or face value, of money remains the same.

Inflation Rate

The inflation rate affects all financial decisions, particularly those related to long-term investments. Hence, financial managers are wise to understand and monitor the inflation rate. Organizations that invest their money for future purchases must ensure that they are receiving interest that at least matches the rate of inflation, or the real value of their investment will decrease. Although the nominal value of a dollar has remained the same over the past 25 years, the real value of that dollar has dramatically decreased; in other words, the products or services that that dollar can purchase have diminished.

To understand the effect of inflation, consider a recreation center that places $10,000 into a checking account and receives no interest. The rate of inflation will gradually erode the value of the money. For instance, if the annual rate of inflation is 2%, the real value of the $10,000 will decrease by 2% over the year, even though the account experiences no loss in nominal value (the account balance remains the same). Conversely, if the recreation center saves $10,000 in a bank account for one year and receives 3% interest, and the rate of inflation is 2%, the realized change in purchasing power can be calculated as follows:

\[
\text{real change in value} = \text{interest received} - \text{purchasing power lost}
\]

\[
= 10,000 \times 0.03 - 10,000 \times 0.02
\]

\[
= 300 - 200 = 100
\]

Although the organization now has $10,300 in its account, the ability to purchase products has increased by $100. The recreation center may wish to explore investments that receive higher returns relative to inflation.

Consumer Price Index

Economists compute the inflation rate by studying changes in the consumer price index (CPI). The CPI is the result of a calculation based on the prices of goods and services in more than 200 categories reflecting the current lifestyle of the typical American consumer, to determine the overall change in real prices during a period (Bureau of Labor Statistics, n.d.). The Bureau of Labor Statistics, which is the government agency responsible for calculating the CPI, allocates the 200-plus smaller categories into nine larger categories: (1) food and beverages, (2) housing, (3) clothing, (4) transportation, (5) medical care, (6) recreation, (7) education, (8) communication, and (9) other and estimates the percentage of spending for each category for a typical U.S. household. The CPI helps consumers understand the difference between the real value and nominal value of money and how the purchasing power of their money is changing. The nominal amount of money needed to purchase products or services typically increases over time, but economists and financial managers are interested in the real value of dollars—the purchasing power those dollars retain.

The Bureau of Labor Statistics tracks the CPI and provides monthly charts for various products and services, as well as information for various cities and regions throughout the country (visit www.bls.gov/cpi/home.htm#tables). The BLS website also provides a “CPI Inflation Calculator” (http://data.bls.gov/cgi-bin/cpicalc.pl) that indicates the change in the value of money over a specified period. For instance, by using the calculator, one can quickly determine that $100 in 1989 had the same buying power as $190.81 had in 2015. In March 2009, in the midst of a significant economic slowdown, the CPI decreased over a 12-month period, for the first time since 1955 (Zigler, 2009). Furthermore, from 2009 to 2015 the CPI increased no more than 3% per year, indicating a continuing low rate of inflation for the goods and services that comprise the CPI.

In addition to tracking the CPI, financial managers need to understand that individual items or services may experience inflation-related changes that deviate from the overall rate. Financial managers must understand the forces working within their industries, because even if the overall inflation rate remains relatively stable, an increase in prices for certain items—for example, travel or sporting equipment—could have a major
negative impact on their organization.

Despite tremendous growth in the popularity of Major League Baseball from 1950 to 1990, ticket prices actually decreased in real terms. Andrew Zimbalist (1992) noted that if 1950 MLB ticket prices were adjusted for inflation, they would average $8.74, whereas the average cost of an MLB ticket in 1990 was $7.95. However, from 1991 to 2001, the average ticket price increased by 120%, while the CPI increased only 30% (Corwin, 2001). MLB tickets have continued to increase in price since 2001, which has caused some observers to question whether teams may be pricing out many of their core customers, as well as future generations of fans (Herbert, 2009).
Present and past prices

Are prices always higher in the present than in the past? In other words, does purchasing power always decrease over time? Let’s look at a couple of items likely to be of concern to you: the costs of college and of gasoline.

When prices are adjusted for inflation, one of the fastest-growing products or services over the last 30 years is college tuition. From 1986 to 2012 the overall inflation rate increased 115.06%, but college tuition and fees increased 498.31% (Wadsworth, 2012)! This means that it is nearly five times as expensive to attend college as it was just 30 years ago. Exhibit 4.1 indicates that the trend has been particularly dramatic since 2000, with nearly 300% increases. This has resulted in students’ relying heavily on loans to attend college, with close to 12 million, or 60% of the 20 million students who attend college each year, using loans to finance all or part of their college attendance (“Student loan debt statistics,” n.d.). Currently, about 37 million people in the United States have outstanding student loan debt (“Student loan debt statistics”).

Now let’s consider what has happened to the price of gasoline. Certainly, gasoline is more expensive in nominal terms now than it was in the past. However, we must consider the rate of inflation to determine whether the purchasing power for gas has increased, decreased, or remained relatively unchanged for consumers.

Changes in gasoline prices typically result in extensive media attention and complaints from consumers. Exhibit 4.2 shows how the cost of gasoline, adjusted for inflation, has changed since 1918. During World War I and World War II gasoline was expensive due to shortages, as most of the country’s gasoline supply was used for military purposes. During the late 1970s, unrest in the Middle East and economic conditions in the United States resulted in a large increase in prices. Recently, gasoline prices have encountered dramatic increases and decreases: gasoline reached near record highs in 2008, dropped dramatically by 2010, increased to near-record levels again in 2012, and fell again in 2015. Only by adjusting its nominal price to inflation can one see exactly how much gasoline, or any other product, costs the consumer. Note that during 2008 and again in 2012 gasoline reached its highest nominal prices in U.S. history, but that the inflation-adjusted price at these times was not considerably higher than at other times in U.S. history.

EXHIBIT 4.1 Rate of inflation for college tuition and fees through September 2012, compared to other costs.
EXHIBIT 4.2 Annual average gasoline prices 1918–2015, adjusted for December 2014 inflation.

Note: Prices are average annual prices, not peak prices, so peaks are smoothed out considerably.

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Like inflation, risk—uncertainty about the future and future returns—may also affect the value of money. Risk often leads to financial losses. It is much harder to predict what will happen in the sport industry in five years than in five days. For this reason, most sport managers are reluctant to invest cash for a long period of time unless the expected payoff from the investment is significant. Typically, financial managers contemplate the risk versus the reward of an investment before making any financial decision, but they are especially particular when making investments that will extend far into the future.

Deferred Salaries: Team and Player Risk

With deferred salaries, players and teams try to optimize the value of their money over time. A team might contemplate deferring players’ salaries when it needs additional cash in the short term to sign new players, attract or retain coaching or administrative personnel, make capital improvements, or enhance some other facet of the operation. When the team defers a portion of a player’s contract, it hopes that retaining the money for other expenditures will result in enhanced revenues, and that those revenues will exceed future expenditures when the deferred salaries must be paid.

The Arizona Diamondbacks made a successful run at the 2001 World Series by assuming long-term financial risks through the deferral of player salaries. Prominent players—Randy Johnson, Steve Finley, Curt Schilling, and others—were signed to lucrative contracts for the 2001 season that deferred over $16 million to future years (on top of $37 million that the team had previously deferred for the 1998 through 2000 seasons) (Rovell, 2001). In the short term, deferring salaries helped the Diamondbacks field a team that won the 2001 World Series. Unfortunately, anticipated revenue increases from the highly successful season did not materialize. During the years following the 2001 season, the Diamondbacks were not able to retain many players from their championship team because the commitments to deferred salaries drained the team’s cash reserves. The team was forced to borrow money to pay the deferred salaries coming due, and veteran players who left the team via free agency or for retirement were often replaced with rookies and other less experienced and, often, less skilled players. Though the new players did not cost the team nearly as much money to employ, the team’s fortunes on the field dramatically decreased. By 2004, the team had fallen to a Major League worst 51–111. It was not until 2007 that the Diamondbacks recovered sufficiently to achieve a winning record. As stated in Chapter 3, at the start of the 2009 season the team still owed $58 million in deferred salaries, most of it resulting from player contracts signed in the early 2000s (Birger, 2009).

For players, deferred salary is also a risk. The future payments owed to players are valuable only if the team remains financially viable and able to pay. Deferred money becomes worthless if the organization defaults on (fails to fulfill) its obligations. A default could result from the organization’s ceasing operations or entering certain types of bankruptcy. In 1998 when the Pittsburgh Penguins could not pay $35 million in deferred salary owed to Mario Lemieux, he became the primary owner and assumed control of the team (Hoffman, 1998). Although this situation was certainly unusual, Lemieux’s case caused alarm for numerous players who were owed deferred salaries. For many players, deferred salaries are their safety net—money to be used for retirement. The potential of losing that money is a risk that the player and his or her agent must consider when negotiating deferred compensation. When the NHL’s Phoenix Coyotes (now the Arizona Coyotes) declared bankruptcy in 2009, concern arose that deferred salaries might not be paid once the bankruptcy case was concluded (“Q&A part 2,” 2009). Fortunately, the league was able to arrange a sale, and the franchise continued normal financial operations. In professional leagues, if the financial survival of the league is in serious doubt, players should exercise great caution in accepting deferred salary payments.

Even long-time and iconic professional sport franchises can experience financial difficulty. Under owner Frank McCourt, the Los Angeles Dodgers were financially mismanaged to the point that the team was unable to make payroll for deferred salaries and current employees in May 2011 (“Los Angeles Dodgers lack cash,” 2011). After watching one of Major League Baseball’s most storied franchises become financially insolvent, Commissioner Bud Selig took control of the team and mandated that all financial transactions by the club be approved by Tom Schieffer, MLB’s appointed advisor. In 2012, MLB brokered the sale of the Dodgers from McCourt to an investment group headed by Mark Walter of Guggenheim Partners for $2 billion (Markazi, 2012).
Bernie Madoff scandal nearly derails the New York Mets

In 2009, disgraced financier Bernie Madoff was convicted of 11 federal felonies in connection with his ongoing operation of a Ponzi scheme (see Sidebar 3.A in Chapter 3 for additional information). One of Madoff’s long-time investors and a close friend was New York Mets owner Fred Wilpon, who consistently enjoyed an 18% return on his investments with Madoff in the 1980s and 1990s. Once the Madoff scandal began to unravel, it became apparent that much of Wilpon’s fortune, and some of the Mets’ money utilized for operating expenses, had been invested with Madoff (Winegardner, 2012). The Mets, typically one of the highest-spending teams in MLB, slashed their payroll to approximately $93 million in 2012, after it had been over $133 million in 2011 (Rubin, 2012). The team had to borrow money from MLB to meet their financial obligations in 2011 (Winegardner).

Policies on Deferred Salaries

The deferral of salaries is certainly not a new phenomenon in sport finance. During the early 1970s, teams in the American Basketball Association (ABA) and the NBA battled to acquire the services of players. To attract and retain players, the ABA instituted the “Dolgoff Plan” (Pluto, 1990): Teams in the ABA would offer multimillion-dollar contracts to potential players but would defer a large portion of each contract. To help the potential player and the player’s agent feel secure that the future payments would be made, the team often invested money for the player’s deferred salary in an annuity (a fixed future payment plan) with a prominent corporation. Although the NBA criticized the ABA’s plan, teams in the ABA were able to attract enough quality players that all professional basketball players’ salaries dramatically increased, and eventually, in 1976, the leagues merged (Pluto). Although some of the deferred money was never paid out, in some cases former ABA players received money long after the ABA had merged with the NBA. Examples include current NBA agent and commentator Len Elmore, whose deferred compensation included $80,000 each year for 1981 to 1984 plus $105,000 for 1985. Former ABA player and NBA coach Dan Issel received semimonthly deferred payments beginning in 1974 and continuing until 1983; he received an additional $12,000 per year from 1989 to 1999 (Pluto).

Some of the major North American professional sport leagues have attempted to address the risks of deferred salaries.

- MLB: Teams must show that money deferred can be paid off in the next four years, even if the money is contractually deferred beyond four years.
- NFL: The team must place deferred payments in a league fund for administration and future disbursement.
- NBA: Only 30% of a total contract value may be deferred, and it must be paid within two years of the contract’s completion.
- The NHL does not restrict teams regarding deferred payments. (Rovell, 2001)

The Challenge of Multi-year Contracts

Multi-year contracts present an interesting challenge for teams in Major League Baseball, the National Basketball Association, and the National Hockey League, as those contracts are typically guaranteed to the players regardless of their future ability. In teams’ fight to obtain or retain prominent players, longer-term contracts are an important recruiting and retention tool. The team, of course, must attempt to sign longer-term contracts only with players who are likely to remain motivated and productive in the future. Players who sign long-term guaranteed contracts and then become injured or perform poorly will limit their teams’ future financial options.

The purchasing power of future compensation is difficult to calculate when contracts extend for long periods of time. The team must predict not only the player’s future performance ability but also the appropriate compensation. For players and their agents, future compensation must account not only for performance but also for inflation. For example, MLB All-Star outfielder Johnny Damon’s compensation for each of the 2006 through 2009 seasons was $13 million, meaning that even with minimal inflation during that time, Damon saw a yearly decrease in the purchasing power of his salary (“USA Today salaries databases,” 2009). Similarly, in the NBA, Atlanta Hawks forward Al Horford’s contract mandates that he be paid exactly $12 million in each of the 2013/2014, 2014/2015, and 2015/2016 seasons (“Salaries,” n.d.). With his contract paying the same amount each year, Horford’s purchasing power will decrease each year as a result of inflation, though at $12 million in salary, he will likely still have plenty of money to maintain a high standard of living.
When the Cleveland Browns drafted wide receiver Braylon Edwards in 2005, he signed a contract that included a $6.5 million signing bonus. Lamont Smith, Edwards’ agent, remarked, “It was a priority for us … because we believe in the time value of money. When you wait for your money, you are providing the team with an interest-free loan” (Mullen, 2005, para. 24). For star NFL players, the signing bonus not only ensures that much of their contract money is guaranteed but also assures them that inflation will not erode the purchasing power of their compensation. The majority of NFL players must play each week with the risk that injury or poor performance may lead to termination of their (non-guaranteed) contracts.

The use of long-term contracts to circumvent salary cap rules (see Chapter 15) was a significant component of the National Hockey League’s 2013 CBA. In an effort to circumvent the cap, numerous teams had signed players to contracts exceeding ten years and $80 million. In some cases, players were signed to contracts that extended payments into their late 30s and early 40s, long after their ability as effective players would have waned. Under the new CBA, some of these contracts would be penalized at a much tougher rate than under the old CBA. In some cases, players and teams elected to cancel their long-term contracts to benefit both parties. New Jersey Devils superstar Ilya Kovalchuk elected to rescind his contract even though it had 12 years remaining and more than $77 million of compensation to be provided. He returned to play in his native Russia (with the hope that he could recoup his “lost” $77 million in a quicker time frame than what was scheduled with the Devils), while the Devils were left with a short-term hole on their roster but much more long-term financial flexibility (McIndoe, 2013).
FUTURE VALUE

To determine the costs and benefits of financial decisions such as deferring salaries, financial managers must understand and be able to compute the future value (FV) of a payment—the value of that payment at a certain date in the future, which we determine by calculating the change in value of money when an interest rate is applied over the intervening period of time. Initial computations of future value provide a nominal value of money; financial managers must then assess the expected rate of inflation and, potentially, provide an estimate of risk to determine the real value of money after time. The question posed at the opening of this chapter dealt with a $100,000, $102,000, $110,000, or $120,000 payment. In a situation like this, a financial manager or agent can appropriately advise a client which payment to take only by understanding the present and future value of a dollar.

Suppose a sport organization invests $100 in a savings bond that pays 5% interest annually for five years. To determine what the value of the investment will be after one year, we perform a simple calculation:

\[
\text{original investment} + \text{interest} = \text{future value} \\
$100 + (5\%)(\$100) = \$105 
\]

To determine the value beyond one year, we must distinguish between simple and compound interest. Simple interest is calculated only on principal. After year 1, under simple interest the investment of $100 would continue to grow at a rate of $5 per year, for a total value of $125 after five years. Compound interest, on the other hand, is calculated on principal and on the interest generated by that principal. Thus, determining the value of an investment under compound interest requires the following formula:

\[
FV = PV(1 + i)^n \\
\text{where } FV = \text{future value} \\
PV = \text{the present value of the initial investment (principal)} \\
i = \text{rate of interest per period} \\
n = \text{number of periods} 
\]

As an example, again consider the sport organization that invests in a savings bond. With compound interest, the calculation is as follows:

\[
FV = 100 \times (1.05)^5 \\
= 100 \times (1.05 \times 1.05 \times 1.05 \times 1.05 \times 1.05) \\
= 100 \times 1.2763 \\
= 127.63 
\]

Fortunately, it is not necessary to memorize this formula; with a table we can look up values rather than calculate them (see Table A.1 in the Appendix). The future value table gives a future value interest factor (FVIF). To find the FVIF, determine the number of periods (in this example the periods are expressed in years) of the investment. Find this row in the table, and then move across to the column for the interest rate. The number in this cell is the FVIF. Now, simply multiply the FVIF by the initial investment.

For an investment at 5% interest for five years, the FVIF is 1.2763. Multiplying this factor by $100 (the initial investment) yields $127.63. Notice that this value is higher than the $125 that would be received under simple interest. To see a dramatic difference in simple versus compound interest, change the time period from five to 20 years and the amount invested to $100,000. With simple interest, the future value is $100,000 + (20 \times 5,000 \text{ [simple interest]}) = \$200,000. With compound interest, the future value is $100,000 \times 2.6533 = \$265,330. This example illustrates why financial managers prefer to receive compound interest on their investments and why Albert Einstein is believed to have remarked that the most powerful force in the universe is compound interest.
ANNUITIES AND PERPETUITIES

Often, the value of an investment is paid out or received not in one lump sum but over time in multiple payments or receipts. Any series of equal payments or receipts made at regular intervals is termed an annuity. Annuity payments may occur annually, quarterly, monthly, or at any other regular interval. Examples of annuities include regularly scheduled mortgage payments, individual retirement account (IRA) contributions, loan payments, and pension payments. An annuity has a scheduled end point. If the payments or receipts were to continue forever, this would be considered a perpetuity. Perpetuities are rarely established, for obvious reasons. Forever is certainly a long time.
FUTURE VALUE OF AN ANNUITY

A sport manager might wish to determine the future value of an investment that is funded on a regularly scheduled basis (an annuity). For instance, a sport team might need to determine how much money it would have after investing $1,000 per year for five years at 5% interest. The financial manager would use the following formula:

\[ FVA = PMT \left( \frac{(1+i)^n - 1}{i} \right) \]

where:
- \( FVA \) = future value of an annuity
- \( PMT \) = payment
- \( i \) = rate of interest per period
- \( n \) = number of periods

For the example given above, the calculation would proceed as follows:

\[ FV = 1,000 \left( \frac{(1.05)^5 - 1}{0.05} \right) \]
\[ = 1,000 \left( \frac{1.2763 - 1}{0.05} \right) \]
\[ = 1,000 \left( \frac{0.2763}{0.05} \right) \]
\[ = 1,000 \times 5.5266 \]
\[ = $5,526.60 \]
The greatest deal in sports?

The idea of guaranteeing anyone money forever would cause most sport organizations to cringe. But the NBA has paid three people who have no connection to the league hundreds of millions of dollars in compensation—simply because of a deal consummated many years ago. When the NBA and ABA were discussing a merger in 1976, the NBA agreed to absorb four teams: the New York [now Brooklyn] Nets, Denver Nuggets, San Antonio Spurs, and Indiana Pacers. In addition, the owner of the Kentucky Colonels was paid $3 million to fold the team, leaving the Spirits of St. Louis as the remaining ABA team. Although the owners of the Spirits, Ozzie and Danny Silna, and their lawyer, Don Schupak, initially desired to enter the NBA, when it became apparent the NBA did not want to merge their team, they negotiated one of the greatest (for them) sport finance deals in history (Pluto, 1990; Rovell, 2002). The Spirits’ owners received $2.2 million in cash plus $\frac{1}{7}$ of a share of national television money from each of the four merged ABA teams—in perpetuity. Essentially, the Spirits’ owners were guaranteed to receive $\frac{4}{7}$ of the annual television share for an NBA team, forever. At the time, the value of the television contracts was minimal, but during the 1980s the Spirits’ owners received roughly $8 million in television revenue. From 1990 through 1998 they received just under $41 million, and from 1998 through 2002 they received $50 million (Rovell, 2002). Despite protests, lawsuits, and buyout attempts, the Spirits’ owners (who currently run an embroidery business) have retained their share of the television money. By 2012, the Spirits’ owners had collected over $255 million, and at no time did they have to pay for rising salaries of players or other expenses incurred through ownership (Sandomir, 2012).

Despite the contract language guaranteeing the former owners of the Spirits of St. Louis television money in perpetuity, in 2014 the NBA announced a $500 million buyout of the majority share of the Spirits’ television rights (Mandell, 2014). As part of the buyout the Silnas agreed to end their litigation with the NBA regarding new television revenue streams that have emerged in the digital environment. In addition, the deal called for an option for the NBA to purchase the remaining shares of the Spirits’ television rights in the future. Many observers wondered why the Silnas would agree to end a perpetual contract that had withstood previous NBA attempts to eliminate it or buy it out. Though $500 million is certainly a significant sum, the future potential for the Silnas and their heirs would likely have exceeded billions of dollars within the next ten years. However, reports emerged that the Silnas had lost a considerable sum of money by investing with Bernie Madoff, which might have influenced their desire for a short-term infusion of cash from the settlement.

Fortunately, we can use a table (see Table A.2 in the Appendix) to simplify the above equation to $FV^a = PMT \times FVIFA$, where FVIFA is the future value interest factor of an annuity, from the table.

To find the FVIFA, determine the number of periods of the investment. Find this row in the table and then move across to the column for the interest rate. This is the FVIFA. Simply multiply the FVIFA by the investment amount per period. For $1,000 invested per year at 5% interest for five years, the FVIFA is 5.5256, yielding a future value of $1,000 \times 5.5256 = 5,525.60$.

The following examples demonstrating the use of the FVIFA show the importance of time and persistence in the creation of wealth. First, suppose two sport managers open retirement accounts and commit to invest $3,000 each year, earning 7% interest, until they retire. The first sport manager starts investing at age 25 and continues until age 65. The second investor starts at age 35 and invests until age 65. When the investors reach age 65, the first will have accumulated over 40 years of time. Her investment will have a FVIFA of 199.64. Multiplied by $3,000, this yields a future value of $598,920. The second investor will have accumulated over 30 years of time, for an FVIFA of 94.461. His future value will be $283,383. The total difference from the additional ten years of investment, with only $30,000 in cash paid in, is $315,537. Any IRA holder can use the Future Value of an Annuity table to determine how much money he or she will have upon retirement (in nominal terms), given an expected rate of return and yearly investment.

In addition to the impact of time, interest rate changes (even small ones) can have a dramatic effect on the yield of an investment. In the preceding example, the first person invested for 40 years at 7% interest, yielding $598,920. If the interest rate increased from 7% to 8%, the new FVIFA would be 259.06, and the yield would be $3,000 \times 259.06 = 777,180—an increase of $178,260. If the interest rate increased to 9% per year, the overall yield would be $3,000 \times 337.88 = 1,013,640. The change in an interest rate may appear small, but it can result in tremendous changes in the yield. Readers should note the importance of investigating the effect that a minor change in interest rate can have on the yield of an investment. If the interest rate increases from
7% to 8%, this is a 14% increase \( \frac{(8 - 7)}{7} = 14\% \). An interest rate change from 7% to 10% is a percentage increase of 43% \( \frac{(10 - 7)}{7} = 43\% \). When the Federal Reserve changes interest rates, dramatic changes in loans, investments, and other financial activities may result (see Chapter 5). Sport managers are wise to anticipate interest rate changes and plan financial activities with future rates in mind.

Once the future value of a single payment or of an annuity is determined, the financial manager can compare this value with the expected rate of inflation to determine the real change in value. In addition to inflation, risk levels associated with different potential interest rates may affect the decision to invest in a particular project, as discussed in Chapter 3. In some financial decisions, a lower potential return may be acceptable for an investment with lower risk. In all cases, the organization or individual is working to maximize the real value of money.
LIQUIDITY

An understanding of inflation, a tolerance for risk, and the computation of future value are all critical to short- and long-range financial decisions. In addition, the sport manager must understand the significance of liquidity before investing capital in any project. As discussed in Chapter 2, an asset’s liquidity is the readiness with which it can be converted to cash. Often, organizations own assets (such as real estate) that cannot easily be sold to raise cash to pay short-term obligations. Before committing resources to long-term investments, individuals and organizations must understand the importance of maintaining liquidity. Those who cannot effectively meet their cash obligations (payroll, facility overhead, and so forth) might be forced to alter short- and long-term financial commitments, sell assets (often at a discount) for immediate cash, or file for bankruptcy. For this reason, sport managers typically expect greater returns from investments that require a longer period until maturity or that cannot be redeemed for cash without substantial penalty. In addition, after an initial investment is made, subsequent investments of similar risk will often be considered only if higher returns can be realized.

For example, suppose a recreation center that has $20,000 in cash commits $9,000 of that amount to a capital improvement project, such as an additional basketball court, that will generate increased participation fees. However, revenue from the new court will not be realized for one year. During that time, the facility is less likely to use an additional $9,000 for another project with a similar expected return, as that would leave only $2,000 in reserve for short-term obligations or emergencies. Most likely, the financial manager would require any second project not only to offer a higher return on investment but also to return cash within one or two months.
PRESENT VALUE

Determining the future value of investments is only part of understanding the time value of money. Sport managers must also understand the concept of present value (PV). Present value is today’s value of a future cash flow—the current value of a payment that will be received or paid in the future. Net present value, or the comparison of the present value of future cash flows to initial cost, will be discussed in Chapter 8.

We calculate present value by applying a discount rate to the future cash flow. The discount rate, or capitalization rate, is a measure of risk or uncertainty. It is determined by the person performing the calculation, e.g., a financial manager, based on his or her estimate of future inflation rates, interest rates, and business activity.

If we revisit the problem from the opening of the chapter, one option for the player’s agent is to accept $120,000 for her client, payable in three years. To determine how valuable (in today’s dollars) that future $120,000 is, the agent would apply a discount rate—say, 6% for the purpose of this example. The present value could be compared with the $100,000 that the athlete could receive immediately. If the present value of $120,000 is greater than $100,000 (and assuming the athlete does not need the cash immediately), the better choice is to defer the salary. If the present value of $120,000 in three years is less than $100,000, then the athlete should take the $100,000 now.

To compute the present value, we use the following formula:

$$PV = \frac{FV}{(1 + r)^n}$$

where
- \(PV\) = present value
- \(FV\) = future value
- \(r\) = discount rate per period
- \(n\) = number of periods

For $120,000 payable in three years with a 6% discount rate,

$$PV = \frac{120,000}{(1 + 0.06)^3}$$

$$= \frac{120,000}{(1.06 \times 1.06 \times 1.06)}$$

$$= \frac{120,000}{1.19106}$$

$$= 100,752$$

Notice that the present value formula is the inverse of the future value formula.

Just as we can easily compute the future value of a dollar by using a table, we can use the Present Value of $1 table (Table A.3 in the Appendix) to compute the present value of a dollar with the present value interest factor (PVIF). To find the PVIF, determine the number of periods until the income is realized and move across that column to the appropriate discount rate. For example, suppose a minor league baseball team anticipates sponsorship revenue of $15,000 to be realized in four years. What is the present value of that future payment if the discount rate is 9%? We can find the PVIF by examining Table A.3. For four periods and a 9% discount rate, the PVIF is 0.7084. Hence, the present value is 0.7084 \times 15,000 = 10,626.

Often, the financial manager cannot accurately predict the future. For this reason, when financial managers estimate present values of future cash flows, they use multiple discount rates to calculate a variety of potential results. At all times, sport managers must remember that projections can change, especially over long periods of time. During the late 1970s, the inflation rate often exceeded 15%. Creditors collecting fixed long-term payments saw the purchasing power of their receipts diminish dramatically. Although inflation rates are not likely to return to such high rates in the United States, they do fluctuate from year to year. When forecasting for the future, it is advisable to employ at least three different discount rates and to consider the worst-case scenario the most likely outcome. This will result in any financial surprises being positive rather than negative.

To understand the present value of future money better, we can look at Table A.3 to see how changing the discount rate to adjust for risk affects the present value of a future expected payment. As the discount rate increases, the present value of the future income decreases (see Exhibit 4.3).
The present value also allows us to compare different investment opportunities to determine which is the best alternative. Suppose a minor league baseball team received two sponsorship offers, one for $15,000 and one for $17,000, both to be paid in four years. Although the second payment would be higher, suppose the risk of default with this company is higher, so you choose to apply a discount rate of 12% as opposed to 9%. Which is the better investment opportunity?

EXHIBIT 4.3 Inverse relationship between present value and risk.

<table>
<thead>
<tr>
<th>FUTURE INCOME</th>
<th>DISCOUNT RATE</th>
<th>PVIF, 5 YEARS</th>
<th>PV OF FUTURE INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td>$10,000</td>
<td>12% (higher risk)</td>
<td>0.5674</td>
<td>$5,674</td>
</tr>
<tr>
<td>$10,000</td>
<td>6% (average risk)</td>
<td>0.7473</td>
<td>$7,473</td>
</tr>
<tr>
<td>$10,000</td>
<td>3% (lower risk)</td>
<td>0.8626</td>
<td>$8,626</td>
</tr>
</tbody>
</table>

Option 1: \( PV = 0.7084 \times 15,000 = 10,626 \)
Option 2: \( PV = 0.6355 \times 17,000 = 10,803 \)

Option 2 yields a higher present value and should be selected given the information provided.

It is important for sport financial managers to remember that many financial decisions are made in spite of the numbers. This is not always advisable, but in some cases decision makers may give up the higher present value of a certain project in favor of a less risky investment. In other cases, owners may be tempted to choose certain investment options for political or public-relations reasons, against financial advice. In cases like these, the financial manager must ensure that decision makers have a complete understanding of the options and the financial ramifications of each choice. Unfortunately, too often decisions are made without a thorough investigation or understanding of available financial information.
A sport manager might wish to determine the present value of a series of future cash flows (an annuity). Suppose an agent negotiated a long-term sponsorship deal that called for yearly payments to an athlete of $10,000 for five years, and the agent felt that a discount rate of 10% was appropriate. We could determine the present value for each individual year and then total those amounts to determine the present value of the future cash flows. Instead, it is far easier to use a formula to calculate the present value of an annuity. Note that these calculations assume that the cash flows in each period are equal.

We can compute the present value of an annuity with the following formula:

\[
PVA = \frac{PMT \left( 1 - \frac{1}{(1+i)^n} \right)}{i}
\]

where

- \( PVA \) = present value of an annuity
- \( PMT \) = payment per period
- \( i \) = discount rate
- \( n \) = number of periods

The calculation for our example would proceed as follows:

\[
PVA = \frac{10,000 \left( 1 - \frac{1}{(1+0.10)^{5}} \right)}{0.10}
\]

\[
= \frac{10,000 \left( 1 - \frac{1}{1.10 \times 1.10 \times 1.10 \times 1.10 \times 1.10} \right)}{0.10}
\]

\[
= \frac{10,000 \left( 1 - \frac{1}{1.61051} \right)}{0.10}
\]

\[
= \frac{10,000 \left( 1 - 0.62092 \right)}{0.10}
\]

\[
= \frac{10,000 \left( 0.37908 \right)}{0.10}
\]

\[
= 10,000 \times 3.7908 = 37,908
\]

By using the present value interest factor of an annuity (PVIFA) from Table A.4, we can reduce the above equation to \( PVA = payment \times PVIFA \). To determine the PVIFA, simply find the period of the annuity in the Present Value of an Annuity table and read across to the discount rate. For the calculation above, \( PVA = 10,000 \times 3.7908 = 37,908 \).

Consider a sport agent who has two potential sponsors for his client. Sponsor A is willing to pay the athlete $10,000 each year for five years, with a discount rate of 5%. Sponsor B is ready to pay the athlete $12,000 each year for five years, with a discount rate of 10%. Which is the better option?

- **Sponsor A:**
  \[
PVA = 10,000 \times 4.4518 = 44,518.00
\]

- **Sponsor B:**
  \[
PVA = 12,000 \times 3.7908 = 45,489.60
\]

Sponsor B is the better financial choice, given the information provided.

Often, the better choice between two payment options is the one that is lower in nominal terms, because, as the result of a lower discount rate, it has greater real value after discounting. Suppose Sponsor A is willing to pay $10,000 a year for five years, discounted at 4%, while Sponsor B is ready to pay the athlete $12,000 a year for five years, discounted at 12%. In this case, the better option is Sponsor A:

- **Sponsor A:**
  \[
PVA = 10,000 \times 4.4518 = 44,518.00
\]

- **Sponsor B:**
  \[
PVA = 12,000 \times 3.6048 = 43,257.60
\]

Many state lotteries offer winners a choice in how they receive their winnings: the winner can either receive the prize in equal payments over a predetermined number of years (often 20 or 30) or elect to receive a portion of the prize amount in a lump sum payment. To make a wise choice, the winner must understand the time value of money. Each winner will have different short-term financial obligations, long-term goals, tolerance for risk, and preferences for liquidity. Unfortunately, unscrupulous firms often attempt to purchase
the right to future payments from winners who are unaware of the financial ramifications of their disbursement choices. Decisions regarding state lottery winnings have such importance that states have developed websites to educate winners about the financial implications of their decisions.
INTERIM YEAR COMPOUNDING

For all previous examples involving interest, we have assumed that the interest is compounded (calculated and added to principal) once per year. However, in many financial arrangements, interest is compounded each quarter, month, week, or, in some cases, day. To adjust for compounding on a basis other than annual is simple. Depending on whether you are computing the present or future value of a dollar, or of an annuity, you will simply determine the number of periods and use the appropriate table to find the factor you need for the calculation.

Suppose, for example, that a sport organization wishes to determine the future value of $1,000 invested for two years receiving 12% interest, compounded quarterly. To determine the future value, we would first find the interest rate for the compounding period. Since there are four quarters in a year, we divide the annual interest rate of 12% by four and find that the interest per quarter is 3%. Since the investment period is two years, the number of compounding periods is eight. From the future value table we find that the FVIF for eight periods at 3% interest is 1.2668, yielding a future value of $1,000 × 1.2668 = $1,266.80. Note that if the 12% interest were compounded yearly, the future value would be $1,000 × 1.2544 = $1,254.40, a difference of $12.40.

William Andrews wants his money now

During the early 1980s William Andrews was one of the top halfbacks in the NFL. While playing for the Atlanta Falcons from 1979 through 1983, Andrews rushed for more than 5,000 yards and accumulated more than 2,500 yards receiving. In one of his contract negotiations, Andrews agreed to a deferred compensation plan that would pay him $200,000 per year for 25 years ($5 million) after his playing career was complete. In 2001, Andrews negotiated a deal where he would give up his deferred compensation in exchange for an immediate $2 million from Hanleigh Co. (Kaplan, 2001). Although the money he received was only 40% of the total due him from the Falcons, Andrews determined that he could invest the money and receive a greater return than what the Falcons had agreed to pay him.

For Hanleigh Co., the risk of the Atlanta Falcons’ defaulting on their financial obligation must have seemed minimal, as NFL teams have been stable for many years and the prospect is strong that they will remain financially solvent. Hanleigh Co. does assume risks, however, from time, inflation, and lack of liquidity. Over the length of the contract, numerous factors could diminish the value of the annual $200,000 payments. For one, inflationary pressure could diminish purchasing power. In addition, immediate payment of $2 million to Andrews meant an immediate loss of capital to Hanleigh, which could be critical if Hanleigh Co. were to need money to meet short-term financial obligations. The financial analysts at Hanleigh Co. likely investigated the investment options available to them, their level of liquidity, and their tolerance for risk, and determined that it was better to receive $200,000 per year for the remaining years of the contract than to invest the $2 million in other financial opportunities.

For William Andrews, the desire to receive immediate money must have been more important than the longer-term security of regular payments. He might have needed immediate liquidity to pay off some obligation. More likely, Andrews computed the return available from potential investments and determined it would be more profitable for him to take the immediate cash. Andrews, of course, assumes the risks associated with his investment decisions. If with the $2 million he generates more than $200,000 per year, his investment decision will have been sound. However, if his returns do not exceed his contracted payments, the decision to take immediate cash will have been in error.

Financial institutions often advertise that they compute interest payments to customers on a quarterly, monthly, weekly, or even daily basis. Before placing funds in any institution, the consumer should calculate the interest that she will receive on deposits. In some cases, interest compounded daily may not exceed the interest compounded monthly or even yearly. By understanding the concept of compounding and using the time value of money tables, investors can make informed decisions.
USING A SPREADSHEET TO CALCULATE TIME VALUE OF MONEY

Though many computations can be completed by hand or with a financial calculator, the use of spreadsheets provides a simple and efficient mechanism to determine the answers to financial calculations. Specifically, Microsoft Excel is a powerful spreadsheet program that has dramatically altered the finance and accounting landscape.

The Microsoft Excel help menu provides instructions for completing computations, including present value, future value, and payments. Excel provides a definition and explanation of the components of each calculation, as well as functions for time value of money calculations. An important consideration in building spreadsheets is ensuring that positive and negative amounts are entered appropriately.

Present Value Function

To compute present value, select the Formulas tab, choose Financial, and scroll through the list to find PV. Click on this function, and the dialog box appears as shown in Exhibit 4.4.

Note that the box prompts you to input the values Excel uses to calculate present value. In a spreadsheet cell, Excel’s PV function appears as follows:

\[
\text{PV}(\text{rate}, \text{nper}, \text{pmt}, \text{fv}, \text{type})
\]

where

- rate is the interest rate per period. For example, if you obtain an automobile loan at a 10% annual interest rate and make monthly payments, your interest rate per month is 10%/12, or 0.83%. You would enter 10%/12, or 0.83%, or 0.0083 into the formula as the rate.
- nper is the total number of payment periods in an annuity. For example, if you secure a four-year car loan and make monthly payments, your loan has 4 × 12 = 48 periods. You would enter 48 into the formula for nper.
- pmt is the payment made each period, which cannot change over the life of the annuity. Typically, pmt includes principal and interest but no other fees or taxes. For example, the monthly payments on a $10,000, four-year car loan at 12% are $263.33. You would enter −263.33 into the formula as the pmt. You have the option of omitting the pmt amount and entering a number for fv instead.
- fv is the future value, or a cash balance you want to attain after the last payment is made. If fv is omitted, it is assumed to be 0 (the future value of a loan, for example, is 0). For example, if you want to save $50,000 to pay for a special project in ten years, then $50,000 is the future value. You could then make a conservative guess at an interest rate and use the present value formula to determine how much you must save each month. If fv is omitted, you must include the pmt argument.
- type is the number 0 or 1, indicating when payments are due. Use 0 (or omit specifying type, as it will default to 0) for payments that are due at the end of each period; enter 1 for those due at the beginning of each period.

EXHIBIT 4.4 Dialog box for PV function.
EXHIBIT 4.5 Calculating present value with Excel’s PV function.

Exhibit 4.5 provides examples of the use of the present value function in Excel. Example A calculates the present value of a $50,000 payment to occur in 10 years, applying various discount rates. Example B determines the present value of a $10,000-per-year annuity discounted 5% over a variety of years.

Future Value Function

To compute future value in Excel, select the Formulas tab, choose Financial, and scroll through the list to find FV. Click on this function, and the dialog box appears as shown in Exhibit 4.6. Note that the box prompts you to input the values Excel uses to calculate future value. In a spreadsheet cell, Excel’s FV function appears as follows:

$$FV(rate, nper, pmt)$$

For a description of the arguments in FV and for more information on annuity functions, see the discussion of Excel’s PV function.

Exhibit 4.7 provides examples of the use of the FV function. In Example A, the future value of $10,000 is computed over 10 years (compounded annually) at various interest rates. In Example B, the future value of a $5,000 annuity is computed at various interest rates.
Payments Function

We can use an Excel spreadsheet to determine a loan repayment schedule. This is especially helpful when computing monthly payments for purchases such as automobiles and real estate.

EXHIBIT 4.6 Dialog box for the FV function.

EXHIBIT 4.7 Calculating future value with Excel’s FV function.

To compute loan payments, select the Formulas tab, choose Financial, and scroll through the list to find PMT. Click on this function, and the dialog box appears as shown in Exhibit 4.8. Note that the box prompts you to input the values Excel uses to calculate payments. In a spreadsheet cell, Excel’s PMT function appears as follows:

\[
PMT(rate, nper, pv, [fv \text{,} [type]])
\]

Exhibit 4.9 presents a series of calculations of the monthly payment for a $100,000 loan to be repaid over 20 years when different interest rates are applied. In addition, it computes the total nominal amount of all payments made over the 20-year loan period.

EXHIBIT 4.8 Dialog box for the PMT function.
EXHIBIT 4.9 Calculating loan payments with Excel’s PMT function.

<table>
<thead>
<tr>
<th></th>
<th>Payments on a $100,000 loan with a 20-year term</th>
<th>Total Amount Paid</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>PMT</td>
</tr>
<tr>
<td>3</td>
<td>5%</td>
<td>($659.96)</td>
</tr>
<tr>
<td>4</td>
<td>6%</td>
<td>($716.43)</td>
</tr>
<tr>
<td>5</td>
<td>8%</td>
<td>($836.44)</td>
</tr>
<tr>
<td>6</td>
<td>10%</td>
<td>($965.02)</td>
</tr>
</tbody>
</table>
CONCLUSION

Let’s return to the question that introduced this chapter. Which option should the athlete choose among his four potential payments? As discussed in this chapter, in order to make an informed decision, the athlete must understand or estimate his current and future need for liquidity, the potential investments available to him and the risks associated with each investment, and the current and future rates of inflation. An athlete who needs immediate cash would be compelled to take the $100,000 now, without even investigating other options. An athlete without liquidity concerns or with immediate access to a loan should investigate each potential investment’s yield and the associated risks before making a decision.

It is critical not only that sport managers be able to calculate the present and future value of money, but also that they understand the immediate needs of the firm and how the time value of money, inflation, the organization’s risk tolerance, and its need for liquidity influence the selection of short- and long-term strategies. Proper financial analysis can lead to long-term financial success, but a failure to understand the time value of money and to implement sound financial strategies may yield financial disaster.

concept CHECK

1. Explain the concept of inflation. How does inflation affect saving and investing?
2. How does a preference for liquidity influence an individual or organization’s financial decisions?
3. Explain the difference between simple and compound interest.
4. What aspects of the time value of money must professional sport organizations and athletes consider when negotiating contracts?
5. What mistake did the NBA make in its dealings with the owners of the Spirits of St. Louis?
6. What are some advantages and disadvantages of deferring salaries (both from the player’s and the team’s perspectives)?
7. What concerns should a sport organization contemplate when negotiating future payments from sponsorships or other long-term agreements?

PRACTICE problems

1. What is the real increase in value if $1,500 is invested for one year at 5% interest and the rate of inflation during that time is 1.79%?
2. A sport organization has a commitment from a sponsor for a $17,000 payment in three years. What is the present value of that money if it is discounted at (a) 3%, (b) 5%, and (c) 9%?
3. Suppose you are the financial manager for a recreation center that has signed an option to purchase new elliptical machines for $22,000 in two years. If you have an investment opportunity that guarantees 7% interest, how much must you invest to have the necessary funds to purchase the elliptical machines?
4. An athlete signs a five-year endorsement deal with a prominent sponsor. Under this deal the athlete will receive $5,000 each year for the first three years and $6,500 each year for the final two years. What is the present value of the total deal if the payments are discounted at 6%?
5. What is the future value of $12,000 invested at 8% interest, compounded yearly for ten years?
6. If an investor commits $4,500 to an IRA each year for 30 years and receives 6% interest, what will her total investment be worth at the end of the 30 years?
7. A bank offers customers the option of receiving interest compounded quarterly, semi-annually, or annually. If the rate of interest is the same, which is the best option for the customer?
8. What is the difference between $10,000 invested for ten years at 3% interest, compounded yearly, and at 8% interest, compounded semi-annually?

Time Value of a Sponsorship

The director of marketing of your organization asks for your advice regarding sponsorship deals she is contemplating. She has to choose from the following: a 15-year sponsorship paying $100,000 per year, a 15-year sponsorship initially paying $75,000 per year and increasing 5% each year, and a 15-year sponsorship initially paying $45,000 per year but increasing 12% each year.
case questions

1. Determine the present value of each year’s payment for each proposal, as well as the total present value of each proposal. For each proposal, compute two different outcomes, one with a discount rate of 5% and one with a discount rate of 10%.

2. Which proposal should the marketing director choose?

3. What questions about her firm and about the potential sponsors should she contemplate?

4. How would the decision be affected by the answers to the questions posed in #3? Fully explain your response.

REFERENCES


PART II
Financial Management

5 Introduction to Financial Management
6 Budgeting
7 Debt and Equity Financing
8 Capital Budgeting
sum-of-years’-digits depreciation
surplus
units-of-production depreciation
unsecured claim
value-added tax (VAT)
Introduction

_Bryan Curtis: Tell me why you live in Las Vegas?_
Former MLB first baseman Jason Giambi: No state [income] tax.
_Curtis: Very good answer._

Financial management is a component of operating any business and, more important, is a necessary and critical aspect of anyone’s personal life. Balancing a checkbook, determining a monthly budget, and investing for retirement are financial management activities likely familiar to many. The work of chief financial officers (CFOs), comptrollers, and other staff members in finance departments is certainly more complex and detailed than what most individuals undertake for their personal finances, but the idea of finance—the application of a series of principles to maximize wealth—applies to both individuals and businesses.

In any sizable organization the finance department will handle most of the long-term financial management issues, but it is vital that every member of the organization have some comprehension of finance. Understanding the basics of finance enables a manager to interact more effectively with the financial analysts whose job it is to decipher the numbers. Financial acumen is critical for career advancement in most organizations. The leaders of any department, at the least, will be involved in budgeting and forecasting decisions. The financial “Golden Rule” always applies: “He who has the gold makes the rules.”
ECONOMIC PRINCIPLES

Although this book focuses on advanced financial principles, we will briefly review some fundamental economic principles that form the basis of finance. Economics has been defined by Walter Wessel as “the study of how people choose to allocate their scarce resources” (2000, p. 2). Key economic principles outlined in this section include: (1) demand, scarcity, surplus, and price; (2) microeconomics versus macroeconomics; and (3) wealth maximization/profits.

Demand, Scarcity, Surplus, and Price

The choices individuals and organizations make will be influenced by the interdependent factors of demand, scarcity, surplus, and price. Demand is the quantity of a product or service desired by consumers; scarcity describes the situation when the availability of a resource does not meet current demand; surplus is the amount of an asset or resource that exceeds the portion that is utilized; and price is defined as what one party (the buyer) must give to obtain what is offered by another party (the seller). For instance, economic principles are at work when the Professional Bowlers Association (PBA) Tour announces a new event on its schedule. For the chosen bowling alley, a variety of factors influence its ability to set prices. The number of available tournament passes to be sold (scarcity and lack of it); the potential surplus of other viable sport and entertainment events in the local area, known as substitutes; and the anticipated customer demand determine the price that the alley can charge. However, even if there is high demand, if the PBA decides to schedule an additional tournament close to a current one, more tickets to PBA events become readily available for customers in this marketplace (i.e., the scarcity of tickets changes), and this may reduce the potential ticket price.

North American professional sport franchises and leagues employ the economic concept of scarcity in a variety of ways. The most prominent way is that leagues create scarcity by not expanding into every metropolitan area that could potentially support a franchise. With viable alternative cities available, teams often can demand financial concessions from their current metropolitan areas in exchange for their remaining in the current location. Although Charlotte and Portland are larger than some cities that currently have MLB franchises, the league has not rushed to expand into those areas and others similar to them. Current teams seeking new facilities have utilized these non-MLB cities as bargaining chips (Rogers, 2007; “Will Charlotte,” 2006). Despite being the second largest metropolitan area in the United States, Los Angeles has not had an NFL team since the Los Angeles Raiders and Los Angeles Rams left the area for Oakland and St. Louis, respectively, in 1995. Representatives of a variety of NFL teams, including the Arizona Cardinals, Jacksonville Jaguars, and Indianapolis Colts, have at least mentioned, and in some cases actually used, the threat of moving to Los Angeles as a bargaining chip during negotiations with their home markets for a new facility (Joyner, 2006; “Lucas Oil,” 2006).

Leagues have established internal rules to restrict franchise movement in an effort to maintain scarcity. Most North American professional sport leagues have territorial rules restricting franchise movement within the proximity of a current team. This provides the established franchise with greater bargaining power when negotiating contracts with sponsors and media partners. For instance, even though more than 3 million people live in San Bernardino County (an area just east of Los Angeles, California), MLB prohibits any MLB team from moving into that area, since it is considered part of the “home market” of the Los Angeles Dodgers and the Los Angeles Angels of Anaheim (Nagel, Brown, McEvoy, & Rascher, 2007). When the Montreal Expos moved to Washington D.C. to become the Washington Nationals in 2005, Baltimore Orioles owner Peter Angelos was given initial control of 90% of the Nationals’ regional cable television rights (in a newly created cable network called Mid-Atlantic Sports Network [MASN]) and a guaranteed sale price of $365 million if he were to sell the Orioles, as compensation for the infringement on his territory (Nagel et al.). Though, according to the agreement, the Nationals’ share in MASN increases by 1% each year until it reaches 33%, with the explosion in cable television contracts for MLB teams, the Nationals are likely “losing” $60 million each year in their current arrangement with MASN (Kilgore, 2012). By protecting team territories, leagues help ensure that individual franchises will have every opportunity to exploit their scarcity power to maximize their financial position.
Kansas City’s Sprint Center still waiting for permanent tenant

Completed in 2007 at a cost of $276 million, the Sprint Center in Kansas City, Missouri, operated by Anschutz Entertainment Group (AEG), is one of the largest multi-use arenas in the United States that does not have a permanent NBA or NHL tenant. However, the Sprint Center has been mentioned often as a potential site for a relocated NBA or NHL team, beginning even before it initially opened its doors. The NHL’s Nashville Predators, New York Islanders, and Pittsburgh Penguins and the NBA’s New Orleans Hornets and Sacramento Kings expressed varying degrees of interest in relocating their franchises to Kansas City, but each was able to negotiate favorable lease terms in their current metropolitan areas. This has resulted in consternation among many Kansas City residents, who thought part of the city’s plan for financing the arena was to acquire an anchor tenant (Unell, 2012). Former AEG CEO Tim Leiweke noted that other NHL teams had openly utilized the Sprint Center to negotiate better venue deals. Leiweke noted, “Pittsburgh used Kansas City … they were ready to move if they didn’t get that deal done (in Pittsburgh)… they were moving here” (Unell, para. 14). The venue has been successful under AEG’s management in attracting top-quality entertainment and sporting events, such as the Big 12 Conference Men’s Basketball Tournament and NCAA Championship events, but it appears the short-term future of the venue will not involve hosting an NBA or NHL franchise. See Chapter 11 for additional information about Kansas City’s viability as a home for a major league team.

Microeconomics versus Macroeconomics

The field of economics is typically divided into microeconomics and macroeconomics. An understanding of each is critical to financial decision making. Microeconomics refers to the study of issues that occur at the firm level, such as supply, demand, and pricing. Many of the decisions that financial managers make are determined by microeconomic factors. Such decisions might include setting prices for athletic club memberships or tickets for an upcoming event, or deciding whether to offer a new product line or to pay for training for current employees to learn new job processes. To make these decisions, the financial manager must evaluate the microeconomic forces at work in the business.

In addition to microeconomic forces at the firm level, macroeconomic forces affect every individual and business throughout the world. Macroeconomics refers to the study of forces that affect numerous or even all sectors of the overall economy, such as income, unemployment, and inflation at the community, national, regional, or global level. It is critical that financial managers track economic conditions and make their best attempt to predict how macroeconomic forces will affect their operations. Of course, no one can be certain what will occur in the future, but research and planning can assist the decision-making process. If the national or state economic outlook is poor, for example, it may not be an ideal time to expand production, because customers may not be able to purchase the additional inventory. However, if economic conditions are poor but research indicates that the economy will improve soon, a business may want to expand before its competitors do, to capture the increased demand that will develop once the economic environment has changed. Since interest rates are often lower during an economic downturn, it is typically more favorable to take out loans when the overall economy is sluggish rather than when the economy is performing well. This issue will be discussed in greater detail later in this chapter.

At various levels—cities, counties, states, regions, and countries—economic conditions and outlooks differ from place to place. However, although differences certainly continue to exist in every area, regions around the world are now much more interwoven than in the past. As Thomas Friedman has discussed extensively (2000; 2005), we now have a “worldwide economy.” Incidents that disrupt markets in one country can have a tremendous impact in countries on other continents. For example, in 1997, the Asian currency crisis caused economic problems in North America and Europe (Friedman, 2000). And as discussed, problems in the U.S. housing market during the Great Recession and afterward have affected investors in other countries, because many brokerage houses around the world purchase mortgage notes sold by U.S. lending institutions. An unexpectedly high number of these mortgages have entered foreclosure, and investors around the world have been left with little or no return on their investments. Given the globalization of finance—the integration of economies into one “world economy”—no longer can financial managers view macroeconomic conditions solely at the national level. The economic world will continue to shrink as technology continues to enable jobs, capital, and information to move swiftly around the world, often with merely the click of a mouse.

Financial managers usually do not compartmentalize microeconomic and macroeconomic factors in their decision-making processes. Every economic factor must be contemplated, whether it is specific to the firm or applicable to the overall economy. With proper decisions arrived at after evaluation of the appropriate
economic environments, firms and individuals can achieve consistent profits and long-term wealth maximization.
Wealth Maximization/Profits

Financial managers must conduct accurate appraisals of potential and realized profits. A distinction must be made between accounting profit and economic profit. An accounting profit is earned when revenues exceed costs and expenses over a particular period of time (see Chapter 2). Economic profit is the profit remaining after the opportunity costs (costs in terms of forgone alternatives) associated with a financial decision are included. Accounting profit does not necessarily accurately reflect the results of the individual’s or organization’s financial decisions. For example, if an individual starts a sport promotion business and has $20,000 net income over the first year, an accounting profit of $20,000 has been realized. However, a calculation of economic profits must include the opportunity costs of not working for someone else. If the individual quit a job that paid $40,000 a year, the economic profit would not be $20,000; instead, it would be $20,000 (gained through the business activities) less $40,000 (lost by not working), for a net of negative $20,000.

This example is typical of new businesses. Starting a business is a risky venture, and even when the business is turning an accounting profit, the economic profit may be negative when opportunity costs are factored into the analysis. What may be more important is what will happen in the second, third, and subsequent years of the life of the business. Typically, entrepreneurs—people who establish a business venture and assume the financial risk for it—understand that a short-term economic loss will be overcome if and when the business becomes successful. Working for someone else may be advantageous in the short term, but most wealthy individuals at some point took risks and endured temporary losses to establish a business.

In addition to understanding the importance of generating profits and creating long-term wealth, managers should be aware that the way a business is structured can have a tremendous impact on its financial performance and on the individual risk of the owners.
Entrepreneurs changing the sport business landscape

Though most people think first of professional sport and big-time college athletics when they think of sport management, entrepreneurs have created a variety of new entities that are growing in popularity. One of the most interesting is the endurance event industry. Participants compete in races that offer a variety of physical tasks, such as traditional running and swimming events, while also exposing the participants to extreme heat and cold. Among the most successful organizations in this industry is Tough Mudder (www.toughmudder.com). Co-founded in 2010 by Will Dean and Guy Livingstone, Tough Mudder courses require participants to engage in militarylike endurance tasks that test both physical ability and mental perseverance. Tough Mudder annually holds more than 35 events, with rapid expansion planned for the future. Since the company’s founding, it has had more than 1 million registrants for its events. In a short period of time, Tough Mudder and other companies operating within the same space have grown from small, niche organizations into international conglomerates that attract significant media and sponsor attention.
BUSINESS TYPES

Most businesses start when an individual or a small group has an idea to create a new product or service or to improve a product or service that already exists. When the initial idea is born, the entrepreneurs do not necessarily think about the importance of forming the new business in a manner that will maximize their short- and long-term financial position. Usually, the primary focus is on developing the idea and determining whether it is viable in the marketplace. However, every business owner, even someone who is earning part-time income from a “hobby,” should understand the ramifications of the organizational structures in his or her industry. In the sport industry, these structures include government-operated organizations, community-owned entities, non-profits, sole proprietorships, partnerships, subchapter S corporations, limited liability corporations or limited liability partnerships, and subchapter C corporations.

Government-Operated Organizations

It is important to remember that governments can operate businesses. In the sport industry, high school and collegiate athletic departments at public schools are ultimately operated by the government. Since the athletic department is a component of the public school, and the public school is operated by the city or county school district or the state, the government entity has ultimate authority over and responsibility for the athletic department’s actions and financial performance. Chapter 14 details some of the important and unique financial considerations of intercollegiate athletic departments, and Chapter 13 discusses recreational programs, which are often subsidiaries of a government agency.

Most private businesses want minimal government involvement in their affairs. When former San Diego Padres owner Joan Kroc offered to donate all or a portion of the Padres to the City of San Diego, MLB immediately voiced its displeasure (Swank, 2004). Major League Baseball owners also rejected the suggestion of Carl Pohlad, former owner of the Minnesota Twins, that a portion of his team be sold to the State of Minnesota. If a sizable portion of the Padres or the Twins were to be owned by the government, citizens would have greater access to information about the financial operation of an MLB team, because information about how government agencies spend their money is available to citizens through Freedom of Information requests (requests made under the Freedom of Information Act or other laws and regulations requiring openness in government, sometimes referred to as “sunshine laws”). Fortunately for MLB, it retains an antitrust exemption that permits it to restrict the sale of franchises and ultimately determine who is eligible to become an owner.

Community-Owned Entities

Although the NFL requires its teams to be controlled by a primary individual owner, it has allowed the Green Bay Packers to maintain their ownership structure despite violating NFL rules. The Packers have a unique history and ownership structure. The Green Bay franchise, formed in 1919, was initially owned by the Indian Packing Company—hence the nickname “Packers” (“Birth of a team,” n.d.). During its first few years the team was not financially successful, and in 1923 it was on the verge of folding. However, A. B. Turnbull, publisher of the Green Bay Press–Gazette, and four other men worked to save the team for the community (“Shareholder and financial history,” n.d.). In August 1923 the Packers were re-formed as a non-profit organization called the Green Bay Packers Corporation, and stock certificates for 1,000 shares of stock were sold at $5 apiece (“Shareholder and financial history”). Because the team was established as a non-profit organization, owners of the team would not be financially rewarded. However, the initial stock sale ensured that the team would remain financially viable and that it would stay in Green Bay.

When the team encountered additional financial difficulty in 1935, the franchise was reorganized as Green Bay Packers Inc., and more shares were sold. The franchise also sold stock in 1950 at $25 per share. Unlike the earlier purchasers, who primarily lived in Green Bay, for the 1950 sale of stock, citizens across Wisconsin and former Green Bay residents living in other states came forward to purchase shares. The team no longer “belonged” to Green Bay but had become “Wisconsin’s team,” as over $50,000 was raised in an 11-day period (“Shareholder and financial history”). The team experienced tremendous on-field success in the 1960s under legendary coach Vince Lombardi, and as its NFL television exposure increased, the Packers began to attract fans from around the country. Many admired the rich history of the Packers and venerable Lambeau Field.

Despite the Packers’ on-field success, by the 1990s the economics of the NFL had dramatically changed. The team was financially successful, but Lambeau Field was in need of considerable upgrades. Other NFL teams played in newer facilities that offered luxury suites and club seating. The Packers could continue to draw sellout crowds, but in order to maximize stadium revenues Lambeau Field needed significant
remodeling. Since the team was owned by the community, raising funds would require an additional sale of stock. The NFL supported the Packers’ plan to amend the articles of the corporation to offer additional shares to the general public. In November 1997 the Packers offered 400,000 shares to the general public (“Shareholder and financial history”). The response was overwhelming, and the team was able to raise millions of dollars to pay for the Lambeau Field renovations. Citizens in every state and in some foreign countries purchased shares. Many of the shares were exchanged as Christmas gifts (Wolfley, 1997).

In late 2011, the Packers opened their fifth stock sale in franchise history. Though Lambeau Field had been renovated in 1997 with proceeds from the team’s fourth stock sale, the franchise hoped to renovate and expand Lambeau Field once again, with significant improvements to its scoreboards and entrance gates. More than 268,000 shares were sold at $250 apiece, yielding in excess of $67 million (Spofford, 2012). The sale helped defray total renovation costs of $143 million. Similar to the 1997 sale, the 2011/2012 offering attracted “investors” from around the world, and 250,000 new shareholders were added to the existing 112,000.

Owners of stock in the Packers are motivated by sentiment rather than the expectation of financial gain. Shareholders may attend an annual meeting and vote on franchise issues, but they will never receive a dividend. In addition, shares cannot be sold except back to the team, at a significant discount from the initial price (“Shareholder and financial history”). However, shares can be given or bequeathed to others. The team’s unique financial structure has enabled it to remain in the small community of Green Bay (pop. 104,779) while the rest of the teams in the NFL play in much larger metropolitan markets.

While the Packers’ ownership situation is unique in the United States, in the Canadian Football League (CFL) three teams are essentially owned by members of their community. The Edmonton Eskimos, Saskatchewan Roughriders, and Winnipeg Blue Bombers have ownership structures that resemble certain aspects of the Packers’ ownership plan. Among the three teams, the Eskimos have been the most successful on the field, having won the second most championships in the CFL.

Non-profits

Non-profit organizations—those that are not conducted for the profit of owners—operate under a variety of specific rules that make them distinct from for-profit enterprises. One of the main rules governing non-profits is that shareholders never receive dividends; most non-profit organizations that generate more revenues than expenses and costs will spend that money to further the organization’s business interests, whereas a for-profit business’s net income would likely be distributed to the shareholders as dividends. A variety of sporting events are operated by non-profit organizations. For instance, the PGA Tour is a non-profit company, and it requires that all PGA Tour events be operated on a non-profit basis.
NFL changes its tax-exempt status

In 2015, the National Football League elected to alter its long-standing tax-exempt status. Though the individual franchises (except for the Green Bay Packers) have always operated as for-profit entities owned by individuals or partnerships, since the 1940s the league office had resisted calls for it to change its own status. Operating as a tax-exempt organization permitted the NFL to avoid paying some potential taxes but also required it to submit select financial information to the government, including the salaries of key employees. NFL Commissioner Roger Goodell’s salary—$35 million in 2013 and $44.2 million in 2014—was perceived by many members of Congress, the media, and sports fans as obscene, particularly for the head of a non-profit organization. Though the league office often reported financial losses, former Oklahoma Senator Tom Coburn led a chorus of complaints that the exemption cost the United States millions of dollars in tax revenue each year (Belson, 2015). By reclassifying its tax status, the NFL will be able to avoid some public scrutiny of its financial operations, but it may also have to pay taxes in the future.

Sole Proprietorships

The vast majority of for-profit businesses in the United States operate as sole proprietorships. A sole proprietorship is a business that is legally owned and operated by a single individual. No formal paperwork is required to establish the business, and the paperwork necessary to sustain the business is minimal (compared to other business types). Extensive meetings to determine strategy and company direction are not necessary, as the owner can simply make decisions unilaterally. Sole proprietorships are typically easier to sell than other business types. The business exists as long as the owner is operating it, and all profits belong to the owner.

However, the simplicity of the sole proprietorship presents some drawbacks. It can be more difficult for a sole proprietorship to raise capital than for other business types. More important, the owner is personally liable for the business’s activities. A successful lawsuit against the business can result in the owner’s being required to sell personal assets to pay the judgment. Most owners of sole proprietorships purchase liability insurance to guard against the financial ramifications of potential lawsuits. Because sport and recreation activities tend to have a higher likelihood of physical injury than activities provided in many other industries, owners of sole proprietorships in sport and recreation often require additional insurance or choose to convert to an alternative business structure. Some of the business structures discussed below can provide a corporate veil separating the business from the owner. This protection from personal liability is an important reason why business owners often choose one of these alternative structures.

Partnerships

A general partnership is simply the joining of two or more individuals with the intent to own and operate a business. The partnership agreement may divide ownership equally or unequally. Most attorneys will advise against operating a business as a 50/50 partnership, even if the owners are family members, because a 50/50 partnership can result in a stalemate. Neither partner in such a partnership can institute policy without the permission of the other, since business decisions must be approved by a majority (50.1%) of the owners. However, disproportionate ownership positions may place the minority partner or partners at a disadvantage. If a two-person partnership is owned with a 60/40 split, the minority partner is entitled to only 40% of the profits and only 40% of the influence in company decisions. That partner can be outvoted on any organizational issue. Typically, investors in partnerships who take minority positions are not likely to invest as much money as they would if they were receiving control.
Al Davis as Raiders general partner

Perhaps the most intriguing partnership agreement in professional sport involves the NFL’s Oakland Raiders. Al Davis had been the head coach and general manager of the Oakland Raiders in the American Football League from 1963 through 1966. After achieving on- and off-field success, he became commissioner of the AFL in 1966. At the time, the AFL and the NFL were competing to sign players and attract fans. Davis, never one to compromise easily, sought to gain an advantage over the NFL by signing the majority of the latter’s star quarterbacks and instituting an aggressive marketing plan (Harris, 1986).

Almost immediately after Davis became commissioner, however, three AFL owners secretly negotiated with the NFL to merge the leagues. When the leagues merged without Davis’s input, Davis was upset, as he felt the AFL could have succeeded against the NFL. Davis felt his work made him the likely choice to become NFL Commissioner after the merger. However, the NFL retained Commissioner Pete Rozelle.

After the AFL-NFL merger, Al Davis signed a ten-year contract to return to Oakland as general manager and part owner of the Raiders. He was offered a 10% stake in the team—a stake valued at approximately $1 million—for only $18,500 (Harris). More important, Davis was named managing general partner. Ed McGah and Wayne Valley were the other general partners.

After continued success on the field and in the front office, Davis utilized language in the partnership agreement to his advantage. When other teams contacted him about becoming their general manager, Davis convinced McGah that McGah needed to sign over complete ownership control of the Raiders to him. McGah, in one of the most amazing incidents in sports business history, signed a contract he did not even bother to read. The contract essentially named Al Davis the Raiders’ “controlling” owner (Harris). The partnership agreement that governed the franchise stipulated that if any two of the general partners agreed to a contract, the other had no recourse. Even though Valley owned the largest percentage of the team, Davis controlled the franchise and would represent the organization in all matters. Valley eventually sold his shares in the partnership after his litigation to regain control of the franchise failed. It was not until 2005 that Davis would acquire a majority of the Raiders, when he purchased shares still owned by McGah’s heirs. Davis subsequently sold roughly 20% of the team for $150 million to investors in 2007 to improve the franchise’s cash flow (Young, 2007).

When Al Davis died in 2011, control of the Raiders passed to his widow, Carol, and his son, Mark. Though Davis owned only 47% of the Raiders at the time of his death, his partnership agreement assured that control of the franchise would remain in his family (Tafur, 2011). Mark Davis has presided over the Raiders since his father’s death, though with not nearly so much flair and controversy.

A general partnership may be established either formally or informally. An express partnership can be created by a contract between the parties. An implied partnership may exist if individuals merely act as partners, such as by sharing a company checking account or by jointly signing for a business loan. Owners must understand the consequences of their actions in the course of operating a business, as a court will examine the activities of the owners when determining liabilities.

A partnership presents the same disadvantages as a sole proprietorship. The partners have personal liability for company losses or judgments. In some cases, a minority partner may be personally liable for a greater share of the company’s liabilities than his or her percentage of ownership. If a partner who owns 60% of a business goes bankrupt, a judgment against the business may result in the minority partner’s being required to cover financial obligations of the insolvent general partner, even though the minority partner owns only 40% of the company. For this reason, some partnerships involve limited partners—partners who are liable only for their direct financial contribution and do not perform any formal managerial role in the operation of the business. Limited partners must remember that the general partner or partners do have personal liability and that a judgment or other financial loss could bankrupt the general partners and, hence, the overall company. It is important to note that limited partners can hold more than 50% of the ownership in a company. A limited partner who owns 60% of an organization, for example, does not have any formal role in the company’s operation but is entitled to 60% of the profits.

A partnership ends when a partner dies or goes bankrupt or when the partnership engages in any illegal activity. A partnership may also be discontinued by the courts if one of the partners is adjudicated insane. A difficulty sometimes arises in the termination of a partnership if the business is not making money. Ultimately, if the business cannot make money, the partnership will be dissolved. In some cases, however, the
partners have differing opinions about the future financial viability of the company. If the partners cannot agree on whether to continue the business, a resolution may require court intervention. The court may dissolve the partnership or may determine how, and at what compensation, one or more partners may exit.
What type of owner do fans want?

In North American professional sports, the owners of most teams are individuals or groups of individuals. Typically, sports teams are not held as C corporations. In fact, the NFL bars publicly traded companies and non-profit organizations from owning franchises. The current public ownership status of the Green Bay Packers is permitted because the team was organized as a non-profit organization before the current NFL ownership rules were established (Eichelberger, 1998; “Shareholder and financial history,” n.d.). The NFL once required that one individual own at least 30% of the franchise and that this owner did not control a majority interest in a team from Major League Baseball, the National Basketball Association, or the National Hockey League (Chass, 2003; Eichelberger). However, the rapidly increasing value of NFL franchises, combined with the aging of many owners, resulted in changes in the ownership rules. In 2004, the NFL altered the 30% rule to allow a primary owner to own just 20% of the team if his or her family owned another 10%. The required figures were “flipped” in 2009 to mandate that the primary owner control 10% if his or her family owned at least another 20% (Kaplan, 2009). In addition, the NFL wants each franchise to have one decision maker in attendance at league meetings. These rules ensure that individual teams are not likely to change their “organizational philosophy,” since controlling ownership is retained by one individual (or family) rather than a group of shareholders (Tucker, 2003).

There have been cases of large Fortune 500 companies holding a professional sport franchise in their portfolio. George Steinbrenner purchased the New York Yankees from the Columbia Broadcasting System (CBS) in 1973. The Atlanta Braves of MLB were owned by media mogul Ted Turner for many years. The flamboyant Turner was often seen at games and on television discussing his hope for the team’s on-field success (Conlin, 2008). Although Turner certainly wanted to generate a profit, he was primarily concerned with winning the National League Pennant and the World Series. When Turner sold the team to AOL-Time Warner, many fans noticed a change: AOL-Time Warner operated the team much as they operated their numerous other corporate holdings (Conlin). The team was required to set a strict yearly budget. Whereas Turner was often willing to trade for talented but expensive players in the middle of the season, fans perceived AOL-Time Warner as being solely interested in achieving a specific return on investment rather than fielding the best possible team to compete for championships (Tucker).

The Disney Corporation owned the Los Angeles Angels of Anaheim from 1996 to 2003. Although Disney management initially thought it could conduct extensive cross-promotions of the team with its theme parks, movies, and other entertainment offerings, it discovered that the benefits of MLB ownership mainly pertain to the “ego gratification” of the team’s owner. (An owner of a professional sport franchise will be known throughout the team’s metropolitan area and potentially throughout the United States and parts of the rest of the world.) Despite the Angels’ 2002 World Series win, Disney soon realized that the team could not generate the same return on investment as its other holdings and sold the team to Arte Moreno for $184 million in 2003 (King, 2003). Moreno has since inspired many Angels fans, who feel that he has done more to acquire players and provide a winning environment for the team (“Moreno keeps promise,” 2008). For example, in December 2011 the Angels signed Albert Pujols to a $254 million, ten-year contract even though Pujols was 31 years old (“Albert Pujols, Angels,” 2011). The following year, the Angels signed Josh Hamilton to a five-year, $125 million contract despite concerns that Hamilton was likely to miss many games given his age, his injury history, and personal problems experienced in his past. Unfortunately for Angels fans, despite Moreno’s largesse, the team failed to make the playoffs in 2012 and 2013. The team did make it to the playoffs in 2014, losing to the Kansas City Royals.

Subchapter S Corporations

The main financial advantage of a subchapter S corporation (often called an S corp) is that profits flow through the business to the shareholders and are taxed only once, as ordinary income to the shareholders. A second advantage is that the shareholders are shielded from personal liability (beyond their investment) by the corporate veil. A subchapter S corporation can own subsidiaries that operate independently (from a legal standpoint), which enables the S corp to be shielded from liability, as well.

Subchapter S corporations do have some significant drawbacks, particularly if the owners seek to grow the business and involve a wide variety of investors. Subchapter S corporations must be based in the United States, and all of the investors—who may number no more than 100—must be from the United States. An S
A corporation can issue only one form of stock (a security that represents an ownership percentage of a company), meaning every share must have the same voting rights and dividend allotments. Many businesses that do not anticipate having a large, diversified ownership structure and do not intend to operate outside the United States choose to be incorporated as subchapter S corporations. Numerous sport businesses in the United States are S corps.

**Limited Liability Corporations and Limited Liability Partnerships**

Forming and operating a subchapter S corporation requires extensive paperwork and attention to detail. For this reason, many business owners choose to operate as a limited liability corporation (LLC) or a limited liability partnership (LLP). An LLC or LLP operates in many ways like a subchapter S corporation. Profits flow through to the investors and are taxed as ordinary income. The LLC and LLP structures also provide a corporate veil against personal liability. However, LLCs and LLPs are typically easier to establish than S corps, through simple paperwork filed in the state where the LLC or LLP will initially operate. Tax forms are also much easier to fill out and file than those for a subchapter S corporation. However, because LLCs and LLPs are fairly new business entities, national standards regarding their operation do not yet exist. Individual states govern LLCs and LLPs in a variety of ways. In some states, rules for LLCs and LLPs have been determined through legislative or judicial action, but in other states ground rules have not been firmly established. States also differ in their laws regarding taxation of LLC and LLP owners. Investors should seek financial and legal advice regarding the formation and operation of LLCs and LLPs.

**Subchapter C Corporations**

When most people think of corporations, they think of Fortune 500 companies such as Disney or General Motors. Disney and General Motors are indeed corporations, but specifically, they are classified as subchapter C corporations (often called C corps). Many, but not all, of the 500 largest companies in the world operate as C corporations, for the primary reason that C corporations may seek investors and conduct business activities around the world. To become a C corporation, a company must file extensive paperwork in its home state. Because of its favorable state laws, Delaware is home to many of the largest C corps, despite the fact that these companies typically do not do much, if any, business in Delaware. Once established, the corporation must hold annual meetings, elect a board of directors, and provide specific annual paperwork to the government and to shareholders.

The C corporation provides the corporate veil that protects investors from personal liability. However, unlike a subchapter S corporation, a C corporation is taxed as a separate legal entity before any profits that remain may be provided to shareholders. Since the shareholders must then pay taxes on their dividends, C corporations are said to be subject to “double taxation.” For example, if a subchapter S corporation earned a $200,000 profit, that money would flow through to the owners’ personal taxes. If the individual tax rate was 35%, then the owners would pay a total tax of $70,000. However, a company operated as a C corporation would first pay corporate taxes on the $200,000 profit. With a corporate tax rate of 35%, the corporation would pay $70,000 in tax, leaving $130,000. If the company were then to issue a dividend to the owners for the entire $130,000, the owners would pay 35% tax on the $130,000.

Companies organized as C corporations are not limited in their number of shareholders. In addition, a C corp can issue different classifications of stock and can sell stock to foreign nationals and institutional investors. A profitable company operated as a partnership, LLC, or subchapter S corporation may elect to change its structure to a C corporation, a process called “going public.” By going public, the owner or owners potentially can generate a tremendous amount of money, and other investors also can take a significant stake in the operation of the company. Decisions regarding the direction of the company are made by the majority of shareholders. If one person or group of people holds 50.1% of the stock, then that person or group has the power to set policies. In most cases, when a company goes public, no one owner retains more than 50.1% of the stock. Fractions of stockholders must vote together to establish or alter company policies. In some cases, prominent founders of companies have been “forced out” of their management positions by other shareholders working in concert.

Exhibit 5.1 summarizes the advantages and disadvantages of various for-profit business structures.

**EXHIBIT 5.1 Advantages and disadvantages of various for-profit business structures.**

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<th>TYPE</th>
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<td>Sole proprietorship</td>
<td>Easily created and managed</td>
<td>Personal liability</td>
<td>Raising capital</td>
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<td>Flow-through taxation</td>
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<tr>
<td>Partnership</td>
<td>Easily created</td>
<td>Potential management disputes</td>
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<tr>
<td></td>
<td>Flow-through taxation</td>
<td>Personal liability (except limited partners)</td>
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<tr>
<td>S corp</td>
<td>Flow-through taxation</td>
<td>Limited number of potential investors</td>
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<td>Limited liability</td>
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<td>Single classification of stock can be issued</td>
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<td>LLC/LLP</td>
<td>Flow-through taxation</td>
<td>Undefined and inconsistent state operating standards</td>
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<td>Limited liability</td>
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<td>C corp</td>
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<td>Unlimited number of investors</td>
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STOCK MARKETS

Every company has individuals who own a percentage of the organization. Though many companies issue stock to owners, not every company is publicly traded. The vast majority of companies are privately held, meaning new investors, whether individuals or institutions, must be invited to purchase stock. The stock of companies that do go public will be listed for sale on a stock market or stock exchange. Stock exchanges exist around the world; the most prominent in the United States are the New York Stock Exchange and the National Association of Securities Dealers Automated Quotations. Each exchange lists the stocks of companies that are available for purchase or sale. To be listed on the exchange, a company must meet a variety of requirements, most of them relating to company capitalization, revenues, and number of outstanding shares. The stock exchange acts as the clearinghouse for brokers to buy and sell listed companies.

The New York Stock Exchange, sometimes known as the “Big Board,” is the largest exchange in the world when measured by market capitalization. However, it ranks only third in the world by number of listings, behind the Bombay Stock Exchange in Mumbai, India, and NASDAQ—the world’s first electronic stock market, which typically attracts emerging and technology companies. Most of the industrialized nations of the world have at least one stock exchange; Canada, for example, has the Toronto Stock Exchange (TSX). Online trading has enabled investors to buy and sell stocks directly in each of these markets.

Professional Sport Franchises

Many non-North American professional sport franchises are listed on stock markets around the world. One of the more notable stock offerings was for Manchester United in 1991 (Kaplan, 2001). For many years Manchester United has been one of the most powerful brand names in sport, and when it went public its stock was quickly purchased by fans around the world. In 2003, Malcolm Glazer (owner of the NFL’s Tampa Bay Buccaneers) launched a takeover bid for Manchester United. After Glazer successfully gained control of the franchise, it was delisted in 2005. Ironically, stock in the franchise was offered on the New York Stock Exchange in 2012 as part of a refinancing effort by the Glazer family.

North American professional sport franchises are currently not traded on a stock market, but some teams were listed in the past. The New England Patriots of the NFL, the Cleveland Cavaliers and Milwaukee Bucks of the NBA, and the Baltimore Orioles of MLB were all taken public in the 1960s or 1970s. Each of them has since returned to private ownership. Shares of the Boston Celtics were offered to the public in 1986, and shares of the Cleveland Indians were offered in 1998. These stocks attracted some interest, but they were initially priced too high for most investors to achieve acceptable financial returns (Much & Phillips, 1999). The Indians were taken private in 2000, and the Celtics were taken private in 2002.

Athletes Selling Their “Own” Stock

It is not uncommon for family members and other supporters to provide money to help athletes pursue their dreams. In many cases, the athlete compensates these supporters by promising a portion of the athlete’s long-term earnings through a verbal or contractual agreement. In some extreme situations, athletes have had to endure legal disputes with family members or past agents regarding how much compensation was required. However, in most cases, parties invested money in hopes of a future payout from an athlete’s success without a formal mechanism. However, in 2013, Fantex Brokerage Services created an environment where athletes could offer investors an opportunity to receive a portion of their future earnings from salaries, endorsements, and other sources (such as film and broadcasting roles), in exchange for buying “stock” in the athlete now. San Francisco 49ers tight end Vernon Davis and Houston Texans running back Arian Foster were among the first athletes to sell stock through the new company. Fantex paid Foster $10 million for a 20% stake in his future earnings, and that stake was resold to new investors (Rovell, 2013). Davis sold a 10% stake for $4 million. In Davis’s case, Fantex announced that his 2015 investment in three Jamba Juice locations would be included in the investor’s portfolio (“Fantex invites,” 2015).
What is the Dow Jones?

The performance of the overall stock market is a matter of interest to many people, not only investors. One way to examine the market’s overall performance is to track a specific stock market to see how all of its stocks are performing. Since each market lists hundreds or even thousands of stocks, you might have to dissect the overall stock market into stock market indexes in order to examine the overall market’s performance or the performance of market subsectors. The Dow Jones Industrial Average (the “Dow”) is the most famous stock market index. In 1884—long before computers were available to crunch massive quantities of numbers—Charles Henry Dow created the index to attempt to track the overall market by following the price fluctuations of a few selected stocks. Dow’s original index included 11 stocks. It increased to 12 stocks in 1896, 20 stocks in 1916, and then 30 in 1928. As the overall economy has changed, the companies included in the Dow have also been changed. The Dow lists only well-known and widely held large-cap companies, those with a market capitalization—the market price of a company, equal to the number of outstanding shares multiplied by the price per share—greater than $5 billion. General Electric is the only company that remains from Henry Dow’s original list. The computation of the Dow uses a scaled average that accounts for stock splits.

Since the Dow contains only large-cap stocks, some investors turn to other indexes for a broader picture of the stock market’s performance. The Standard and Poor’s 500 (S&P 500) is a popular stock market index. Note that the S&P 500 does not list the 500 largest companies, but rather 500 companies that, together, are believed to provide an accurate indication of the overall performance of the stock market. Other popular indexes include the Russell 2000, which tracks the performance of small-cap stocks (stocks of companies with a market capitalization between $250 million and $1 billion), and the Wilshire 5000, which tracks the performance of all publicly traded companies in the United States. These indexes tend to move in similar directions over an extended period of time, but short-term market conditions may affect the indexes differently.
GOVERNMENT INFLUENCE ON THE BUSINESS ENVIRONMENT

The U.S. government has a vested interest in the financial success of individuals and corporations. A prolonged poor economy hurts citizens, and since citizens may vote for many government positions, the government must at least tacitly acknowledge the state of the economy and at least appear to be addressing economic concerns. Although the United States operates under a capitalist economic system, in which the majority of capital is privately owned, over the past 100-plus years it has moved away from 19th-century laissez-faire economics—where the government meddled little in the business environment beyond setting and enforcing rudimentary laws—toward a more socialistic system, where the government is more actively involved in owning and administering means of production.

Two important events in the 20th century spurred the U.S. government into taking a more active role in the business community. During the Great Depression, President Franklin D. Roosevelt enacted extensive and expensive government programs to provide food for the poor and work for the unemployed. After the economic downturn ended, many of these programs were not repealed. Then, during President Lyndon B. Johnson’s administration in the 1960s, Congress passed expensive Great Society initiatives to combat poverty. Much of the legislation passed during Johnson’s tenure, such as Medicare and Medicaid, is still active.

The long-term economic results of Roosevelt’s and Johnson’s policies have been mixed. Massive amounts of spending did help to spur some economic activity, but many economists believe the government’s large financial commitments could have been better utilized in the private sector. The programs have clearly created an expectation among the majority of the country’s citizens that the government will be actively involved in their individual and business affairs. Currently, the government’s overall role in the economy encompasses a variety of areas of influence. Our discussion in this chapter will center on two important governmental functions: monetary policy and fiscal policy.

Monetary Policy and the Federal Reserve

Monetary policy is policy the government sets to control the supply, availability, and cost of money. In most cases, when monetary policy decisions are made, the vast majority of American citizens pay little attention. The Federal Reserve, or “Fed,” is the primary organizing body that attempts to maintain the overall economic health of the United States. Established in 1913, the Federal Reserve acts as “the nation’s bank,” controlling the nation’s currency and lending money to the government, among other functions. The Federal Reserve’s main goal is to manage the economy so it grows steadily. Its secondary goal is to control inflation—the devaluation of the currency. Inflation is not unusual (see Chapter 4), but a high rate of inflation, like those encountered in the late 1970s, causes significant damage to the economy.

The Federal Reserve system includes 12 district Federal Reserve Banks and numerous member banks across the United States. Seven governors serve 14-year terms on the Federal Reserve Board, with staggered terms to ensure continuity. Each of the governors is appointed by the President of the United States and approved by Congress. The length of time each governor serves is longer than the terms served by the President and members of Congress, to diminish political interference and enable the Federal Reserve to serve the short- and long-term financial interests of the country rather than the whims of elected politicians. Typically, the governors meet approximately every six weeks, with additional meetings scheduled if needed.

The Federal Reserve acts to

- regulate the nation’s currency supply,
- serve as banker for many government agencies,
- lend to banks,
- audit banks,
- control the currency,
- guard more than 10,000 tons of gold held in the New York Federal Reserve Bank, and
- administer the transfer of funds via checks.

Usually, the Federal Reserve does not need to act often or dramatically to maintain the economy. Typically, the overall economy shifts gradually, and the Fed can take subtle action to attempt to nudge it in a positive direction. However, during times of concern, the Federal Reserve may need to act often. If the economy is rapidly slowing or expanding, the Fed may meet more than once every six weeks to set interest rates. Natural disasters, such as Hurricane Katrina, or terrorist acts, such as those that occurred on September 11, 2001, can cause dramatic shifts in the overall economic climate. If necessary the Federal Reserve will meet and act multiple times in a single month.
What is the impact of an interest rate change?

The Federal Reserve typically changes the discount and federal funds rates by only a quarter of a percent at a time. If the Fed feels the economy needs a more dramatic change, it might increase or decrease the rates by a half percent or more. A hundredth of a percent is called a basis point. If the Federal Reserve cuts rates by one quarter of one percent, then it has cut rates by 25 basis points. Note that a 25 basis point increase or decrease is not the same percentage change for different established rates. If a 10% rate is cut by 25 basis points (to 9.75%), the rate is changed by 2.5%, but if a 5% rate is cut by 25 basis points (to 4.75%), the rate has changed by 5%. Most people pay no attention to the Fed’s changes in interest rates, until they start shopping for a loan. Even a small increase of 25 basis points can dramatically alter the monthly or yearly interest payment on a loan, particularly when the loan has a large principal or a long term.

For instance, a person who wishes to purchase a $250,000 house and can make a down payment of $50,000 would need a mortgage loan for the remaining $200,000. Most home mortgages have a term of 10, 15, 20, or 30 years, although some mortgages have a term of 40 or even 50 years. Exhibit 5.2 shows the effect of a small increase or decrease in rates on a monthly mortgage payment.

EXHIBIT 5.2 Monthly payment (principal and interest) for a $200,000 loan.

<table>
<thead>
<tr>
<th>RATE</th>
<th>10 YEARS</th>
<th>15 YEARS</th>
<th>20 YEARS</th>
<th>30 YEARS</th>
<th>40 YEARS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.50%</td>
<td>$1,977.72</td>
<td>$1,429.77</td>
<td>$1,159.92</td>
<td>$891.09</td>
<td>$747.78</td>
</tr>
<tr>
<td>3.75%</td>
<td>$2,001.22</td>
<td>$1,454.44</td>
<td>$1,185.78</td>
<td>$926.23</td>
<td>$805.05</td>
</tr>
<tr>
<td>4.00%</td>
<td>$2,024.90</td>
<td>$1,479.33</td>
<td>$1,211.96</td>
<td>$954.83</td>
<td>$835.88</td>
</tr>
<tr>
<td>4.25%</td>
<td>$2,048.75</td>
<td>$1,504.55</td>
<td>$1,238.47</td>
<td>$983.88</td>
<td>$867.24</td>
</tr>
<tr>
<td>4.50%</td>
<td>$2,072.77</td>
<td>$1,529.99</td>
<td>$1,265.30</td>
<td>$1,013.37</td>
<td>$899.13</td>
</tr>
<tr>
<td>4.75%</td>
<td>$2,096.95</td>
<td>$1,555.66</td>
<td>$1,292.45</td>
<td>$1,043.29</td>
<td>$931.52</td>
</tr>
<tr>
<td>5.00%</td>
<td>$2,121.31</td>
<td>$1,581.59</td>
<td>$1,319.91</td>
<td>$1,073.64</td>
<td>$964.39</td>
</tr>
<tr>
<td>5.25%</td>
<td>$2,145.83</td>
<td>$1,607.75</td>
<td>$1,347.69</td>
<td>$1,104.41</td>
<td>$997.74</td>
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<tr>
<td>5.50%</td>
<td>$2,170.53</td>
<td>$1,634.17</td>
<td>$1,375.77</td>
<td>$1,135.58</td>
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<tr>
<td>5.75%</td>
<td>$2,195.38</td>
<td>$1,660.82</td>
<td>$1,404.17</td>
<td>$1,167.15</td>
<td>$1,065.78</td>
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<tr>
<td>6.00%</td>
<td>$2,220.41</td>
<td>$1,687.71</td>
<td>$1,432.86</td>
<td>$1,199.10</td>
<td>$1,100.43</td>
</tr>
<tr>
<td>6.25%</td>
<td>$2,245.60</td>
<td>$1,714.85</td>
<td>$1,461.86</td>
<td>$1,231.43</td>
<td>$1,135.48</td>
</tr>
<tr>
<td>6.50%</td>
<td>$2,270.96</td>
<td>$1,742.21</td>
<td>$1,491.15</td>
<td>$1,264.14</td>
<td>$1,170.91</td>
</tr>
<tr>
<td>6.75%</td>
<td>$2,296.48</td>
<td>$1,769.82</td>
<td>$1,520.73</td>
<td>$1,297.20</td>
<td>$1,206.71</td>
</tr>
<tr>
<td>7.00%</td>
<td>$2,322.17</td>
<td>$1,797.66</td>
<td>$1,550.60</td>
<td>$1,330.60</td>
<td>$1,242.96</td>
</tr>
<tr>
<td>8.00%</td>
<td>$2,426.55</td>
<td>$1,911.30</td>
<td>$1,672.88</td>
<td>$1,467.53</td>
<td>$1,390.62</td>
</tr>
</tbody>
</table>

Although the Federal Reserve performs many functions, it focuses primarily on two main areas: setting interest rates and monitoring the money supply. The Fed studies a variety of evaluation measures before making changes in interest rates or the money supply. These measures include unemployment claims, durable goods orders, housing starts, new factory orders, and overall consumer confidence.

Setting interest rates

The first primary responsibility of the Federal Reserve is to set interest rates. The Fed does not mandate the rates individual lending institutions charge customers for loans for cars, homes, and so forth, but it does establish lending policies, and it sets two important interest rates. The discount rate is the rate at which banks may borrow money from the Federal Reserve. This rate is used primarily as a baseline for setting other rates.
— the vast majority of banks do not ever borrow money from the Federal Reserve, as this would be seen as a sign of financial trouble for the bank and is typically a last resort. However, banks do borrow money from other banks on a daily basis. The rate a bank charges another bank when it loans excess money through the Federal Reserve is the federal funds rate.

The reason banks borrow money from each other is that the Federal Reserve requires every bank to have a reserve available in case customers wish to withdraw their deposits. This reserve is essentially 10% of total deposits, although the stipulations are complex (Morris & Morris, 1999). One factor that led to the Great Depression of the 1930s was that a large number of customers visited their local branches to withdraw funds (particularly after President-elect Franklin D. Roosevelt failed to renounce formally a radical change to U.S. dollar valuation that he had been privately discussing), and some of the banks did not have sufficient money available to give to them. A financial panic ensued as more and more customers became concerned that money was not available. This caused banks to fail. The U.S. government has established the Federal Deposit Insurance Corporation (FDIC; not a part of the Federal Reserve) to assure citizens that their money is safe in banks. Typically, savings accounts and some (though not all) other accounts are insured by the federal government up to $250,000 in the event a bank fails.

Each day, banks determine how much money they have on deposit and how much money they have loaned to customers. Since banks earn profits by loaning money and charging interest, they benefit from loaning as much money as possible. To adhere to the Fed’s reserve requirement, a bank that does not have enough money on hand on a given day must borrow from another bank (or the Federal Reserve, in dire situations) to increase its reserve. Banks that are in good financial standing can typically find other banks willing to loan them money. Each day, hundreds of banks borrow from and lend to one another to maintain their reserve requirement and maximize financial returns. It is not uncommon for a bank to borrow money from another bank one day and then loan money back to that other bank a few days later, as each bank’s overall deposits fluctuate through customers’ making deposits, taking out loans, and so forth. Computers enable the timely and orderly computation and transfer of money.

The Federal Reserve monitors the overall economic health of the United States (and to a lesser extent the rest of the world) and attempts to set the discount and federal funds rates at a level that will maintain the overall economic health of the nation. If the Federal Reserve believes the economy is slowing down, it may lower the interest rates in an effort to cause more money to “flow” through the economy. Lower interest rates encourage citizens and businesses to borrow money, and when a business borrows money, it will often expand its production, hire new workers, and so forth. The Federal Reserve seeks to avoid a national recession—two consecutive quarters of negative growth in the nation’s gross domestic product—as a recession can result in a dramatic increase in unemployment.

When the Fed reduces the interest rate at which banks borrow money from one another, other interest rates typically fall in consequence. For example, some banks set their prime rate—the rate they charge their “best” customers—a few percentage points higher than the federal funds rate. If the federal funds rate goes down, the prime rate likely will decrease. Banks are likely to change some but not all of their rates as soon as the Federal Reserve sets its rates. Credit card rates are not changed as often as the federal funds rate, because credit card debts are unsecured claims, debts issued without any collateral. (Collateral is an asset or assets pledged to a lender to be used as repayment of a loan in the event of default.)

During times when the economy is performing well, the Federal Reserve may elect not to change the rates, but if the Fed feels the economy is performing too well, it may raise interest rates. An overheated economy can lead to inflation, as businesses will be expanding rapidly. When businesses increase output, they tend to require new workers, and if there are not sufficient workers available, the businesses will begin to offer much higher wages to entice workers away from other businesses. This is obviously a good environment in which to work, but only to a point. If wages increase too rapidly, inflation can become rampant. By raising interest rates, the Federal Reserve slows the rate of increase in the overall economy. It becomes more expensive for individuals and businesses to borrow money, resulting in fewer purchases and lower overall production.

For an example of how interest rate increases can dampen economic activity, consider the purchase of a house. Referring back to Exhibit 5.2 (p. 126), the difference in payment between a 30-year mortgage for $200,000 at 4.0% interest and a 30-year mortgage at 4.25% interest, for example, is $29.05 per month. When multiplied by 360 (the number of payments to be made over the 30-year period), the monthly difference results in a total additional outlay of $10,458. The difference between 4.0% and 5.0% is even more dramatic: the monthly difference of $118.81 results in a total difference of $42,772. Any individual or company that is anticipating taking out a loan would be wise to observe the Federal Reserve’s actions on interest rates.

**Monitoring the money supply**
In addition to setting interest rates, the Federal Reserve attempts to control the overall amount of money in the economy. The public money supply is measured in three ways:

- **M1** measures liquid assets in the form of cash and checking accounts.
- **M2** includes all of the money in M1 plus all money in savings accounts and certificates of deposit (CDs) —FDIC-insured debt instruments issued by banks and savings and loans with a fixed term and a specific interest rate. This money is not likely to be spent as readily as M1 money.
- **M3** includes all of the money in M1 and M2 plus the assets and liabilities, including long-term deposits, of financial institutions. In 2006, the Federal Reserve announced that it would no longer publish M3 statistics, but other entities continue to estimate and publish this information.

These measures and other information help the Federal Reserve determine the likelihood that money will be spent in the near future. The M1 and M2 tables are available at www.federalreserve.gov/releases/h6/Current/.

Increasing the money supply. If the Federal Reserve believes the economy needs more money to maintain or improve its overall health, it will increase the overall money supply by creating new money with which it buys securities from banks and other financial institutions. The financial institutions in turn spend, loan, or invest the new money. The Fed must be careful that it does not create too much money. Simply “printing” more money to pay off current financial obligations is a recipe for hyperinflation. After World War I, the German government printed too many marks (the German currency at the time), and their value decreased to such an extent that people were burning their paper money, since that was more efficient than gathering wheelbarrows full of money to use to buy firewood.

**SIDEBAR 5.H**
What is quantitative easing?

When the Federal Reserve wants to stimulate the economy, it typically will reduce interest rates to spur economic activity. With lower rates, in theory, more businesses and individuals will be interested in applying for additional loans, since the cost of money will be more affordable. Consumers and businesses will use those additional loans to start businesses, buy houses, and make other purchases that will spur economic growth. But if interest rates are already at or near zero, and many of the banks are unable to loan considerably more money because their balance sheets are already carrying too many poorly performing loans, what can the Federal Reserve do in this situation to influence the behavior of banks and citizens?

Quantitative easing occurs when the central bank of a country purchases from banks poorly performing loans or loans likely soon to become poorly performing. The banks then have more “room” under their reserve requirement to issue new loans, and they will have more confidence in pursuing additional loan applicants because their “worst” loans are now removed from their financial books. Quantitative easing was initially implemented by Japan to fight deflation in 2001. The United States implemented Quantitative Easing 1 (QE1) after the 2007 financial crisis. In November 2008, the U.S. Federal Reserve purchased $600 billion in mortgage-backed securities, which increased its holdings of debt to $2.1 trillion by the middle of 2010. Though the plan was to phase out the debt purchases, by November 2010 the Federal Reserve implemented QE2 to address an economy that had not returned to typical (by U.S. standards) performance metrics. The plan called for an additional $600 billion of debt purchases. With the economy continuing to stagnate under the Obama administration, the Federal Reserve announced QE3 in September 2012, with promises by Federal Reserve Chairman Ben Bernanke that the massive debt purchases would continue while the economy was performing at a suboptimal level. In June 2013, Bernanke announced that the slightly improving economy would allow the Federal Reserve to decrease bond purchases from $85 billion to $65 billion a month, with additional cuts to be announced as economic conditions warranted.

The short- and long-term impact of quantitative easing programs in the United States and other countries (such as Japan, England, and other European nations) is difficult to quantify. Certainly, the removal of poorly performing debt from balance sheets strengthens banks’ financial solvency and ability to issue new loans. However, many of those banks have not chosen to issue new debt at the level some experts anticipated. Some banks have simply kept all or a significant portion of their additional financial reserves or invested it in “safer” debt instruments, rather than risk it through loans to entrepreneurs and small businesses.

The financial benefits that QE1, QE2, and QE3 have provided might not be worth the cost. Injecting hundreds of billions of dollars into the economy is likely to provide some benefits, even if it is not directed effectively. The sheer volume of additional dollars is going to spark some economic growth, but that massive increase in new money is also likely to spur inflation at some point. Though the use of quantitative easing may have assisted the economy in the short term to a certain extent, no one is exactly sure about its long-term effects and how much inflation will impact the economy in the years ahead. In addition, the fact that the Federal Reserve has purchased poorly performing debt instruments from banks does not mean the debts have magically disappeared. Debt, whether “good” or “bad,” is still debt, and when default occurs, if the Federal Reserve simply writes it off its books, it is essentially saying to the American taxpayers that they will have to cover those losses. Quantitative easing is essentially a “bet” that the short-term benefits of the Federal Reserve’s actions will generate enough positive outcomes to overcome the unknown potential long-term dangers from massive inflation and defaults.

Decreasing the money supply. The Federal Reserve can also remove money from the economy by issuing government securities. Financial institutions usually will be interested in purchasing the newly issued securities, because they are backed by the United States government and typically provide a solid rate of return. As financial institutions purchase the securities, money is removed from the economy—until the securities are due to be repaid, with interest.

The overall supply of money in the economy is ever changing. It is not uncommon for the Federal Reserve to issue securities one day and then buy them the next.

Fiscal Policy

Another function of the government in relation to the economy is setting fiscal policy—governmental...
decisions to collect and spend money in order to influence the economy. With more than 300 million people in the United States, there are more than 300 million opinions regarding exactly how much money the government needs and where the government should spend its money. Politicians have different views regarding spending priorities, but it seems none of them ever complain about having too much money to spend. The legislative and the executive branches of the government have direct influence on the United States’ fiscal policy. Congress passes a federal budget, and then the President signs it into law. Each individual state, county, and city also has a fiscal policy, which is managed by governors, mayors, city council members, and so forth. Debates regarding the collection and spending of money, at every level of government, can become contentious. Often, compromises must be made to avoid a government shutdown when the debate runs past a fiscal deadline. The fiscal policies of governments, such as decisions about taxes and depreciation, influence sport entities, as well as other businesses. In some cases laws are enacted that specifically affect the sport industry, such as “jock tax” legislation (discussed later in this chapter).

**Taxes**

Governments need revenues to defray the cost of providing services. These revenues are typically raised through a variety of different taxes. Citizens who owe the government money must pay their taxes on time or incur penalties and late fees. In addition, delinquent taxes can result in criminal charges against the offending party. Notorious mobster Al Capone, a mob boss during the Prohibition era, used intimidation, physical violence, extortion, and in some cases murder to sustain his criminal enterprises. Despite these well-known violations of the law, his failure to pay federal income taxes led to Capone’s eventual imprisonment in 1931.
Phil Mickelson’s golfing success and tax liability

In 2013, Phil Mickelson noted that he might follow Tiger Woods’ example and purchase a new residence outside the state of California. In late 2012, California passed a significant tax increase for those residents earning over $250,000, with a new 13.3% tax on incomes over $1,000,000. In January 2013 Mickelson noted his displeasure with the State of California: “If you add up all the federal (taxes) and you look at the disability and the unemployment and the Social Security and the state, my tax rate is 62, 63 percent… I’ve got to make some decisions on what I am going to do” (Miceli, 2013, para 6). Though long-time California resident Mickelson experienced a public relations backlash from some fans and members of the media, former California resident Tiger Woods noted, “I moved out of here [California] back in ‘96 for that reason” (Ackerman, 2013, para. 8). Mickelson later apologized for discussing his personal financial situation. Despite the attention the tax discussion generated, Mickelson had one of his best years in 2013, as he won the Scottish Open and also won the prestigious British Open for the first time. Mickelson owed to the United Kingdom 45% of his total earnings from those two events, for a British tax bill of $954,000, plus 45% of a portion of his endorsement monies earned within Great Britain (Murphy, 2013). Fortunately, the United States and the United Kingdom have a tax treaty that limits some of Mickelson’s exposure to double taxation on income earned in foreign countries.

Every business must spend considerable time and money ensuring that it adheres to the various applicable tax codes. It is beyond the scope of this book to detail how various federal, state, and local taxes affect sport business operations. However, a sport business or an individual who understands the overall tax code and its unique aspects can save hundreds of thousands or even millions of dollars. For instance, under the Federal Insurance Contributions Act (FICA), every employee pays 2.9% of wages (technically half is paid by the employer and half is paid by the employee) for Medicare (King, 2005). Signing bonuses, however, were exempt from the 2.9% tax until December 2004, when the Internal Revenue Service (IRS) changed its interpretation of the tax regulations for signing bonuses for MLB players. Major League Baseball had long argued that signing bonuses should not be taxed as wages. Signing bonuses and wages are treated the same for federal income tax purposes, but until the 2004 ruling they were taxed differently for Medicare. When the IRS altered its rules, some players and teams realized they had been paying taxes on signing bonuses that they did not owe. Baseball agent Scott Boras understood both the previous rules and the ramifications of the new interpretation. After negotiating Carlos Beltran’s $119 million contract with the New York Mets, he insisted that Beltran sign the contract prior to January 12, 2005—the date the new IRS ruling would take effect. Signing the contract prior to the deadline saved Beltran $319,000 in Medicare taxes on his $11 million signing bonus (King, 2005).

Depreciation

Depreciation, the allocation of an item’s loss of value over a period of time, is an important factor in the determination of a business’s tax debt. Items such as machinery, buildings (but not land), computers, and desks purchased for a business’s operations have a useful life, and once their useful life is completed, they typically must be replaced. The tax code permits businesses to deduct the loss of value of business assets from their taxable income. For instance, if a fitness club purchases a computer, each year the computer will lose some of its initial value. At the end of its useful life, the business will need to replace the computer with a new one.

The IRS recognizes a variety of methods to determine the yearly loss of value of a particular item. For simplicity, this discussion will describe four of the most common methods.

Straight-line. Estimating straight-line depreciation is straightforward. We subtract the item’s estimated salvage value from its total cost and divide this figure by its useful life to determine its yearly depreciation allowance. For a computer with a cost of $1,000, a useful life of five years, and no salvage value, the depreciation would be ($1000 — $0)/5 = $200 per year. The $200 is recorded as a deduction against yearly revenue. If the business had operating income of $100,000, its tax obligation would be calculated on $99,800. During each of the next four years, the business will be able to deduct $200 from its tax obligation.

Sum-of-years’-digits. Straight-line depreciation is simple and easy to calculate, but it is not necessarily accurate in assessing the loss of value an item experiences during its useful life. In some cases an item depreciates quickly, and in others the item retains a greater portion of its value until the completion of its
useful life. The sum-of-years’-digits method attempts to take the non-linear loss of value into account. As in the straight-line method, we must estimate the useful life of the item. We then add up the numbers of the years of the item’s life: for a life of two years, the sum is $1 + 2 = 3$; for a life of three years, it is $1 + 2 + 3 = 6$; and so on. For the computer that will be depreciated over five years, the sum is $1 + 2 + 3 + 4 + 5 = 15$. Now, for each year the item is depreciated, this figure serves as the denominator. The year number, counted in reverse, serves as the numerator. We count in reverse because most items depreciate quickly after purchase (sometimes known as decelerating depreciation), so the largest amount of depreciation is taken first. See the depreciation schedule in Exhibit 5.3.
Flat and fair taxes: New ways to assess taxes?

As long as there are organized societies there will be debates about taxes. Certainly, taxes are necessary to fund government activities, but every citizen probably has different ideas about who should pay taxes, how much each person should pay, and the proper method of collecting government revenue. Each of the states in the union has different methods of collecting taxes. Whereas many states, such as Georgia, California, and New York, charge individuals income tax, other states, such as Florida, Texas, and Washington, have no state income tax, generating revenue from other forms of taxation, such as taxes on property, sales, and tourism. The state of Nevada has long utilized taxes on tourism and gambling activities (among others) rather than income taxes to generate revenue. Other states have realized that gambling activities in various forms can be a lucrative source of state revenue (McCredie, 2008). Forty-two states have established some form of a state lottery that produces revenue (McCredie). Sport gambling, however, is legal in only four states (Nevada, Oregon, Montana, and Delaware). In 2013, led by Governor Chris Christie, the state of New Jersey sued the United States for limiting sport gambling to these four states (McClam, 2013).

The United States federal government collects a variety of taxes from individuals and businesses. These include income taxes, capital gains taxes, social security taxes, Medicare taxes, and estate taxes, among many others. The current United States tax code is 73,954 pages long, whereas The Bible is 1,291 pages and War and Peace is 1,444 pages (“How many pages is,” 2013). The 73,954 pages cover thousands of tax credits and deductions, and leave as many tax loopholes. In the sport industry, as in others, businesses often argue with the IRS about what the tax code requires. For instance, the Tampa Bay Rays successfully argued in court that money they received for advance ticket sales prior to their franchise having played any games should be taxed in the year the games are played (Moskal, 2002). The tax code did not clearly state exactly how to handle that situation. The current system is so complicated and opaque that even former Internal Revenue Service Commissioner Mark Everson had an accountant compute his taxes, because he was not sure if he could understand the code. Everson noted, “I don’t want to get a letter from the IRS saying I made a mistake” (“67,204-page code,” para 5).

Adhering to the cumbersome federal tax laws costs a tremendous amount of time and money. It is estimated that American citizens and businesses spend over 6 billion hours and $225 billion each year in the effort to adhere to the code (Boortz & Linder, 2008). This time and money could certainly be spent more effectively in other pursuits—such as working to streamline businesses’ operations, designing better products, and providing improved services. For individuals, a simpler tax code would afford them more time and money for investing, retirement planning, and spending leisure time with family and friends. The overall inefficiency and costs of adhering to the current tax code have concerned a variety of groups and caused many to plead for a simpler tax code (Edwards, 2006).

One of the more popular tax reform proposals is the flat tax. The United States currently assesses income taxes on citizens based on their yearly income, with different Americans paying different income tax rates. Under a flat tax, every American would pay the same tax rate, and the myriad deductions and tax loopholes would be eliminated. Steve Forbes advocated a 17% flat tax rate when he sought the Republican Presidential nomination in 1996 and 2000. Forbes did not win the nomination, but his flat tax idea attracted media attention and some support. Forbes continues to promote in articles, books, and speeches the merits of the flat tax as a necessary reform.

Another tax reform idea is the “fair tax.” During his tenure, former Georgia Congressman John Linder repeatedly introduced legislation in the U.S. House of Representatives that would have repealed the entire current tax code and replaced it with a consumption tax. Many European countries use a similar tax called a value-added tax (VAT). European countries employing the VAT also assess a variety of other taxes, but Linder’s plan would eliminate all other forms of taxation at the U.S. federal level except for a 23% national sales tax. If the fair tax were implemented, Americans would no longer need to keep receipts, hire accountants, and worry about specific deductions. They would be taxed only when they purchased retail products and services (Boortz & Linder). The more a person consumed, the higher the taxes that person would pay. The poor would pay no taxes, since the fair tax plan mandates a monthly “pre-bate” for every American to cover the tax obligation for the basic necessities of life (Boortz & Linder). The fair tax is designed to be revenue neutral, meaning the federal government would receive the same amount of revenues that it does under the current system.

The main obstacle for the flat and fair tax plans is that members of Congress support the current system. Under a complex tax code, government officials can solicit financial support from lobbyists for specific deductions and loopholes. Members of Congress, regardless of party affiliation, have little
reason to seek radical reform to a system that provides them considerable financial support and political power.

If the item will depreciate slowly in the beginning (known as accelerating depreciation), the schedule will be reversed, with the largest amount depreciated in the last year. In most cases, regardless of an item’s “actual” useful life, taxpayers will seek to take the largest depreciation possible as soon as possible, due to the time value of money (see Chapter 4). Deferring taxes is typically an excellent way to boost short-term profits and long-term wealth. In the event an item that initially was estimated to have no salvage value proves to have value at the end of its life, the government requires that depreciation recapture taxes be paid.

Double-declining balance. This depreciation method is the most aggressive in allocating loss of useful life to the early years of an asset’s use. In this method, we estimate the total years of useful life and calculate the straight-line depreciation percentage. However, for double-declining balance depreciation, we double the estimated depreciation percentages. Then, we multiply the percentage by the remaining amount of money to be depreciated. After the depreciation calculations have been performed for the item’s useful life, a certain amount of money will remain to be depreciated. This amount is the theoretical salvage value. If the actual salvage value is higher, then depreciation recapture must be paid; if the actual salvage value is lower, then additional depreciation can be taken during the last year of the item’s useful life. Exhibit 5.4 shows how double-declining balance depreciation works.

Units of production. Perhaps the most accurate method for depreciation is the units-of-production method. For this method, we must estimate the total number of items that will be produced by the asset during its useful life. We then calculate the depreciation schedule simply by dividing the total number of items produced during a given year by the total number of items the asset will produce during its useful life. The resulting percentage is multiplied by the original purchase price to determine the yearly depreciation. Exhibit 5.5 shows the use of units-of-production depreciation for a copier costing $2,000 that is expected to produce 10,000 copies and to have zero salvage value at the end of its useful life.

EXHIBIT 5.3 Five-year sum-of-years’-digits depreciation schedule for a $1,000 computer with no salvage value.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PROPORTION DEPRECIATED</th>
<th>AMOUNT DEPRECIATED</th>
<th>REMAINING AMOUNT TO BE DEPRECIATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5/15</td>
<td>$333.33</td>
<td>$666.67</td>
</tr>
<tr>
<td>2</td>
<td>4/15</td>
<td>$266.67</td>
<td>$400.00</td>
</tr>
<tr>
<td>3</td>
<td>3/15</td>
<td>$200.00</td>
<td>$200.00</td>
</tr>
<tr>
<td>4</td>
<td>2/15</td>
<td>$133.33</td>
<td>$66.67</td>
</tr>
<tr>
<td>5</td>
<td>1/15</td>
<td>$66.67</td>
<td>$0</td>
</tr>
</tbody>
</table>

EXHIBIT 5.4 Five-year double-declining balance depreciation schedule for a $1,000 computer with a useful life of five years.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>STRAIGHT-LINE PERCENTAGE</th>
<th>DOUBLE-DECLINING BALANCE PERCENTAGE</th>
<th>AMOUNT DEPRECIATED</th>
<th>REMAINING AMOUNT TO BE DEPRECIATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20%</td>
<td>40%</td>
<td>$400.00</td>
<td>$600.00</td>
</tr>
<tr>
<td>2</td>
<td>20%</td>
<td>40%</td>
<td>$240.00</td>
<td>$360.00</td>
</tr>
</tbody>
</table>
EXHIBIT 5.5 Units-of-production depreciation schedule for a copier costing $2,000 that is expected to produce 10,000 copies and to have zero salvage value.

<table>
<thead>
<tr>
<th>YEAR</th>
<th># OF COPIES PRODUCED</th>
<th>DEPRECIATION PERCENTAGE</th>
<th>COPIES REMAINING</th>
<th>AMOUNT DEPRECIATED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,000</td>
<td>30%</td>
<td>7,000</td>
<td>$600</td>
</tr>
<tr>
<td>2</td>
<td>2,000</td>
<td>20%</td>
<td>5,000</td>
<td>$400</td>
</tr>
<tr>
<td>3</td>
<td>1,500</td>
<td>15%</td>
<td>3,500</td>
<td>$300</td>
</tr>
<tr>
<td>4</td>
<td>1,500</td>
<td>15%</td>
<td>2,000</td>
<td>$300</td>
</tr>
<tr>
<td>5</td>
<td>1,200</td>
<td>12%</td>
<td>800</td>
<td>$240</td>
</tr>
<tr>
<td>6</td>
<td>800</td>
<td>8%</td>
<td>0</td>
<td>$160</td>
</tr>
</tbody>
</table>

The units-of-production depreciation schedule is ideal for items that are clearly related to some sort of tangible production. For items that lose value simply due to time, the units-of-production schedule may not be optimal. As with the other depreciation schedules, if the item retains value beyond its anticipated useful life, then adjustments to taxable income may be required.

Choice of depreciation method. The choice of depreciation method is determined by a variety of factors. In some cases the federal government mandates that certain types of items be depreciated in a specific manner. In other cases the government permits individuals and businesses to use the depreciation schedule they feel is appropriate—with IRS permission, of course. For specific information about which depreciation method to use, see [www.irs.gov/publications/p946/ch01.html#en_US_publink1000107337](http://www.irs.gov/publications/p946/ch01.html#en_US_publink1000107337).

**Jock taxes**

Professional athletes are subject to a variety of special taxes. Since professional sport attracts much media and fan attention, it is easy to know where and when professional athletes “work” in a particular location. California has had laws since the early 1980s requiring out-of-state residents to pay taxes on income earned while in the state. California was certainly able to collect taxes from full-time, part-time, and seasonal employees who received a W-2 from a business located in the state, but it was not until 1991 that the state realized it could track professional athletes working in California. After the Chicago Bulls defeated the Los Angeles Lakers in the NBA Championship, the State of California sent the Bulls’ players and coaches a tax bill for the portion of their salaries that they earned in the state (Smith, 2007; Williams, 2003). In response, Illinois assessed its own state taxes against professional athletes. Eventually, individual cities and counties realized they could also enact and enforce jock taxes on highly paid, visible professional athletes.
Bill Veeck owned numerous Major League Baseball franchises from 1941 to 1980 and was known primarily for his marketing activities. Veeck dramatically changed the way the game of baseball was promoted and presented. Though they are commonplace now, his ideas, such as providing non-baseball entertainment such as fireworks, exploding scoreboards, and on-field parades, were revolutionary when he first introduced them. His marketing acumen led to Veeck’s election to the Baseball Hall of Fame in 1991.

Although Bill Veeck was known primarily for his marketing activities, perhaps his greatest contribution to the business of sports was his understanding of the U.S. tax code and the application of depreciation. In 1959 Veeck successfully argued that the government should accept his interpretation of the depreciation laws. His financial plan was soon copied by most of the other owners in the league (Zimbalist, 1992).

The essential elements of Veeck’s plan involved the depreciation of contracts for players currently on a team’s roster at the time of the owner’s purchase of the franchise. Traditionally, when a player/contract was purchased from another team (which happened far more often in Veeck’s time than now, because most of the minor league teams were then not affiliated with a Major League club), that expense was charged off taxable income, like any other operating expense. However, when an owner bought an entire team, all assets were simply transferred to the new owner.

Veeck wished to write off the existing player contracts from his taxes. To do this, he needed to control 80% of a franchise when he (and his investors) initially purchased the team. Prior to the purchase, Veeck would establish a new organization, and the team would then sell the players and their contracts to the new organization for at least 90% (and usually higher) of the agreed-upon purchase price prior to selling the rest of the team (name, logos, merchandise, media contracts, and so forth). Since the players/contracts had been purchased rather than transferred with the other team assets, they could be depreciated on the new organization’s taxes. Veeck, and most owners who mimicked his plan, depreciated the cost of the players/contracts over three to ten years (Veeck, 1996), which considerably lowered the owners’ taxable income.

Once it was accepted by the IRS, the effect of this plan was dramatic. Purchasing professional sport franchises became a valuable tax shelter, which attracted new owners who had made fortunes in other industries and dramatically increased franchise values (Zimbalist). Veeck’s initial tax plan has since been altered by the Omnibus Tax Act of 2004, which permits a new owner to deduct 100% of the team’s purchase price over a 15-year period (Fort, Gerrard, Lockett, et al., 2008).

Jock taxes are based on the athletes’ time spent working within a particular jurisdiction. The state or local government would prefer to calculate athletes’ taxes based on their time spent in the state and the number of games played in the season, but instead jock tax calculations typically are based on the athletes’ “duty days.” The athletes’ total duty days are counted from the first day of training camp to the last day of the team’s season. For example, if a professional baseball player has 225 duty days from the start of spring training in March until the conclusion of the season in early October, and he spends 25 days playing games in California, he will receive an income tax bill based on the 11% (25 days/225 days) of his yearly salary he earned in the state. Most states issue a tax credit for income taxes paid in other states, but California does not, resulting in potential double taxation (Smith).

Although jock taxes have been assessed since 1991, litigation continues regarding how much individual athletes actually owe. Scott Radinsky of the Chicago White Sox sued the State of Illinois for the manner in which it administered its jock tax against him (Rovell, 2003). Other athletes have complained that jock taxes are often assessed even when the athlete does not visit a city as part of the team’s travel party. Many players on injured reserve do not travel with their team while they rehabilitate, and in those cases the player may be able to argue that he or she did not earn any salary in the state, even though the team played there.

Jock taxes are not limited to the United States. Alberta, Canada, home to the Edmonton Oilers and the Calgary Flames of the National Hockey League, began to assess jock taxes in 2003 (Schecter, 2002). When the Montreal Expos played games in Puerto Rico, players were assessed a jock tax. The special tax was passed just days before the first games. Although the players were required to pay, Major League Baseball, the participating teams, and the promoter of the games were granted a waiver absolving them of tax liability on their profits (Rovell).

The complex nature of jock taxes has resulted in many teams’ hiring additional staff for their payroll
departments to monitor the tax bill players and coaches may owe in various jurisdictions (Smith). Players have also had to retain accountants to ensure they adhere to the various laws. Ray Suplee, an accountant who works for a variety of professional athletes, noted, “My clients’ returns are typically 12 to 15 inches thick” (Williams, p. 25). Some players consider the potential state and local taxes in their decision to sign with a particular team. The old adage “It is not what you make, but what you keep” certainly applies to a well-paid professional athlete. Paying 10.3% in state income tax in California versus no state income tax in Florida could mean a difference of hundreds of thousands or even millions of dollars in taxes over the life of a multimillion-dollar contract. For some professional athletes, such as tennis players, it is easier (for tax adherence purposes) and much less expensive to live in a country, such as Monaco, where there is no income tax rather than deal with the unwieldy United States tax laws (Sweet, 2002). For an exhaustive examination of the impact of state and federal taxes on athlete compensation, please see Stanley Veliotis’s (2013) article in the Journal of Sport Management.
The Tennessee jock tax

Though Tennessee has no state income tax, it does have a unique 2009 jock tax that applies to NBA and NHL players. Any player who is on a team roster that plays in Tennessee pays a flat $2,500 tax per game, up to a maximum of three games and $7,500. Whether those players are members of the NBA’s Memphis Grizzlies or NHL’s Nashville Predators or members of a visiting team, the tax applies. However, NFL players are exempt (Butler, 2013). In addition to the unique tax, the law also mandates that the collected money be distributed to the Grizzlies’ home arena and the Predators’ home arena, which are owned by the Grizzlies and the Predators, respectively (Butler; Lowe, 2013). This creates a situation where players are taxed by the state to subsidize the operations of a private entity, which also happens to be the employer of some of the taxed athletes. It is estimated that Tennessee collected $3.5 million from this particular tax in 2012 (Butler).

Though the Tennessee tax has not received extensive media scrutiny, the NBA Players Association and the NHL Players Association have been lobbying Tennessee to repeal the tax. The NHL has created a $2 million pool to compensate the taxed athletes, but the NBA does not provide any financial relief, which caused former interim NBA Players Association President Ron Klempner to note, “In certain instances it can actually cost a player money to play in Memphis” (Lowe, para. 8). For example, NBA teams often sign bench players to ten-day contracts that pay a prorated portion of the league’s minimum salary (ranging from $473,000 to $1.3 million in 2012/2013, depending on a player’s accrued service time). If a player with no NBA service time were to sign a ten-day contract to play for the Memphis Grizzlies, he could pay $7,500 in Tennessee taxes, which would exceed his total ten-day compensation.
CONCLUSION

Management’s understanding of microeconomic and macroeconomic concepts and trends is critical to the success of any sport entity. In addition, the government’s monetary and fiscal policies will impact financial decision making. Successful financial managers will work within the established tax codes to minimize tax obligations legally. As governments continue to seek revenue sources, it is likely that new tax laws—some of which may be specifically targeted to sport businesses—will be passed. Successful financial managers will be able to adapt their operations quickly to remain profitable when tax changes occur.

concept CHECK

1. Define microeconomics and macroeconomics. What are the main differences between the two?
2. How do professional sport leagues use the concept of scarcity when locating franchises?
3. Define and discuss monetary policy. What specific actions can the Federal Reserve take to achieve its goals?
4. List actions that a government can take to establish its fiscal policy. What are some fiscal policies specifically targeted to the sport industry?
5. What is a basis point? How does a change in a few basis points affect a loan?
6. Define inflation and explain how it might affect sport business operations.
7. What is a stock market index? What is an index designed to accomplish?
8. Explain the important differences between general and limited partners.
9. What are the differences between a C corp and an S corp?
10. What are an LLC and an LLP? Why have they become more popular business entities over the past ten years? What concerns should an investor investigate before forming an LLC or LLP?
11. How has globalization affected sport finance in the past ten years? How might it affect sport financial management in the future?
12. What is your reaction to Phil Mickelson’s 2013 comments regarding taxes? What is the potential impact of Mickelson and others’ leaving California because of high taxes?
13. What are jock taxes? How is Tennessee’s jock tax unique?

PRACTICE problems

1. If an interest rate is currently 6% and a lending institution announces a 25 basis point increase, what percentage increase does this represent?
2. Calculate the straight-line and sum-of-years’-digits depreciation schedules for a $450 video camera that will have a salvage value of $50 after five years of use.
3. Calculate the double-declining balance depreciation schedule for a $1,000 item that will last four years. What is the estimated salvage value?
4. For a fitness center that is purchasing a $3,000 photocopier expected to produce 30,000 copies, calculate the units-of-production depreciation schedule if the following numbers of copies are expected to be made each year: Year 1, 12,000; Year 2, 8,000; Year 3, 6,000; Year 4, 3,000; Year 5, 1,000.

Schedule Changes at Darlington Raceway

Darlington Raceway is one of the most important tracks in the history of NASCAR. Opened in 1950, Darlington Raceway became a model for many superspeedway tracks that would be built later in the 1950s and 1960s. For many years, NASCAR held two Sprint Cup Series races at the track—one in the spring and one on Labor Day weekend. In 2003, because of decreased demand for the spring Darlington race and NASCAR’s desire to expand its presence to other areas of the United States, Darlington’s schedule was reduced to one Sprint Cup race.
1. How might NASCAR’s decision to reduce Darlington’s races from two to one be received by regular attendees at both events?
2. How might NASCAR’s decision affect ticket pricing for the one remaining Darlington race?
3. Explain your answer, referring to the economic and financial principles discussed in this chapter.
4. What would you guess has happened to Darlington’s attendance at its one Sprint Cup race?
5. Did NASCAR make the correct decision in this situation? Explain and justify your answer.

REFERENCES


KEY CONCEPTS

base budget
budget
budget time horizon
business planning horizon
capital expenditure budget
cash budget
decision package
decision unit
expense budget
fixed cost
forecast
going concern
incremental budget
line-item budgeting
mixed cost
modified zero-based budgeting (MZBB)
periodic expense
planning
program budget
program planning budgeting system (PPBS)
reduced-level budget
revenue budget
sensitivity analysis
step cost
strategic planning
strategic planning horizon
variable cost
zero-based budgeting (ZBB)
Introduction

Budgeting is an indispensable tool of management and corporate governance. A budget aids management in financial coordination, and because the annual budget of a corporation requires board approval, it also helps ensure the fulfillment of the board’s wishes. Beyond these facts, the definition and functions of budgeting vary widely among organizations. In the United States, sport organizations regard budgeting mostly as a tool for financial planning. A budget is considered to be a set of financial statements based on projections resulting from a particular scenario—generally, the most likely or hoped-for scenario. A budget, therefore, reflects management’s opinions about future financial circumstances. Budgets and financial plans are often developed and used similarly, emphasizing the comparison of income and outlay entries—a practice adopted from public corporate bodies. In addition to providing a comparison of income and expenses, a budget can also serve several other functions: to motivate, coordinate, and communicate.

The budget as a means of motivation. Because budgets aid in performance measurement, performance evaluation, and the determination of pay, a carefully considered budget directs managers toward the company’s goals. When personal benefits are coupled with business objectives (often expressed in financial form) and when subordinates participate in the planning process, a budget can supply incentive for the work force to act on behalf of the organization.

The budget as a means of coordination. Because the development of a budget provides an opportunity to consider and plan for the future, the process helps management understand and overcome challenges in earning a profit. Certain budgeting techniques enable managers to uncover production bottlenecks and other problems and to correct any errors in forecasting.

The budget as a means of communication. For management to be effective, subordinates need enough information about organizational goals to be able to act appropriately. Superiors need up-to-date information about progress and results. Budgeting can serve these functions in a formal business setting.
WHAT IS A BUDGET?

A budget quantifies planned revenues and expenses for a period of time. It also includes planned changes to assets, liabilities, and cash flows (Smith, 2007). A budget facilitates the control process and helps with the coordination of an organization’s financial activities. Budgets are prepared in advance of the time period they cover. They are based on the objectives of the business and are intended to show how policies are to be pursued in order to achieve objectives.

A budget is a financial plan that sets out a business’s financial targets, expressed in monetary terms. It is an agreed-upon plan of action for a given period of time that reflects the policy to be pursued and the anticipated outcomes related to that policy, and it is set out in numerical or financial terms.
RELATION OF PLANNING AND FORECASTING TO BUDGETING

A clear distinction must be made between a plan, a forecast, and a budget.

Planning

Planning is usually a first step, prior to forecasting and budgeting. Planning is the establishment of objectives and the formulation, evaluation, and selection of the policies, strategies, tactics, and actions required to achieve those objectives. The planning process produces a plan that, along with information about the environment, provides information for the forecasting process.

Forecasting

A forecast is a prediction and quantification of future events for the purpose of budgeting. The difference between a forecast and a plan is that a forecast is simply a prediction, whereas a plan defines actions to be taken. (A budget is technically a plan, because it concerns actions to be taken.) A forecast relates to events in the environment, relevant to the implementation of the plan, over which the business has either no control or only very limited control. The environment considered may be internal, external, or personal—all have effects on decision making. A forecast is a prediction of the future as it relates to the organization’s plan. The terms forecast, prediction, projection, and prognosis are typically used interchangeably.

The field of forecasting is concerned with approaches to determining what the future holds and with the proper presentation and use of forecasts. It includes the application of both judgment and quantitative (statistical) methods. Research on forecasting has produced many changes in recommended practice, especially since the 1960s. Many assumptions about the best way to generate forecasts have been found to be wrong. For example, the practice of basing forecasts on regression models that fit historical time-series data has been found to produce inaccurate results. Sometimes the research findings have been upsetting to academics—such as the discovery that in many situations relatively simple models are more accurate than complex ones (Makridakis & Wheelwright, 1982; Ord, Hibon, & Makridakis, 2000).

Forecasts may be conditional. That is, if policy A is adopted, then X is most likely to occur, but if B is adopted, then Y is most likely. Forecasts of future values are often for a time-series, such as the number of tickets that will be sold in a year or the likely demand for season tickets. A forecast may also predict a one-off event, such as the outcome of free agency or the performance of a new recruit. A forecast may project a distribution, such as the locations of potential security risks or the sales of merchandise among different age cohorts.

The individuals who complete a budget will determine the forecasting tasks to be done. For example, a budget may require estimates of future ticket sales, merchandise sales, concessions, donations, gifts, and licensing fees. Determining the necessary forecasting tasks is part of the planning stage of budgeting.

The forecasting task itself may be complex. In order to estimate sales, for example, a prudent manager will look at past sales histories and various factors that influence sales. Marketing research may reveal that sales are expected to stabilize, because the organization cannot produce enough to sustain growth in sales or because a general economic slowdown is anticipated to result in stagnating sales. In such a case the budget team will need input from administration, managers, and other parties in related cost centers. This is just a sample of the process of developing forecasts.

Forecasting is concerned with what the future will look like, whereas budgeting is concerned with what it should look like, from management’s point of view. If the sport organization does not like the forecasts, it can generate other plans until one is found that leads to acceptable outcomes. Of course, many organizations take a shortcut and merely change the forecasts. This is analogous to a family deciding to change the weather forecast so they can go to a baseball game.

Guidelines for forecasting

The approaches to forecasting described below should be helpful in the budgeting process.

1. Forecasting relies on observing past relationships and making predictions from historical information. However, if these relationships change, forecasts become inaccurate. For example, if a team’s star player retires or signs with another team in the off-season, forecasts of attendance for the next season will likely be inaccurate. Hence, forecasters must both extend past trends and make adjustments for known changes.

2. Consider developing several forecasts under different potential scenarios. Assign a probability to each scenario and calculate a weighted average to arrive at an acceptable forecast. This process is often called
sensitivity analysis.

3. Longer planning periods tend to produce less accurate forecasts. To increase accuracy, consider shortening the planning period. The appropriate length of a planning period will also depend on how often plans must be evaluated, which in turn will depend on sales stability, business risk, financial conditions, and the organization’s budgeting approach.

4. Forecasts of large interrelated items are more accurate than forecasts of specific itemized amounts. For example, a forecast for the entire athletic department for one academic year will be more accurate than a forecast for one specific game. The variations in single games will tend to cancel each other out within a group of games. An overall economic forecast will be more accurate than an industry-specific forecast.

We now turn to budgeting, the process of determining what management feels the organization and its activities should look like in financial terms.
In a typical organization, each department submits an annual budget recommendation, which, once approved, is incorporated into the organization’s annual operating budget. This budget becomes the basis of authority for the financial operation of each department during the fiscal year. The organization should set a general budgeting policy to guide resource allocation on the basis of program justifications.

The budget formulation process should:

1. Define financial objectives, which determine the direction and thrust of each department’s operations;
2. Establish goals for achieving these objectives within the budgeted time frame;
3. Identify the activities and quantify the elements needed to achieve established goals; and
4. Describe the factors and situations that may affect planned activities.

Each year, the budget formulation process is initiated by the organization’s business manager, chief financial officer, or comptroller. Employees with budgetary responsibilities should obtain copies of the previous year’s budget, review it carefully, and use it as the basis for budget recommendations for the coming year. Requests for capital expenditures, equipment, and administrative expenditures should be carefully itemized and fully described. Requests for new positions and other increases in the budget may also be made at this time. These recommendations will be reviewed by the appropriate business manager, the CFO, or the comptroller.

The business office typically initiates the planning cycle on or around the end of the second financial quarter of each fiscal year; team coaches and department administrators begin soon after. The schedule and approach to the budgeting process will vary depending on the size of the organization.

Timing and Budgets

Individuals involved in budgeting should consider three distinct time periods: the budget time horizon, the business planning horizon, and the strategic planning horizon. The budget time horizon is the immediate future, which can be predicted with a reasonable degree of certainty on the basis of past business decisions and commitments. The budget time horizon is generally considered to be the next 12 months. The business planning horizon is the period over which forecasts can be made with a reasonable degree of confidence—generally, three to five years. Individuals who are developing budgets usually gather data to produce short-term and long-term budgets for these two time periods. They might inquire, for example, how ticket sales have changed over the past year, two years, three years, and five years and use the pattern to make forecasts and produce short- and long-term budgets. Finally, the strategic planning horizon extends far into the future; planning for this time period focuses on the long-term aspirations of the sport organization and management.

Keys to Successful Budgeting

Successful budgeting depends on the involvement of the entire organization in both the planning and the implementation phases. Hence, two keys to successful budgeting are (1) input from the entire organization and (2) a means of sharing the budget across the organization.

Input from each cost center, department, or management unit is vital to drawing up a budget that realistically reflects revenue and expenses from each unit, department, or sport. A budget arrived at in a “top down” fashion—that is, with input only from the head office or higher administration—is not likely to be accurate or effective.

To share the budget across the organization, user-friendly software, such as Microsoft Excel, is indispensable. If an organization wants grassroots involvement, managers must have tools they feel comfortable using, and every task must be simplified through software and technology. Online data capture and transparency of data will help coaches, managers, and assistants become involved in the budgeting process, which in turn will result in an efficient process.

Furthermore, a budget must be sustainable. Budgets do not go away, and they must be readily adaptable to changes. The first step toward sustainability is gaining “buy-in” from the administration and department heads. With everyone pulling in the same direction, the organization moves forward together. Involving each department, coach, and employee in developing and maintaining the budget helps ensure buy-in, congruence, and efficiency.

Best Practices in Budgeting

Budgeting should be a value-added activity. These best practices can transform budgeting into a value-added
1. Link budgeting to strategic planning—the process of defining a vision for your organization and creating goals and objectives to help achieve this vision—since these strategic decisions usually have financial implications.

2. Make budgeting procedures part of strategic planning. Strategic assessments should include identification of historical trends, competitive analysis, and other activities that might otherwise take place within the budgeting process.

3. During the budgeting process, spend less time collecting and gathering data and more time generating information for strategic decision making.

4. Get agreement on summary budgets before you spend time preparing detail budgets.

5. Automate the collection and consolidation of budgets across the organization. For easy updating, every person with budgeting responsibilities should have access to budgeting software.

6. Set up the budget so that it will accept changes quickly and easily. Budgeting should be a continuous process and one that encourages alternative thinking.

7. Design a budget that will give lower-level managers some form of fiscal control over their own areas of responsibility.

8. Leverage your financial systems by establishing a data warehouse that can be used for both reporting and budgeting.

Not all of the best practices can be implemented in every sport organization. Time and resources available vary among athletic departments and sport enterprises. Effective budgeting requires that managers understand the resources available and the skills and limitations of the personnel working on the budgeting process.
APPROACHES TO BUDGETING

Several approaches are used in budgeting in the sport industry. Each sport enterprise will need to select the most favorable approach for its business, considering the advantages and disadvantages of each.

Regardless of the approach, budgeting is an easy process when revenues are increasing. In past decades, sport enterprises have enjoyed increasing revenue forecasts, the result of ticket price increases, significant media revenues, luxury and box seating expansion, and lucrative naming rights deals. Budgeting becomes more difficult in an environment where revenues are decreasing and expenses must be cut. During periods of recession or flat revenue streams, the budget becomes a tool for motivation, communication, and, in some cases, job security.

Individuals in all sport job titles are affected by the budgeting process, and all departments—including marketing, operations, ticketing, sales, sports information, and administration—must be involved in it. Budgetary decisions should be made in accord with management’s priorities and desired revenue growth to attain the goals of the organization.

For example, suppose the goal of an athletic department is to finish first or second in the Southeastern Conference in every sport. It would behoove every coach, staff member, and administrator to become involved in the budgeting process. If the women’s basketball recruiting budget was being reduced—and you were the women’s basketball coach—would you still be able to reach the top 10%? A coach who is not involved in the budgeting process might not be aware of an impending reduction. Yet that coach will be evaluated at the end of the year on the team’s performance, just the same. If your team needs to be in the top 10% of the conference, you would benefit by becoming involved in the budgeting process to ensure that resources are allocated so that you can meet that goal.

This section discusses in detail the following four approaches to budgeting:

1. Incremental budgeting
2. Program planning budgeting system (PPBS)
3. Zero-based budgeting (ZBB)
4. Modified zero-based budgeting (MZBB)

Within each budgeting approach, there are budgets within budgets. These include revenue budgets, expense budgets, cash budgets, and capital expenditure budgets. Each is briefly summarized at the end of this section.

Incremental Budgeting

A form of line-item budgeting often called the object-of-expenditure budget was the earliest type of budget format used in private, public, and non-profit entities. It was considered an innovative development by financial reformers in the early 1900s and remains a popular form of budgeting even today. The line-item budget achieved prominence with the establishment of the executive budget, which assigned responsibility and accountability for spending to the organization’s chief executive. This gave the chief executive a powerful instrument for controlling departmental and agency demands for money.

Line-item budgeting is a technique in which line items (also known as objects of expenditure) are the main focus of analysis, authorization, and control. Typical line items include supplies, personnel, travel, and operational expenditures. See Exhibit 6.1 for a list of typical expenditures in an athletic department. An incremental budget is a form of line-item budgeting in which next year’s budget is the result of either decreasing or increasing last year’s budget for each line item by the same percentage (as opposed to a zero-based budget, discussed later in this chapter, with which we clear the deck and start all over again). An incremental budget is based on projected changes in operations and conditions. This approach to budgeting tends to lead to budgetary increases over time.

As Exhibit 6.1 suggests, by using a software spreadsheet we can prepare an incremental budget very quickly. In Exhibit 6.1, the revenues for each line item were increased by 1.5% and the expenses for each line item were increased by 2% for the 2015/2016 budget.

Incremental budgeting is often called the “fair share” approach. It has this name because no one sport program or department is increased or cut at a different level from the others. This form of budgeting is usually associated with a top-down management style, and it has two important characteristics. First, funds are allocated to departments or organizational units, and the managers of these units then allocate funds to activities as they see fit (see Exhibit 6.1). Second, as mentioned previously, an incremental budget develops out of the previous year’s budget, and only the incremental change in the budget request is reviewed.

Each of these characteristics creates problems. Incremental budgeting is particularly troublesome when top
management seeks to identify inefficiencies and waste. In fact, inefficiencies tend to grow in an organization that uses incremental budgeting, because inefficiencies are easily hidden. In a typical budget of this type, nothing ever gets cut. Because top management looks only at the requests for incremental changes, money may be provided for an activity long after the need has passed.

EXHIBIT 6.1 Sample line-item budget for a department of intercollegiate athletics.

<table>
<thead>
<tr>
<th></th>
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<td>A. Men’s Basketball</td>
<td>$1,000,000</td>
<td>$1,008,000</td>
<td>$1,023,120</td>
</tr>
<tr>
<td>B. Football</td>
<td>$7,044,000</td>
<td>$7,874,560</td>
<td>$7,992,678</td>
</tr>
<tr>
<td>C. Baseball</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,750</td>
</tr>
<tr>
<td>D. Women’s Basketball</td>
<td>$12,002</td>
<td>$10,000</td>
<td>$10,150</td>
</tr>
<tr>
<td>E. Soccer</td>
<td>$15,000</td>
<td>$10,000</td>
<td>$10,150</td>
</tr>
<tr>
<td>F. Other</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,075</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$8,126,002</td>
<td>$8,957,560</td>
<td>$9,091,923</td>
</tr>
<tr>
<td>II. Athletic Fees:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Matriculation Fees</td>
<td>$475,000</td>
<td>$475,000</td>
<td>$482,125</td>
</tr>
<tr>
<td>B. Debt Service</td>
<td>$610,000</td>
<td>$610,000</td>
<td>$619,150</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1,085,000</td>
<td>$1,085,000</td>
<td>$1,101,275</td>
</tr>
<tr>
<td>III. Program Club Revenues:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Contributions</td>
<td>$5,800,000</td>
<td>$5,800,000</td>
<td>$5,887,000</td>
</tr>
<tr>
<td>B. Investment Income</td>
<td>$120,020</td>
<td>$150,000</td>
<td>$152,250</td>
</tr>
<tr>
<td>C. Endowment Income</td>
<td>$125,000</td>
<td>$125,000</td>
<td>$126,875</td>
</tr>
<tr>
<td>D. Non-Cash Gifts in Kind</td>
<td>$160,000</td>
<td>$150,000</td>
<td>$152,250</td>
</tr>
<tr>
<td>E. Royalties</td>
<td>$50,000</td>
<td>$50,000</td>
<td>$50,750</td>
</tr>
<tr>
<td>F. Jr. Program Club</td>
<td>$10,000</td>
<td>$10,000</td>
<td>$10,150</td>
</tr>
<tr>
<td>G. Parking</td>
<td>$4,000</td>
<td>$5,000</td>
<td>$5,075</td>
</tr>
<tr>
<td>H. Credit Card Revenue</td>
<td>$5,000</td>
<td>$10,000</td>
<td>$10,150</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------</td>
<td>------------</td>
<td>-----------</td>
</tr>
<tr>
<td>I. Miscellaneous</td>
<td>$5,000</td>
<td>$5,000</td>
<td>$5,075</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$6,279,020</strong></td>
<td><strong>$6,305,000</strong></td>
<td><strong>$6,399,575</strong></td>
</tr>
</tbody>
</table>

**IV. Other Revenues:**

<table>
<thead>
<tr>
<th>A. Radio &amp; Television</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Basketball</td>
</tr>
<tr>
<td>2. Football</td>
</tr>
<tr>
<td>3. Talent Reimbursement</td>
</tr>
<tr>
<td>4. Miscellaneous</td>
</tr>
<tr>
<td><strong>TOTAL RADIO &amp; TV</strong></td>
</tr>
<tr>
<td>B. Corporate Sponsorships</td>
</tr>
<tr>
<td>C. Mailing &amp; Handling Fees</td>
</tr>
<tr>
<td>D. Investment Income</td>
</tr>
<tr>
<td>E. Concessions</td>
</tr>
<tr>
<td>F. Souvenirs</td>
</tr>
<tr>
<td>G. Programs</td>
</tr>
<tr>
<td>H. Conference Revenue Sharing</td>
</tr>
<tr>
<td>I. Stadium Rental</td>
</tr>
<tr>
<td>J. Miscellaneous</td>
</tr>
<tr>
<td>K. NCAA Distribution</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
</tbody>
</table>

**V. Subsidy from Non-Restricted Reserve for Debt Service**  
**$125,000** | $125,000 | $125,000 |

**TOTAL PROJECTED REVENUE**  
$19,375,062 | $20,412,600 | $20,716,914 |


**EXPENSES**

| I. Revenue Sports: |
|-------------------|---|---|---|
| I. Men’s Basketball | $1,283,873 | $1,078,823 | $1,100,399 |

198
### II. Men’s Olympic Sports:

<table>
<thead>
<tr>
<th>Sport</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseball</td>
<td>$441,725</td>
<td>$335,575</td>
<td>$342,287</td>
</tr>
<tr>
<td>Golf</td>
<td>$169,010</td>
<td>$146,708</td>
<td>$149,642</td>
</tr>
<tr>
<td>Soccer</td>
<td>$293,860</td>
<td>$248,871</td>
<td>$253,848</td>
</tr>
<tr>
<td>Swimming &amp; Diving</td>
<td>$289,427</td>
<td>$214,291</td>
<td>$218,577</td>
</tr>
<tr>
<td>Tennis</td>
<td>$207,867</td>
<td>$173,751</td>
<td>$177,226</td>
</tr>
<tr>
<td>Track Indoor/Outdoor &amp; CC</td>
<td>$273,643</td>
<td>$260,555</td>
<td>$265,766</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,675,532</td>
<td>$1,379,751</td>
<td>$1,407,346</td>
</tr>
</tbody>
</table>

### III. Women’s Olympic Sports:

<table>
<thead>
<tr>
<th>Sport</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basketball</td>
<td>$461,671</td>
<td>$421,049</td>
<td>$429,470</td>
</tr>
<tr>
<td>Softball</td>
<td>$243,285</td>
<td>$175,760</td>
<td>$179,275</td>
</tr>
<tr>
<td>Volleyball</td>
<td>$275,587</td>
<td>$210,307</td>
<td>$214,513</td>
</tr>
<tr>
<td>Swimming &amp; Diving</td>
<td>$294,496</td>
<td>$198,512</td>
<td>$202,482</td>
</tr>
<tr>
<td>Tennis</td>
<td>$215,081</td>
<td>$147,661</td>
<td>$150,614</td>
</tr>
<tr>
<td>Golf</td>
<td>$147,469</td>
<td>$117,612</td>
<td>$119,964</td>
</tr>
<tr>
<td>Track Indoor/Outdoor &amp; CC</td>
<td>$273,643</td>
<td>$86,567</td>
<td>$88,298</td>
</tr>
</tbody>
</table>

**TOTAL**

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,911,232</td>
<td>$1,357,468</td>
<td>$1,384,617</td>
</tr>
</tbody>
</table>

### IV. Cheerleaders:

<table>
<thead>
<tr>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>$94,017</td>
<td>$87,893</td>
<td>$89,651</td>
</tr>
</tbody>
</table>

### V. Support Services:

<table>
<thead>
<tr>
<th>Service</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Information</td>
<td>$447,805</td>
<td>$449,114</td>
<td>$458,096</td>
</tr>
<tr>
<td>Medical/Training</td>
<td>$626,036</td>
<td>$608,565</td>
<td>$620,736</td>
</tr>
<tr>
<td>Booster Club</td>
<td>$1,352,586</td>
<td>$1,325,929</td>
<td>$1,352,448</td>
</tr>
<tr>
<td>Administration</td>
<td>$1,573,484</td>
<td>$2,222,982</td>
<td>$2,267,442</td>
</tr>
<tr>
<td>Facilities/Grounds/Projects</td>
<td>$1,105,053</td>
<td>$1,024,196</td>
<td>$1,044,680</td>
</tr>
<tr>
<td></td>
<td>2022-23</td>
<td>2023-24</td>
<td>2024-25</td>
</tr>
<tr>
<td>----------------</td>
<td>-------------</td>
<td>-------------</td>
<td>-------------</td>
</tr>
<tr>
<td>6. Business Office</td>
<td>$227,895</td>
<td>$251,791</td>
<td>$256,827</td>
</tr>
<tr>
<td>7. Ticket Office</td>
<td>$377,642</td>
<td>$324,354</td>
<td>$330,841</td>
</tr>
<tr>
<td>8. Academic Support</td>
<td>$365,089</td>
<td>$355,637</td>
<td>$362,750</td>
</tr>
<tr>
<td>9. Strength/Conditioning</td>
<td>$159,665</td>
<td>$148,256</td>
<td>$151,221</td>
</tr>
<tr>
<td>10. Recruiting</td>
<td>$209,264</td>
<td>$203,779</td>
<td>$207,855</td>
</tr>
<tr>
<td>11. Compliance</td>
<td>$54,446</td>
<td>$57,645</td>
<td>$58,798</td>
</tr>
<tr>
<td>12. Olympic Sports Administration</td>
<td>$349,668</td>
<td>$345,277</td>
<td>$352,183</td>
</tr>
<tr>
<td>14. Wellness Program</td>
<td>$126,840</td>
<td>$130,820</td>
<td>$133,436</td>
</tr>
<tr>
<td>15. Concessions</td>
<td>$74,100</td>
<td>$74,100</td>
<td>$75,582</td>
</tr>
<tr>
<td>16. Programs Football/Basketball</td>
<td>$52,002</td>
<td>$52,002</td>
<td>$53,042</td>
</tr>
<tr>
<td>17. Video Support</td>
<td>$191,324</td>
<td>$139,588</td>
<td>$142,380</td>
</tr>
<tr>
<td>18. Marketing, Development</td>
<td>$564,057</td>
<td>$385,947</td>
<td>$393,666</td>
</tr>
<tr>
<td>19. Student Support Services</td>
<td>$105,347</td>
<td>$103,678</td>
<td>$105,752</td>
</tr>
<tr>
<td>20. Stadium</td>
<td>$183,772</td>
<td>$172,388</td>
<td>$175,836</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$8,161,775</td>
<td>$8,389,748</td>
<td>$8,557,543</td>
</tr>
</tbody>
</table>

VI. Capital Improvement/
      Maintenance and Debt service | $2,011,300 | $2,011,300 | $1,900,000 |

TOTAL PROJECTED EXPENDITURES | $19,606,368 | $20,338,283 | $20,593,523 |

TOTAL PROJECTED REVENUE | $19,375,062 | $20,412,600 | $20,716,914 |

PROJECTED INCOME OVER EXPENDITURES | ($231,306) | $74,317 | $123,391 |
The incremental budgeting approach is not recommended, as it fails to take into account changing circumstances. Moreover, it encourages managers to “spend up to the budget” to ensure a comparable allocation in the next period. This is a “spend it or lose it” mentality, by which managers are sure to spend all that is allocated to them in fear that if a surplus remains, their request for an incremental increase will be denied. See Exhibit 6.2 for a summary of the advantages and disadvantages of incremental budgeting.

**Program Planning Budgeting System**

The program planning budgeting system (PPBS) is one method used to develop a program budget. Whereas traditional budgets, such as line-item budgets, focus on input (e.g., program costs), program budgeting focuses on outputs, or the goals and objectives the organization hopes to achieve. Here, the emphasis is on organizational effectiveness, not spending. Program budgets are based primarily on units of work and secondarily on the character and object of the work. For example, under the heading of the marketing department we would find personnel, office supplies, and advertising. The purpose of program budgeting, as the name suggests, is to highlight the units of activity that the line items support.

In this approach, the organization’s policy decisions lead to a specific budget and specific multi-year plans. PPBS, therefore, contributes to the organization’s planning process. The goal of PPBS is to link planning with budgeting systematically in the service of clearly identified goals.

**EXHIBIT 6.2 Advantages and disadvantages of incremental budgeting.**

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>The budget is stable and change is gradual.</td>
</tr>
<tr>
<td>Managers can operate their departments on a consistent basis.</td>
</tr>
<tr>
<td>The budget is relatively simple to prepare and easy to understand.</td>
</tr>
<tr>
<td>Conflicts may be avoided if departments are seen to be treated similarly.</td>
</tr>
<tr>
<td>Coordination between budgets is easier to achieve.</td>
</tr>
<tr>
<td>The impact of changes can be seen quickly, because the budget is relatively easy to prepare and modify.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities and methods of working are assumed to continue in the same way as before.</td>
</tr>
<tr>
<td>The budget process provides no incentive for developing new ideas.</td>
</tr>
<tr>
<td>The process provides managers no incentives to reduce costs.</td>
</tr>
<tr>
<td>This approach encourages managers to spend up to the budget to ensure that the budget is maintained next year.</td>
</tr>
<tr>
<td>The budget may become out of date and no longer relate to the level of activity or type of work being carried out.</td>
</tr>
<tr>
<td>Changes in the priority for resources may not be reflected in the budget.</td>
</tr>
<tr>
<td>Budgetary slack may be built into the budget, which is never reviewed. Managers may have overestimated their requirements in the past in order to obtain a larger budget allocation, and this situation is never reviewed or remedied.</td>
</tr>
</tbody>
</table>

PPBS integrates into the planning and budgeting process a number of techniques for

- identifying, costing, and assigning a complexity of resources,
- establishing priorities and strategies in a major program, and
- forecasting costs, expenditures, and achievements in the immediate financial year or over a longer period.

Planning is the essence of program budgeting, and if a budget is not connected to a plan, it is not a true budget. Many agencies organize the budget into functional categories or sets of activities, but unless a plan gives purpose to these functional categories and activities, it is difficult to identify the purposes the line-item categories are intended to serve. Program expenditures should be related to a set of objectives, which in turn are connected to goals, for a true program budget to exist. The development of goals and objectives for an organization or program unit is fundamental to management planning and PPBS. Together, the goals and objectives plus budgeted resources provide an overall plan. Once a set of long-range goals or general directions has been established, a series of directly related, measurable short-range objectives can be developed. The short-range objectives are the projected or planned achievements for the agency or program during the planning period. Whether these objectives will actually be achieved depends on the resources made available and the ability of management.

Consider as an example a PPBS budget for a summer community tennis camp (see Exhibit 6.3). As stated above, a PPBS budget includes performance objectives, measurement criteria, a productivity measure, and effectiveness measures, unlike the line-item budget presented earlier. The emphasis of this budget is on outcomes: meeting the performance objectives set for the camp. The three performance objectives are matched to the demand, workload, productivity, and effectiveness outcomes to ensure the program is meeting the objectives set for it. In addition, and like the line-item budget, the PPBS budget includes revenue and expenditure information.

As another example, let’s return to the collegiate athletic department that has a goal of being in the top 10% of programs within its conference. To achieve this goal, administrative officials and coaches set this objective: build a new state-of-the-art facility in order to recruit the best players. By recruiting the best players, the teams using the new facility and its amenities (e.g., locker rooms, weight rooms, and training room) will improve their chances of moving into the top 10%. If this athletic department uses PPBS for major capital expenditures, it will need to incorporate the planning, programming, and budgeting concepts during the facility’s construction phase. In professional sports, an organization’s goal might be to increase revenue streams so that the franchise can better compete with larger-market teams. This goal may also lead to the objective of a new facility, which should enhance the revenue streams from the sale of luxury and box seats.

Program budgeting has several advantages. By connecting the budget to a plan, it enables an organization to allocate its scarce resources purposefully. This clarity of purpose in turn enables managers to understand how the work of their particular unit contributes to the work of the organization as a whole. Other advantages pertain to staff involvement in the initial stages of the project. The personnel involved often have significant input, and their needs form the basis of the final budget. For the larger, government-funded sport entity, program budgeting provides a visible and concrete expression to the citizens of how their tax dollars are being spent. Many college athletic departments are state funded and, as a consequence, have a public non-profit mentality. Yet the department must exist in a competitive environment.

EXHIBIT 6.3 Sample PPBS for a summer community tennis camp.
The advantages that come fromrationally and systematically connecting means to ends and dollars to programs come with disadvantages. One serious disadvantage for managers is that PPBS limits their flexibility in shifting dollars from one program to another. Over time programs build up strong constituency support, which means that any program cuts may attract strong external opposition. Program budgeting has been likened to buying all perfectly matching suits of clothes—it is difficult to treat the parts as interchangeable. In addition to limiting flexibility and increasing the potential for conflict, true program budgeting is quite time consuming. Staff must be involved, and their input and buy-in are required. The more employees involved in budgeting, the more the timeline expands. Another disadvantage is that the evaluation process is often weak. The length of the budgeting process seems to limit the evaluation process, especially after completion. Finally, a budgeting system like PPBS sometimes allows athletic departments to support irrational objectives, such as moving into NCAA Division I-Football Bowl Subdivision from a lower division (see Chapter 14) and increasing from 20 to 28 sports when the department and its institution do not have the resources to support these changes.

Exhibit 6.4 lists the advantages and disadvantages of PPBS budgeting.

Zero-Based Budgeting

Zero-based budgeting (ZBB) is a budgeting approach and a financial management strategy intended to help decision makers achieve more cost-effective delivery of goods and services. It is well suited to the service
industry—of which the sport business is part—and has been a common approach to budgeting in the service industry for over 50 years. ZBB originated with Peter Pyhrr at Texas Instruments in the late 1960s. Pyhrr’s book on the subject remains the most definitive and comprehensive study of this approach to budgeting (1973). His goal was to create a decision-making mechanism that would force an organization to remain competitive in a rapidly changing set of market conditions. He believed this could best be achieved by putting managers in the position of constantly asking why they are doing what they are doing and whether they should be using their resources to do something else.

EXHIBIT 6.4 Advantages and disadvantages of PPBS.

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enables an organization to allocate its resources purposefully.</td>
</tr>
<tr>
<td>Shows managers how their departments’ work relates to the whole organization.</td>
</tr>
<tr>
<td>Provides evidence to citizens of how a department is spending tax dollars.</td>
</tr>
<tr>
<td>Gets staff involved at an early stage and allows them significant input.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limits flexibility to shift dollars between programs.</td>
</tr>
<tr>
<td>Increases the potential for conflict if programs with strong support receive cuts.</td>
</tr>
<tr>
<td>Is time consuming due to staff involvement and need for staff buy-in.</td>
</tr>
<tr>
<td>Results in a weak evaluation process due to program length.</td>
</tr>
<tr>
<td>May allow support for irrational objectives.</td>
</tr>
</tbody>
</table>

One of the best ways of putting this question at the center of attention is for managers to begin each budget year with no assumption that they will have what they received last year. What if managers had to start over from scratch each year and justify everything they were doing from the ground up? In short, why not create a level playing field for all managers, and assume that they could stop what they have been doing and use the resources to do something else instead? Wouldn’t this generate more innovation and new product lines, thus ensuring the company constant market preeminence? Pyhrr thought so, and he created ZBB to achieve this goal.

ZBB requires building a budget from a “zero base.” That is, the budget is not based on the previous year’s budget but rather starts all over again from a clean slate. This is the opposite of incremental budgeting, and it is designed to attack the major drawback of incremental budgets—the fact that resource allocation tends to become routine and inefficient. Sport is a fast-changing environment, and ZBB has become a staple budgeting approach for administrators who want to control costs and achieve operational efficiency in this kind of environment. Zero-based budgeting helps to prevent budgets from creeping up each year with inflation, and ZBB also shifts the “burden of proof” to the manager, who must justify why his or her department or sport should receive any budget at all.

ZBB has four requirements:

1. Each budget period starts fresh—budgets are not based on past budgets.
2. Budgets are zero unless managers make the case for resources. The relevant manager must justify the whole of the budget allocation.
3. Every activity is questioned as if it were new, before any resources are allocated to it.
4. Each plan of action has to be justified in terms of total expected cost and benefit, with no reference to past activities.

The philosophy of always questioning why we should continue doing what we have been doing is the heart
and soul of zero-based budgeting. This philosophy and the system that Pyhrr created have been adopted by for-profit and non-profit organizations and used in government and athletic departments across the country. Through ZBB, budgeting can become a driving force to shape departmental and business policy and force systematic planning.

Key elements of the ZBB system are decision units, base budgets, reduced-level budgets (RLB), and decision packages that are priority ranked. Each part of the organization where budget decisions are made is referred to as a decision unit. The base budget is first created at the decision unit and contains the expenditure levels necessary to maintain last year’s service level at next year’s prices. In short, the manager increases the existing budget by the rate of inflation. Next, the decision unit manager creates a reduced-level budget that defines a predetermined percentage by which the unit must cut the budget; for example, by 50%. The reduced-level budget includes services considered critical or essential to the unit, and it may include either new or existing programs. Finally, the decision unit manager creates decision packages. These are the building blocks of ZBB and are linked to the organization’s goals and objectives. Within a decision package are specific additions to the reduced-level budget, ranked in priority order, based on what is viewed to be most critical to the organization. Decision units may be asked to create decision packages beginning with a base budget or reduced-level budget. As the ZBB process begins, managers frequently use cost worksheets like the one given in Exhibit 6.5.

EXHIBIT 6.5 Sample ZBB budgeting cost worksheet for an athletic department.

<table>
<thead>
<tr>
<th>PROGRAM, FUNCTION, OR ACTIVITY</th>
<th>ATHLETIC DIRECTOR AND COACHES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Salaries (Object 01)</td>
<td>Current FTE</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Coaches</td>
<td>35.0</td>
</tr>
<tr>
<td>Admin. Sec. I</td>
<td>1.0</td>
</tr>
<tr>
<td>Secretary</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>38.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other Non-position Salaries (Object 01)</th>
<th>Current $</th>
<th># Hrs.</th>
<th># Days</th>
<th>Rate</th>
<th># of Persons</th>
<th>Request $</th>
<th>Change $</th>
<th>Justification/Purpose</th>
<th>Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Part-time</td>
<td>3,500</td>
<td>600</td>
<td>8</td>
<td>$35.00</td>
<td>1.6</td>
<td>3,500</td>
<td>0</td>
<td>Flexible part-time assistance needed for peak summer/ fall season</td>
<td>2-614-1-60</td>
</tr>
<tr>
<td>Supporting Service PT</td>
<td>1,138</td>
<td>75</td>
<td>15</td>
<td>$16.98</td>
<td>1.6</td>
<td>7,160</td>
<td>5,862</td>
<td>Flexible part-time assistance needed for peak summer/ fall season</td>
<td>2-614-1-60</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td>4,638</td>
<td></td>
<td></td>
<td>$10,500</td>
<td></td>
<td></td>
<td></td>
<td>5,862</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Consultants/Other Contractual Servs. (Object 02)</th>
<th>Current $</th>
<th># Hrs.</th>
<th># Days</th>
<th>Dates of Service</th>
<th>Rate</th>
<th>Request $</th>
<th>Change $</th>
<th>Justification/Purpose</th>
<th>Account Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultants/camps</td>
<td>0</td>
<td>40</td>
<td>N/A</td>
<td>Nov–Jan</td>
<td>$53,238</td>
<td>$53,238</td>
<td>$53,238</td>
<td>Help train trainers/coaches</td>
<td>5-614-2-01</td>
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<tr>
<td><strong>Subtotal</strong></td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>$53,238</td>
<td>$53,238</td>
<td></td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

205
Ranking the decision packages

An important characteristic of zero-based budgeting is that it forces prioritization. Within the organization, each department and its related activities are ranked. When revenue may be insufficient to meet demand for spending, it is useful for the organization to have a ranking of sports, programs, and activities based on their effectiveness, as well as potential alternatives to expensive or ineffective programs. Despite its virtues, in good revenue years ZBB can accommodate poor decisions, but in years of financial exigency, tough decisions must be made. ZBB requires all managers involved in the budget process to agree to the priority and ranking of their departments and activities. This requirement creates accountability.

In the ZBB process, decision packages are evaluated and ranked in order of importance. On the example cost worksheet (Exhibit 6.5), the decision packages are ranked as Object 01, Object 02, and so forth. Note that subgroups are also ranked. For example, under Position Salaries, we find Object 01: [1] Coaches, [2] Administrative Secretary, and [3] Secretary; see Exhibit 6.5. Establishing the rankings according to performance measurement tools, including cost/benefit analyses, is clearly very important, but the application of subjective judgment is also appropriate. This is because few activities can be reduced to a manageable number of measures, and some measures may not be practical because of difficulties in real-world application or the expense of data collection. For example, a manager may believe that there would be a “feel good” factor in taking a particular course of action, such as not cutting a team that has been a historical power even though it makes business sense to do so. This could never be accurately quantified and is subjective, but may be valid.

Usually the highest rankings in the decision package for an athletic department are salaries and benefits for the administration, coaches, and staff, as seen in Exhibit 6.5. For example:

1. Football coach
2. Basketball coach

The athletic director should consider which coach and which sport are most important to the department, and how this sport matches the department’s goals and objectives (e.g., to compete on a national level in football and to compete for conference championships in all other sports). The matching of budget priorities with
goals is essential for the success of any athletic department, particularly major BCS athletic departments. If football generates 80% of an athletic department’s revenue, how does this factor into the allocation of resources in the overall athletic department budget? The football program will likely receive most of the department’s resources. But suppose you are the softball coach or the equestrian team coach—what would you say about the hefty allocation of resources to the football program? The reality of the situation is that the department would have no softball or equestrian budget without football, so these coaches cannot effectively question the allocation of resources to football. This brings us to the discussion of allocation of resources.

Allocating resources

The ranking list results in a priority order for the allocation of resources. The most important items are funded, whether they are existing or new, and in lean years funding for the lower-ranking items can be reduced. Returning to the ZBB cost worksheet (Exhibit 6.5), note that the Coaches and Administrative Secretary positions are fully funded, but funding for the Secretary position has been reduced by half (1.0 position). The final budget will be made up of the decision packages that have been approved for funding, allocated in the appropriate operational units.

Under ZBB, previous decisions are not supposed to influence the new budget. Previous outlays for coaches and facilities should, in theory, not be considered. Reality, however, is not theory, and previous budget outlays, especially for coaches and facilities, do matter in preparing the new budget.

Advantages and disadvantages

The zero-based budgeting process of setting priorities provides significant accountability to the administrators, coaches, and staff who develop the criteria. In cases where revenues are flat or decreasing, the lowest-ranked priorities may be eliminated, and conflicts and resistance should be less than under other budgeting systems.

ZBB is no panacea, however. Like incremental budgeting, it has its own set of drawbacks. It increases paperwork and requires time to prepare, managers tend to inflate the benefits of activities that they want funded, and the eventual outcome may not differ much from what would occur with an incremental budget. Exhibit 6.6 summarizes the advantages and disadvantages of ZBB.

Modified Zero-Based Budgeting

As service-level budgeting entities, sport organizations are positioned to use a modified zero-based budgeting (MZBB) approach. In this approach, spending levels are matched with services to be performed. Under zero-based budgeting, a great deal of effort can be devoted to documenting personnel and expense requirements that are readily accepted as necessary, such as travel expenses for required road games, utility expenses for home games, and staff expenses for home games. MZBB reduces this effort by starting at a base that is higher than zero. An appropriate starting point for a department or program might be 80% or 85% of current spending levels. High-priority requests above this level may be identified in order to restore part or all of the current year’s service levels.

EXHIBIT 6.6 Advantages and disadvantages of ZBB.

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forces budget setters to examine every item.</td>
</tr>
<tr>
<td>Allocates resources based on results and needs.</td>
</tr>
<tr>
<td>Fosters a questioning attitude.</td>
</tr>
<tr>
<td>Eliminates waste and budget slack.</td>
</tr>
<tr>
<td>Prevents creeping budgets (using the previous year’s figures with an additional percentage).</td>
</tr>
<tr>
<td>Encourages managers to look for alternatives.</td>
</tr>
<tr>
<td>Has a strong evaluation component.</td>
</tr>
</tbody>
</table>
## DISADVANTAGES

- Is a complex, time-consuming process.
- May result in an emphasis on short-term benefits to the detriment of long-term planning.
- Does not officially consider previous money outlays.
- May be unrealistic (it is impossible to eliminate some programs, e.g., sports, although the budget indicates they should be).
- Is affected by internal politics and can lead to annual conflicts over budget allocation.

### Elements of MZBB

MZBB has the following characteristics:

- Uses cost identification and behavior techniques
- Begins with a floor of expenses
- Includes decision or add packages
- Requires managers to reduce their budgets by a predetermined percentage
- Puts existing programs in competition with new ones

The use of cost identification and cost behavior techniques (recognizing how costs react to changes in volume) enhances this budgeting approach. Costs are identified as fixed, variable, mixed, or step costs. Fixed costs do not vary with volume, whereas variable costs change with volume (see Exhibit 6.7a). For example, an arena has certain expenses necessary to open the doors for fans for a sport event, regardless of the number of fans. This base is the same for 5,000 or 30,000 fans. These costs include administrative salaries and benefits, property insurance, property taxes, payroll taxes, and depreciation. Other fixed expenses are discretionary and might reflect organizational policies in the form of periodic appropriations for training and development, special promotions, and opponent guarantees, to name a few. Variable expenses for an arena will include cost of goods sold, wages (part time), and the opponent’s share of the gate receipts. Mixed costs possess both fixed and variable elements. An example is utilities, which include a flat rate plus a cost for each unit used. For a sport arena, mixed costs include repairs and maintenance, as well as utilities. Finally, step costs are constant within a range of use but differ between ranges of use. For example, the cost for security might be fixed under contract, with one rate for event attendance of zero to 2,500 patrons, a higher rate for attendance between 2,501 and 5,000, and a still higher rate for attendance from 5,001 to 7,500. MZBB focuses on variable expenses, and this is why it is a practical approach to budgeting. See Exhibit 6.7 for a comparison of variable and step costs.

EXHIBIT 6.7 Comparison of the movement of variable costs (in the same direction and at the same rate as their associated activity) to that of step costs (constant within a range of use but different between ranges of use).
Exhibit 6.8 provides an overview of the MZBB focus. The expense floor represents the fixed costs of operations. These costs are the organization’s minimal costs needed to stay in business, and they typically represent approximately 70% of total expenses. The top level (approximately 30%) represents mixed and variable expenses. This section is the focus of MZBB.

Zero-based budgeting focuses time and effort on all expenditures. Modified zero-based budgeting is more efficient in focusing time and effort on variable expenses and accepting fixed expenses as necessary. All departments and programs will have a base need for expenditures—the minimum necessary for the department or program to operate. MZBB focuses time, energy, and management decision making on the area above this budgetary starting point. Underlying the MZBB process is the concept of the going concern—the assumption that the entity will operate indefinitely. A sport entity whose status isn’t in question would be prudent to budget for the variable costs, those above the starting point. This will focus effort on areas that pertain to the goals and objectives of the organization and increase the efficiency of the budgeting process.

In general, MZBB asks managers to reduce their budgets to a predetermined level (a percentage of the previous year) and then add back requests for funding. Although this process places some existing programs in competition with new programs, it saves managers the strain of justifying all costs for all programs from the ground up.

In practice, athletic departments and public sector organizations that use MZBB require managers to submit “decision” or “add packages” for discrete activities or programs that need funding above a predetermined reduced level. In the submission stage of the budget process, managers are forced to reduce their appropriation requests to 80% to 90% of the base budget. A manager may then reconfigure existing activities into new decision packages that could bring the total budget request up to 110% to 115% of the previous year’s budget.

EXHIBIT 6.8 MZBB starting point.
By this means, new programs may be considered for funding. For example, an athletic department might be presented with the choice of reducing some current operations in favor of adopting a new program, funding the new program out of the savings gained by reducing the existing program. “Service-level budgeting” may be a better description of this budgeting approach, which begins with the minimum costs of providing a given service.

MZBB provides an occasion for managers to try something new and puts them on notice that they cannot assume the status quo. This can be unsettling to employees and managers, who may find their programs part of a “cut” package. Even if their activity is never cut, the employees and managers may feel unappreciated. Because of this potential for demoralization and the extensive time often required for the preparation of decision packages, zero-based budgeting processes, including MZBB, may not be appropriate for use in the public sector, especially where many activities are legally mandated.

Steps in MZBB

Step 1. The first step in MZBB is to identify expenses. Mark each expense type as fixed, mixed, or variable. Simply write F, M, or V next to the category (or in another column in a spreadsheet).

Step 2. Next, allocate fixed and mixed expenses. Fixed expenses will probably include the largest expenses, such as debt service and management salaries. Most fixed expenses are probably not negotiable without dramatic business changes or disruptions, so they provide a “hard landscape” around which you will fill in (and prioritize) the variable expenses. By identifying fixed and mixed expenses first you are able then to focus on the smaller, more negotiable amounts that remain.

Some expenses are periodic expenses. These are expenses for which we set aside money each month, in order to have sufficient funds when the expense is incurred. Examples are new vehicles, retirement bonuses, certain one-time events, purchases of computer software and equipment, and some insurance payments. Some organizations simply divide these expenses by 12 and set aside that amount each month. However, this approach will not work if the expense is less than a year away. Instead, for each expense, count how many months away it is, and divide the total expense amount by the number of months. For example, if the company plans to purchase a new car in four months with a down payment of $15,000, you would divide $15,000 by four and budget that amount, $3,750, each month. If an additional car will be purchased in the next fiscal year, and the purchase is at least a year away, you would divide the expense by 12 and set aside that amount each month.

This approach may cause strain on the budget at first, but as short-term expenses are paid, the monthly allocations for those expenses will decrease, freeing up cash.

Step 3. Once you have allocated the fixed and mixed expenses, circle back to identify any fixed expenses that could be eliminated. What remains will be the floor of expenses. You will concentrate on the expenses above this starting point line.

Step 4. Next, average the mixed expenses to determine the average amount spent per month over the last six to nine months (some organizations may want to look at a full fiscal year of expenses). Convert the average
monthly mixed expenses to a figure for annual expenses. For example, if the average monthly utility expense was $26,500, the annual expense is $318,000. Consider the economic reality that your organization will face during the next budget period. For example, how will the global demand for fuel affect utility rates over the next year? Exact estimates are not necessary; you will make adjustments as the process continues.

Step 5. Next, address and prioritize the variable expenses. The prioritizing of variable expenses is essential to MZBB, and it is the difference between MZBB and ZBB.

Step 6. The variable expenses must be offset against anticipated revenues. Subtract total expenses from total revenues to arrive at the starting point for anticipated profit or loss from operations. Note that the goal of budgeting is not to break even (to make income equal expenses). Although you should conduct breakeven analyses to ensure that a net operating loss will not occur, you should budget for a profit or a positive residual, depending on the profit/non-profit status of your organization. By making trade-offs between one category and another, adjust the expense and revenue figures until income equals or exceeds expenses. In this process conflicts often arise among sports, departments, coaches, and administration, because it exposes their conflicting values. If a conflict becomes too heated, it may be necessary for the parties to take a break from the process and continue later.

Remember that you will refine the budget as you go. It is a process: Prepare, Compare, Repair. Budgeting takes time, and it does not end when departments or programs submit their revenue and expense estimates. Many meetings and individual sessions will be necessary to discuss the numbers and the reasoning behind these numbers. Each meeting or session should focus on the goals and objectives of the department and the organization.

The ZBB cost worksheet found in Exhibit 6.5 may be used for MZBB, as well. Recall that whereas under ZBB each program, function, or activity must be justified and placed in a decision packet, MZBB allows a starting point of 80% to 85% of the previous year’s budget. Managers use decision or add packages to justify an increase in their unit’s allocations above the starting point.

For example, in Exhibit 6.5 professional part-time salaries are ranked more important than supporting service part-time salaries. Under ZBB, this package would start at zero, and changes to the budget would be based on the priority of the cost-decision package. Under MZBB, however, the package might start at 80% of last year’s funds ($3,710.40). To request funds for new activities above the 80%, the manager would submit an add package. The add package would include $5,862 for the new supporting service part-time request.

Advantages and disadvantages
MZBB focuses on the portion of the budget that has flexibility rather than the entire budget. Fixed and mixed costs cannot be eliminated if a service is to be offered, but variable expenses can be often eliminated or reduced—or increased, when warranted. MZBB combines the best advantages of ZBB with the simplification of focusing on the variable costs above the budget starting point. See Exhibit 6.9 summarizing the advantages and disadvantages of MZBB.

Exhibit 6.9 Advantages and disadvantages of MZBB.
May result in an emphasis on short-term benefits to the detriment of long-term planning.

- Does not consider previous money outlays.

- May be unrealistic, because some programs (e.g., sports) cannot be eliminated.

- Is affected by internal politics and can lead to annual conflicts over budget allocation.

Budgets within Budgets

Within each budget type are additional budgets. These budgets track an organization’s revenue, expenses, cash, and capital expenditures, and they are some of the most important planning tools an organization can use. They show the impact that the budget will have on future organizational revenues, expenses, cash flows, and capital expenditures.

Revenue budget

The revenue budget is a forecast of revenues based on projections of the organization’s sales. For example, to set appropriate ticket prices, athletic directors, general managers, and administrators must consider the strength of their schedule, their conference affiliation, the competition, the advertising budget, their sales force’s effectiveness, and other relevant factors, and they must estimate sales volume. Then, based on estimates of demand at various prices, they select the appropriate prices. The result of sales estimates is the revenue budget.

Expense budget

The expense budget is found in all units within a firm and in non-profit and profit-making organizations alike. The expense budget for each unit lists its primary activities and allocates a dollar amount to each. Sport managers give particular attention to so-called fixed and semi-fixed expenses—those that remain relatively unchanged regardless of volume. As attendance drops or increases, variable expenses tend to control themselves because they change with volume.

Cash budget

The cash budget forecasts how much cash the organization will have on hand and how much it will need to meet expenses. This budget can reveal potential shortages or the availability of surplus cash for short-term investments.

Capital expenditure budgets

Investments in real estate, stadiums, arenas, buildings, and major equipment are called capital expenditures. These are typically substantial expenditures, in terms of both magnitude and duration. Their magnitude and duration can justify the development of separate budgets for each of these expenditures. Capital expenditure budgets allow management to forecast future capital requirements, to keep on top of important capital projects, and to ensure that adequate cash will be available to meet expenses as they become due. Capital budgeting is discussed in detail in Chapter 8.
CONCLUSION

Planning is a controlling activity of decision makers. The “mechanical” (the actual budget on paper) is only part of the planning approach, which involves managerial and motivational elements. Decisions about the future of an athletic department, professional sport organization, or non-profit entity are often made in budgeting meetings. The budgeting process will indicate where next year’s growth will focus and what areas will benefit from additional funds. It behooves every manager to take an interest in the budgeting process—and not only because bonuses depend partly on meeting budgetary objectives. Get involved: budgeting affects every department and every individual in the organization.

concept CHECK

1. Why is the budgeting process important to the success of a sport organization?
2. How do budgeting and forecasting differ?
3. How does incremental budgeting differ from program planning budgeting? How does it differ from zero-based budgeting?
4. What are the strengths and weaknesses of incremental budgeting?
5. How does program planning budgeting differ from zero-based budgeting?
6. What are the strengths and weaknesses of program planning budgeting?
7. What are the strengths and weaknesses of zero-based budgeting?
8. How does modified zero-based budgeting differ from zero-based budgeting?
9. What are the advantages and disadvantages of modified zero-based budgeting?
10. In team sport (professional or college), which form of budgeting should be used?

PRACTICE problems

1. The Columbia Arena Company formed in 2015 and uses the accrual basis of accounting. Using the company’s 2015 budget, provided in Exhibit 6.10, develop a pro forma operating budget for 2016 based on the following revenue and expense estimates:
   a. It is forecasted that costs and expenditures will change in 2016 as follows:
      - Merchandise COGS, G&A, Event Costs, and Maintenance will increase by 2.5%.
      - Concessions COGS will increase by 4.5%.
      - Utilities will increase by 8.0%.
      - Personnel will increase by 2.5%.
      - Insurance, Contract Services, Marketing, Management Fee, and Reserve are forecasted to remain the same.
   b. The arena is expected to generate cash receipts in 2016 as follows:
      - All rent will increase by 5.5%.
      - Concessions Gross will increase by 4.0%.
      - Merchandise Gross, Suite Revenue, Club Seating Revenue, Advertising Revenue, and Naming Rights are forecasted to remain the same.
      - Box Office, Parking, and Ticket Fee revenues will decrease by 2.3%.

2. After you have calculated the 2016 budget, suppose your boss asks you to revise it so that overall revenues increase by 4% and operating expenses decrease by 1.5%.
   a. Based on current trends in facility management, what revenues do you anticipate can be increased? What expenses can be decreased?
   b. Use the 2016 budget that you created in Problem 1 and create a new 2016 budget based on the revenue increases and expense decreases outlined in Problem 2 and your work on Problem 2a.

EXHIBIT 6.10 Sample budget for Practice Problem 1.
Revenues:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent from Sports Teams</td>
<td>$ 465,000</td>
</tr>
<tr>
<td>Rent from Events</td>
<td>$ 729,000</td>
</tr>
<tr>
<td>Equipment Rent</td>
<td>$ 27,600</td>
</tr>
<tr>
<td>Concessions (Gross)</td>
<td>$ 2,512,000</td>
</tr>
<tr>
<td>Merchandise (Gross)</td>
<td>$ 244,600</td>
</tr>
<tr>
<td>Advertising and Sponsorships</td>
<td>$ 580,400</td>
</tr>
<tr>
<td>Naming Rights</td>
<td>$ 327,000</td>
</tr>
<tr>
<td>Box Office</td>
<td>$ 150,560</td>
</tr>
<tr>
<td>Suite Revenue</td>
<td>$ 781,700</td>
</tr>
<tr>
<td>Club Seat Revenue</td>
<td>$ 549,360</td>
</tr>
<tr>
<td>Ticket Fees</td>
<td>$ 654,000</td>
</tr>
<tr>
<td>Parking</td>
<td>$ 482,010</td>
</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td><strong>$ 7,503,230</strong></td>
</tr>
</tbody>
</table>

Less COGS:

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concessions COGS</td>
<td>$ 1,507,300</td>
</tr>
<tr>
<td>Merchandise COGS</td>
<td>$ 122,300</td>
</tr>
<tr>
<td><strong>Total COGS</strong></td>
<td><strong>$ 1,629,600</strong></td>
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</tbody>
</table>

**Gross Profit**

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<tr>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>$ 5,873,630</td>
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</tbody>
</table>

Operating Expenses:

<table>
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<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel</td>
<td>$ 981,000</td>
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<tr>
<td>G&amp;A</td>
<td>$ 218,000</td>
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<tr>
<td>Non-reimbursed Event Costs</td>
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<td>Utilities</td>
<td>$ 490,500</td>
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<tr>
<td>Insurance</td>
<td>$ 272,500</td>
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<tr>
<td>Maintenance</td>
<td>$ 369,800</td>
</tr>
<tr>
<td>Contract Services</td>
<td>$ 119,900</td>
</tr>
<tr>
<td>Marketing and Promotion</td>
<td>$ 218,000</td>
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<tr>
<td>Management Fee</td>
<td>$ 109,000</td>
</tr>
<tr>
<td>Reserve</td>
<td>$ 163,500</td>
</tr>
<tr>
<td><strong>Total Operating Expenses</strong></td>
<td><strong>$ 3,105,700</strong></td>
</tr>
</tbody>
</table>

**Operating Income (Loss)**

<table>
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<tr>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>$ 2,767,930</td>
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</tbody>
</table>

Coastal Atlantic University

The intercollegiate athletics department at Coastal Atlantic University (CAU) has major budgeting issues. For the 2015 fiscal year, the university’s Board of Trustees has approved a $20.4 million budget for the department. The budget projects a $1.4 million shortfall. After CAU’s president shifted $1.4 million to athletics to cover the shortfall, groups across campus complained loudly about the role of
intercollegiate athletics on CAU’s campus.

The CAU athletic program competes as an NCAA Division I-FBS team. The school is a member of a mid-major conference and has 16 varsity teams, the minimum number required by the NCAA for competition at the Division I level. The athletic department’s budget is relatively small compared to those of other Division I-FBS teams. The team’s football budget was in the bottom half of conference budgets in fiscal year 2013. For the 2014 fiscal year, the budget was cut by 5%. The athletic department employs relatively few staff members, but in 2014 ten positions were cut, saving the department $700,000. In fiscal year 2014, the department spent $20.4 million while generating $4.5 million in revenues. After the athletic department’s portion of student fees was transferred to the department, it had a $1.9 million deficit. The department has overspent by a total of approximately $8.2 million over the past few fiscal years.

Beyond its athletics department, the university as a whole faces serious budgeting challenges. Due to a slowly recovering economy and declining state support, CAU will have to cut between $11 million and $24 million in fiscal year 2015. For fiscal year 2016, the cuts may grow higher, to as high as $39.5 million. As the university acts to balance its budget, many are questioning the athletic department’s deficit spending. One member of CAU’s faculty senate stated, “The athletics department drains resources at a time when academics are being threatened by overall cuts at the university.” Other faculty members are asking whether operating the athletic department is worth the expense.

case questions

1. If you were advising the athletic director at CAU, what budgeting advice would you provide?
2. What budgeting approach should the athletic department use if it intends to balance its budget in the 2015 fiscal year?
3. For an average athletic department, which budgeting method would most likely keep the program from running a deficit? Why?

REFERENCES


KEY CONCEPTS

annual coupon interest payment
bankruptcy board of directors bond
bond rating call premium
call provision capital gain
capital gains yield common stock
convertible bond coupon rate
current yield default risk
dividends initial public offering
junk bond liquidation
liquidity spread loan
perpetual growth rate production opportunities
return on equity capital secured claim
stock option tax abatement
total expected return trade credit
yield curve yield to maturity (YTM)
Introduction

Individual people, families, and businesses often have money available that is not being used in their day-to-day lives or businesses. Instead of just keeping this money under the proverbial mattress, they have the opportunity to invest. At the same time, businesses are in need of money or financing in order to expand their operation, buy new equipment, launch new products, and so forth. In other words, there are potential suppliers of financial capital and potential purchasers of this capital. The financial markets and intermediaries help these two sides find each other.

A sport organization in need of financing may decide to raise capital by allowing investors to own part of the company in exchange for the funding or financing (equity financing), or they may decide to borrow money (debt financing). The choice of one or the other (or some of both) depends on the overall cost of each and the related risks. In essence, a financing decision is based on the risk (and creditability) of the company. Typically, companies with lower risk and steady cash flows choose to issue debt. Companies that have higher risk in their cash flows (i.e., they cannot guarantee an interest payment) usually issue equity.

How does a company go about completing a financial transaction to raise capital? The company will probably select one of three methods for doing so. The first is a direct transfer, whereby the business sells its stocks or bonds directly to investors (savers) without using any type of financial institution. When corporate bonds are floated or stock is offered through a secondary stock offering, this is done directly to the market. A second method is to use an investment bank as an intermediary. The business sells its bonds or stocks to the investment bank, which resells them to the market. A third method is that savers invest their money with a financial intermediary, such as a bank, which then issues its own securities. When a person deposits money in a bank, the bank then lends that money out to another person or entity. The saver has no direct connection to the borrower. The bank makes money by paying a lower interest rate to savers than it receives from borrowers. Mutual funds, insurance companies, and pension funds may also act as financial intermediaries.

This chapter discusses equity financing through the sale of shares of stock and its debt counterpart, the sale of corporate bonds and loans, but first we will discuss required rate of return, which affects both equity and debt financing.
The required rate of return is the annual return that an investor would require from a particular investment, whether in stocks or bonds, to account for the riskiness of the investment.

Factors Influencing the Required Rate of Return

An investor purchasing stock (equity) in a company will require a return of at least a certain amount. The amount will depend on (1) production opportunities, (2) time preferences for consumption, (3) risk, and (4) inflation.

Production opportunities. The quality or nature of the production opportunities of an investment—that is, the reason the company needs the money in the first place—is a factor in the return on equity capital—the combination of dividend payments and capital gains offered by the investment. In other words, the quality of the new product offering or geographic expansion (two examples of production opportunities) will affect the financial return from the project. If the company believes that it can create large returns from the project once it receives the equity capital, it may be willing to pay high returns on that capital. However, competition to invest in a projected high-return business opportunity helps to keep the cost of equity capital down. A competitive market will dampen the production opportunities effect, because multiple equity investors desiring to invest in the project will outbid each other, reducing the expected return on equity capital. As in any market, the final expected return on equity capital is the result of a balance between the supply of possible investments and the demand to invest in these projects.

Time preferences for consumption. Consumers or businesses considering an investment will base their decision partially on their time preferences for consumption. As discussed in Chapter 4, those with a high preference for consuming now will require a higher return on equity capital than those with a low preference for consuming now.

Risk. A potential investor will also consider the risk involved in the investment, in terms of the size of the dividend payments (and when they will be paid) or the expected stock appreciation. With a higher perceived risk, the required rate of return on equity capital will also have to be higher, to entice investors to provide capital for the project.

Inflation. Inflation affects all financial investments, in that gains from the sale of securities will be undercut by the increased costs of goods and services resulting from inflation. Gains must be high enough to outpace inflation and to reward the investors. If expectations for future inflation rise, then the required rate of return will also rise, reflecting the expected future inflation.

Calculating the Required Rate of Return

The required rate of return will be higher if the investor sees a substantial probability of the investment’s becoming worthless or worth less than expected. An investor could buy a short-term U.S. Treasury bill (T-bill) and earn its rate without fear of default. Hence, the required rate of return begins at the risk-free or T-bill rate. Then, the investor will add percentage points reflecting default risk (DRP), inflation risk (IP), liquidity risk (LP), and maturity risk (MRP).

You will note that this adding of percentage points is similar to the calculation of the nominal interest rate, as discussed in Chapter 3. See that chapter for definitions of these risk premiums. Exhibit 7.1 gives the formula for the required rate of return (k) as it applies to different types of securities.

From this exhibit, one can see that short-term T-bills will have lower required rates of return (based only on k* and IP) than other types of securities because they present the lowest levels of risk; long-term corporate bonds (and other corporate securities) will have higher required rates of return because of various additional risk premiums.

By graphing interest rates against the time to maturity for bonds with equal credit quality, including government bonds, we can create a yield curve (or term structure of interest rates). The most frequently reported yield curve is one that plots three-month, two-year, five-year, and 30-year U.S. Treasury debt. Exhibit 7.2 shows a curve for 11 maturities, as of December 31, 2014. Typically, the yield curve slopes upward, with a diminishing slope as maturity increases. (In Exhibit 7.2, the fact that the X-axis is not to scale masks this tendency.) Long maturities generally entail greater risk than short maturities because there is more uncertainty in the far future than in the near future. However, the yield curve may be humped or downward
sloping. A downward-sloping yield curve is rare and is known as an *inverted yield curve*. It is caused by a market expectation of lower interest rates in the future that outweigh the maturity risk premium. When yield curves are inverted, a recession typically follows.

**EXHIBIT 7.1** Formula for the required rate of return.

![Formula for the required rate of return](image)

**EXHIBIT 7.2** Yield curve for U.S. Treasury bills as of December 31, 2014.

![Yield curve for U.S. Treasury bills](image)

*Note: X-Axis (Maturity) is not to scale. Source: [www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/Historic-Yield-Data-Visualization.aspx](www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/Historic-Yield-Data-Visualization.aspx).*

The liquidity spread is the difference between a long-term interest rate (e.g., 30 years) and a short-term interest rate (e.g., three months). This spread will be large if the risk in the distant future of adverse events is high relative to the risks of the near-term future.

**SIDEBAR 7.A**

The bond market saw the recession coming

An inverted yield curve has preceded every recession since World War II, although twice, in 1966 and 1998, the curve inverted but a recession did not follow. The New York Federal Reserve views an inverted yield curve as useful information in forecasting a recession two to six quarters ahead. The yield curve for March 2, 2007, shown in Exhibit 7.3, was inverted or at least flat. The Great Recession began
in December 2007, so the inverted yield curve maintained its forecasting accuracy.

EXHIBIT 7.3 Yield curve for U.S. Treasury bills as of March 2, 2007.

Note: X-Axis (Maturity) is not to scale.
As discussed above, equity financing involves the exchange of capital (money) for an ownership stake in a company. This section discusses the various forms of equity financing and stocks (equity ownership).

**Types of Equity Financing**

Although equity financing is typically considered simply the infusion of equity into a firm in exchange for company shares, this type of financing actually includes three additional funding sources: retained earnings, government funding, and gifts or donations.

**Shares**

One way to finance a large project is to issue shares of the company in exchange for money. The buyers of those shares will own stock (typically common stock) in the company, meaning they will own some percentage of the company and will be entitled to a portion of any dividends the company may pay out. Dividends are periodic payments made to shareholders of a company as a way of distributing profits to the shareholders. Through the sale of stock, the company obtains financing for a large project (such as a new product line, a new geographic market, or the acquisition of a complementary company).

**Retained earnings**

In another form of equity financing, the firm simply uses cash on hand, or retained earnings, to finance a large project. Technically, the shareholders own the cash on hand—it is their equity. Depending on the board of directors’ decision, this cash could be given to the shareholders in the form of a dividend, or it could be reinvested in the company (or some of each).

**Government funding**

A third form of equity financing is the use of government funding. Chapter 9, “Facility Financing,” discusses ways the government has traditionally helped finance sport stadiums and arenas. This section describes those methods in brief.

Direct financing. Local, regional, state, and federal governments sometimes provide funds directly to sport organizations. For example, the Milwaukee Brewers each year receive $3.85 million from local government as part of the team’s agreement to operate Miller Park. These funds are meant for maintenance costs. In 2012 the Nashville Predators received $1.8 million in fees from the city of Nashville to operate their arena, but the team also received an extra nearly $9 million in other local and state money to cover operating losses. In Indianapolis, the local government owns Lucas Oil Stadium, where the Indianapolis Colts play. The government allows the franchise to retain the naming rights revenue, which has amounted to over $6 million per year. This is also the case with Cowboys Stadium. The team sold a naming rights deal to AT&T, and the team gets to keep the money, even though the City of Arlington owns the new stadium. In cases like these, the money simply becomes part of the organization’s cash on hand and is, therefore, equity (owned by the shareholders). Finally, state governments directly finance part of the costs for intercollegiate athletics, intramurals, and recreation at public universities through the states’ annual budgets.

Indirect financing. Other forms of government financing are indirect. An example is the provision of land, or a cheap lease on land, for a sports stadium. Although money does not change hands, the “free” land allows the organization to use its cash on hand for other things. Therefore, the government donation is an indirect form of equity financing. For the Amway Center in Orlando (host of the Orlando Magic), the City of Orlando picked up the costs of the land and infrastructure. Another method of government financing is for a government to forgo the collection of sales or property taxes for a sport organization (known as tax abatement). For instance, the Florida Marlins receive a sales tax rebate on tickets and concessions sold in their baseball stadium, which amounts to about $2 million per year in extra cash. Their neighbor, the Miami Heat, also receive about $2 million per year in sales tax rebates. The organizations add this amount to their cash on hand (and owners’ equity).

**Gifts**

Finally, some sport organizations solicit and receive tax-free donations or gifts. Any non-profit organization
set up as a 501(c)(3) can receive donations and provide the donor with a receipt allowing the donor to take a tax deduction. Some intercollegiate athletic departments generate 10% or more of their annual budget through donations. In 2010, The Ohio State University generated over $27 million in donations to athletics, accounting for over 20% of its athletics budget. These donations add to the cash on hand. Although non-profit organizations and universities do not have equity holders, they do have equity or net assets that management may use in operating the organization.

**Stocks**

All for-profit businesses have equity ownership—one owns the business, even if it is one person who owns 100% of the equity (or stock) in the business and even if the equity is not traded on a stock market. Sport teams, for instance, are owned either by a single person (such as Terry Pegula, owner of the Buffalo Bills), by multiple owners privately (such as the St. Louis Cardinals), or by multiple owners, with the equity or stock traded on public markets (formerly the case for the Cleveland Indians and Boston Celtics). The latter ownership type is now common in the English Premier League. As mentioned previously, the NFL prohibits the publicly traded ownership model, with the exception of the Green Bay Packers.

Common stock is held by the owners of a company. State and federal laws govern the specific rights and privileges of ownership, but ownership always implies control of the business. Usually, this means that shareholders (also called stockholders—those owning “shares” of stock) elect a board of directors (BoD) whose job is to select the executives and management and to supervise the overall direction of the company. Those executives hire the remaining employees. Thus, shareholders exercise and maintain their control through the BoD, not by directly running the day-to-day operations of the company. Typically, board members own shares or are granted options to buy shares; share ownership ensures that their interests are aligned with those of the stockholders.

**Price of equity**

Just like other goods, financial goods have prices. The price of borrowing money is the interest rate: the borrower must pay the lender interest, corresponding to the interest rate, in order to borrow the money. Typically, the borrower also pays a transaction fee. The price of obtaining capital by issuing stock takes the form of dividend payments and loss of equity by the company’s owners. Any capital gain, or appreciation in the stock price, is now shared with the equity holders who provided the capital.

**Calculating stock values**

The value of a share of stock is equal to the present value of its expected dividend stream. See Chapter 4 for the calculation of the present value of a future cash flow and Chapter 10 for valuation of a company. As shown in Exhibit 7.4, the present value of a share of NewFangled Sports Products, Inc. (NFSP) is about $17.36, based on the present value of the expected future dividend stream. The first row ❶ shows the expected dividend payments. This forecast may be based on what an equity analyst who covers this company (analyzes it for his or her investment bank employer) feels the dividend payments are going to be, or it may be based on guidance from the CEO of NFSP.
The discount period simply reflects how far into the future from the current year the payment is expected to be made. Here the assumption is one dividend payment per year. As discussed in Chapter 4, the discount factor is

$$\frac{1}{(1 + i)^n}$$

where \( i \) is the discount rate and \( n \) is the number of periods

In other words, the $1.10 dividend is worth only $1.10 \times 0.8993 = $0.99 today, because the shareholder will not receive it until one year from today. The discount rate is based on the required rate of return, as discussed above and in Chapters 3 and 4. It reflects the riskiness of the expected dividend payments. The perpetual growth rate is an expected annual growth rate in the dividend payment beyond the four years forecasted, in perpetuity (forever). This rate is projected by the equity analyst and is usually tied to the average U.S. gross domestic product growth rate. The calculation of the terminal value is explained in Chapter 10. Essentially, this is the total value of the stock at the end of Year 4. This value is reflected as a $12.72 present value. The net present value of a share of NFSP with the expected dividends shown is the sum of each year’s value in the present value row (i.e., summing $1.00, .99,…), which equals $17.36.

The concepts of discount rate and present value are fundamental tools of finance. We can use them in many different situations where a cash flow exists over multiple time periods.

Sidebar 7.B

Finally … a byte from Apple

Apple Inc. grew quickly in the early 1980s and helped build the personal computer industry. It has been profitable for most years of its existence. In fact, sales of the iPod, iPhone, and iPad have boosted Apple’s income to nearly $42 per share (as of this writing) on total income of approximately $40 billion in 2015. Apple has nearly $14 billion in cash on hand, with $55 billion in other current assets. Since 2003, its revenues have grown by 2,400% and its income has increased from nearly zero to the aforementioned $40 billion. The company finances its R&D with annual expenditures and does not have a lot of capitalized investment in equipment, plants, and so forth, because it outsources manufacturing.
Yet it did not pay dividends for decades, until pressure from shareholders (along with low borrowing rates and no immediate need for its excess cash of nearly $100 billion in early 2012) caused it to begin making dividend payments of about $10 per share per year in mid-2012. Apple has announced that it will spend $60 billion over a number of years to buy its stock back. Thus, a long era of piling up cash with no dividend payments to its owners comes to an end. Note that Warren Buffett, perhaps the most prescient investor over the past few decades, also does not pay a dividend from his Berkshire Hathaway fund. His role is to buy companies, so he needs the funds to do so.

Changes in stock prices

In casual conversation, people often talk about a stock being valuable because the price of the stock has risen since they purchased it or because the price is expected to rise. Thus, the person could sell the shares for a capital gain (the increase in a stock’s price since purchase). Why would the stock price go up? The simple reason is that another person thinks the stock is more valuable than what the owner paid. Why would that person think the stock is more valuable? This line of reasoning will lead eventually to the conclusion that the point of owning a share of stock (or ownership in a company) is to share in any profit that is made. Profits are disbursed to stockholders through the mechanism of dividends. As discussed previously, dividends are payments made to shareholders, usually on a quarterly or annual basis. In other words, shareholders own the company, and they share in the profits of the company.

Many companies pay a consistent dividend each year instead of varying it according to actual profits. This reduces the financial risk of stock ownership in that company. A company might choose to return $1 per share of stock in dividends as a way of giving the owners what is due them. Other companies base the dividends somewhat on the company’s profits. For example, Nike paid 19 cents per share per quarter in FY 2007; since then, the company has paid out quarterly dividends eight times, in amounts ranging from 23 cents per share to 42 cents per share.

Nike has paid a dividend since 1984. Other companies, including many listed on the NASDAQ, do not pay dividends but instead invest the money back into the company rather than obtaining financing through debt or some other means. For example, Under Armour has not paid any dividends, because it is a young company that is reinvesting its net profits in the growth of the company, with the hope of creating even larger profits. The presumption is that Under Armour will pay dividends in the future. Dividends are the fundamental reason for owning stock.

If a company were to state credibly that it was never going to distribute a dividend, why would someone want to buy a share of that stock? A person might hope that someone else would be willing to pay more for the share in the future (the “greater fool” theory). We might ask why that “someone else” would be interested in buying a share of stock that would never provide dividend payments. Logically, no future purchaser would be interested, and the stock’s value should be zero. In other words, to extract any money out of owning a share of stock, the owner must receive a dividend payment. For this reason, the value of a stock is based only on expected future dividend payments, not on any capital gain anticipated from selling the stock—because that capital gain itself is based on expected future dividend payments.

Yet stocks do change hands, and that is because different people have different expectations for how big or small future dividends are going to be. There are other reasons why investors sell their shares—such as the seller’s needing immediate funds or differences in calculated required rates of return. Also, an investor might sell shares of a company because she believes other companies provide better investment opportunities, with higher expected dividend payments and relatively lower stock prices. Proof of this point is in what happens each quarter when a company announces its earnings. If it misses earnings by a few cents per share, its stock price usually drops to reflect the expected drop in the future dividend stream. This is because dividends are, in the long run, tied to earnings. Although companies do not necessarily set the exact dividend amount each year based on that year’s earnings, over time earnings will determine how much money is available to be distributed as dividends.
DEBT

Now that we have discussed the sources of equity financing and its pricing, let’s consider debt financing. The two major sources of debt financing are corporate bonds and loans. Companies issue corporate bonds to raise capital. The investors or buyers of the bonds may range from large institutions to individual people. For reasons discussed below, some investors prefer to own both stocks and bonds. Loans, on the other hand, are usually provided by financial intermediaries, such as banks or insurance companies. Loans operate similarly to bonds, except that loans are not originated through a publicly traded market, as bonds are. After discussing bonds and loans in more detail, we will look at what happens when a firm cannot repay or restructure its debt.

Bonds

As mentioned above, bonds are a financial mechanism that organizations use to raise capital through debt (as opposed to equity). A bond is a promise to pay back borrowed money plus interest to the investor who has purchased the bond. The par value or face value of a bond is the amount of principal that the bond will be worth at maturity. The face may represent a single investor’s total investment (say, $75,000), or the investor may purchase multiple bonds with smaller par values (say, 75 bonds worth $1,000 each). The owner of a bond may sell it to someone else at any time, and the new owner will collect the principal repayment at maturity. The sale price may be higher or lower than the par value, depending on various types of risk. A bond’s coupon rate is the rate that the organization is paying for use of the money, the equivalent of an interest rate. A bond’s maturity is the number of years from issuance until the principal (or par value) will be paid back. Typically, corporate bonds have maturities of six to ten years.

A bond does not provide the investor any ownership privileges, as stock does. The bond holder will receive a fixed payment stream over time. This arrangement has a lower risk than ownership shares of stock, which will rise and fall daily and provide varying dividend payments. An equity (stock) owner, however, has a say in how the company is managed (usually through a vote on the membership of the BoD), whereas a bond holder is not entitled to vote on the management of the company. Bond holders, however, are usually first in line to receive some payment from liquidated assets if the company should go bankrupt. Essentially, stocks and bonds present a trade-off between risk and reward: the bond holder has less risk but usually receives lower expected total returns from ownership (at least historically) compared to equity owners.

Call provisions and premiums

Sometimes a borrower will obtain sufficient funds and decide to pay off the bonds before the maturity date. Each bond issue usually includes a call provision, which allows the borrower to pay the bond off early. Often, a minimum period, called the call protection period, guarantees the lender some interest payments, which should compensate her or him for the costs of the purchase transaction. After the call protection period, the borrower can pay off the bonds by repaying the principal plus a call premium (a fee assessed when the borrower pays off the principal prior to the maturity date). Often, the call premium is equal to one year’s interest payments, if the call occurs during the first year, and it declines each year thereafter. The typical formula is

\[
\text{call premium} = \frac{N-t}{N} \times \text{INT}
\]

where

- \( N \) = the full number of years of maturity (e.g., for a 30-year bond, \( N = 30 \))
- \( t \) = the number of years since the issue date
- \( \text{INT} \) = the interest payment

For example, suppose a 30-year bond for $10 million has an interest rate of 8%. The annual interest payment is, therefore,

\[0.08 \times \$10,000,000 = \$800,000\]

If the borrower wishes to pay off the bond in Year 10, then the call premium would be

\[
\left(\frac{30-10}{30}\right) \times \$800,000 = \$533,333
\]
The borrower would owe $10 million plus $533,333 at the end of Year 10, after having already paid annual interest payments of $800,000 in Years 1 through 10 (since this call premium occurs at the end of Year 10).

Note that the call premium usually declines as time moves forward and maturity approaches. This is not always the case, however. For instance, in January 2009, the Dallas City Council approved the full payment of over $61 million in city government bonds that were initially issued in 1998 as part of the financing of American Airlines Center. The call premium was 1% flat, or about $610,000, so the total payment consisted of $61 million in principal plus $610,000 for the call premium. The city decided to cash in the bonds and reissue new ones, because calculations showed that it would save over $10 million in present value as a result of lower interest rates in 2009 versus 1998. This is similar to refinancing a home mortgage because interest rates have dropped and having to pay an early payoff penalty of 1%. The ability to call a bond and pay it off early provides flexibility to the issuing company. Typically, a borrower will pay a higher interest rate for bonds with a call provision because of the added flexibility.

Rating a bond

Rating a bond is similar to “scoring” a loan applicant. The rating is intended to convey the likelihood that payments will be made in full and that the borrower will not default. Default risk is the risk that a borrower will not pay back the principal of a debt plus interest. Analysts arrive at ratings by studying the financial performance of the corporation issuing the bonds, using indicators such as some of the ratios described in Chapter 2. The company’s earnings stability, the regulatory environment, potential product liability, and similar issues affect the bond rating.

Rating agencies such as Moody’s and Fitch rate bonds as a service to investors. Ratings range from a high of AAA to a low of D. If a bond has a high risk of default, the borrower will have to raise the interest rate in order to interest investors. Junk bonds have a bond rating below BBB, such as BB, B, C, or D. These bonds have a significant chance of default and, thus, offer much higher coupon rates.

Returns

Investors can make money from a bond in two ways. First, they may receive an annual or periodic payment, called the annual coupon interest payment. This is a periodic return from owning the bond and is analogous to a dividend payment. Second, the investor may earn a capital gain upon selling the bond, if it is sold prior to maturity. This one-time gain from the sale of the asset is similar to the capital gain from selling a share of stock.

The current yield is the amount that the investor earns annually from the interest payment, compared to the price of the bond. Current yield is expressed as a percentage return and is defined as follows:

\[
current\ yield = \frac{annual\ coupon\ interest\ payment}{current\ price\ of\ the\ bond}
\]

The annual interest payment received from a bond is fixed (the coupon rate), but the price of the bond may vary with changes in interest rates, inflation, required rates of return, and so forth. A bond paying 10% with a par value of $1,000, a ten-year maturity, and a price of $1,000 will have a current yield of 10%. If the price were $887, the current yield would be 11.27%:

\[
\frac{0.10 \times 1,000}{887} = 11.27\%
\]

If the bond was sold for $887, and its sale price a year later was $950, then the capital gains yield is 7.1%:

\[
\frac{950 - 887}{887} = \frac{63}{887} = 7.1\%
\]

The sale price of a bond might rise because of a decrease in the discount rate due to lowered inflation expectations. See below for a discussion of bond valuation.
When we combine the two ways to make money from a bond, we have the total expected return from owning the bond. For the bond described above, the total expected return would be

\[
\text{total expected return} = \text{current yield} + \text{capital gains yield} = 11.27\% + 7.1\% = 18.38\%
\]

(The difference is due to rounding.) This is quite a substantial annual return. The term yield to maturity (YTM) is often used for the total annualized return from owning a specific bond. It is the same as the total expected return.

**Calculating the value of a bond**

After purchasing a bond, the investor can either hold it and receive the interest payments plus the principal upon maturity or sell the bond at some time and receive its price at that time. As discussed in Chapter 10, one way of finding the value of an asset is to calculate the present value of its future payment streams, discounted at some discount rate. Recall that the discount rate is based on the required rate of return. Thus, the riskiness of the investment plays a role in determining its discount rate. (An example of calculating a discount rate is provided in Chapter 10.)

If interest rates rise after an investor has purchased a bond, then higher-yielding bonds (those with higher payments because of higher interest rates) will be available to potential buyers, thus driving down the price of the investor’s bond. In mathematical terms, higher interest rates cause higher discount rates, which lead to lower valuations for streams of payments. The risk that the price of a bond will go up or down is known as interest rate risk.

The present value of a bond is the price that a buyer would pay for it prior to maturity. On the day of maturity, of course, a buyer would pay the principal amount, because that is what the bond holder will collect on that day. The following formula provides the present value of a bond:

\[
\text{PV} = \frac{\text{IP}}{(1+d)^1} + \frac{\text{IP}}{(1+d)^2} + \ldots + \frac{\text{IP}}{(1+d)^N} + \frac{\text{M}}{(1+d)^N}
\]

where \(\text{IP} = \text{interest payment}\)

\(d = \text{discount rate or required rate of return}\)

\(N = \text{number of annual payments}\)

\(M = \text{value at maturity}\)

In other words, the present value equals the sum of the present values of the interest payments, plus the present value of the principal payment (M), which is due at maturity \(N\) years in the future.

Consider the present value on the issue date of a ten-year bond with par value $1,000, coupon rate 10%, and a discount rate of 8%. For each of ten years, the bond holder will receive a $100 interest payment, and at the end of ten years the principal will be paid back. In nominal terms, $2,000 will be paid out over the ten years. However, the present value on the bond’s issue date of that payment stream is

\[
\text{PV} = \frac{\$100}{(1+0.08)^1} + \frac{\$100}{(1+0.08)^2} + \ldots + \frac{\$100}{(1+0.08)^{10}} + \frac{\$1,000}{(1+0.08)^{10}} = \$1,134.20
\]

Therefore, one could sell the bond for $1,134 on its issue date. After five years, the bond would be worth less, because only five years of payments would remain. If the discount rate were higher (12%)—perhaps because of higher expected inflation or because of default risk or interest rate risk—the present value of the bond would decrease to $887. If the coupon rate were 8% and the discount rate were also 8%, the bond’s present value might be surprising:

\[
\text{PV} = \frac{\$80}{(1+0.08)^1} + \frac{\$80}{(1+0.08)^2} + \ldots + \frac{\$80}{(1+0.08)^{10}} + \frac{\$1,000}{(1+0.08)^{10}} = \$1,000
\]

As this example shows, when the discount rate of a bond is the same as the interest rate, the present value is equal to the par value. The explanation illustrates the nature of the discount rate. If an investor is looking for an 8% rate of return on a $1,000 bond, and the bond is paying 8% interest, the investor is getting exactly what he or she is looking for in terms of return. For a ten-year bond, the nominal payments would total $1,800. If the maturity were 20 years, the nominal payments would total $2,600—but the present value would still equal the par value, $1,000, because the annual required rate of return is being met by the interest payments. However, for a bond paying 10% interest, the present value to an investor with a required rate of return of 8% would be greater than the par value.
When can debt transform into equity?

A convertible bond offers some of the features of both equity and debt. The investor has the option to convert the bond into a fixed number of shares of stock in the company, at a stock price agreed upon at the issuance of the bond—usually 25% to 35% higher than the current stock price at the time of issuance. If the stock price rises, the bond holder sees an increase in the value of the bond, because it can be converted into stock and sold if the stock price is above the conversion price. Effectively, the bond buyer is purchasing a stock option, a contract that allows the bond holder to purchase a specified number of shares of stock for a certain price.

If the stock price drops, the investor still receives interest payments from the bond. Because of the increased upside of convertible bonds, their coupon rates are lower than those of traditional bonds. For the company offering the bonds, convertible bonds offer savings, at least in the short run, because the debt payments will be lower. If the share price rises, the flood of bonds being converted to equity will dilute the equity of existing shareholders—thus keeping the stock price from rising very high. During the uncertainty in financial markets in the fall of 2008, Warren Buffett purchased $5 billion in convertible bonds from Goldman Sachs. He was paid a guaranteed 10% return on the “bond” portion of the investment, with the option to convert it into stock at the price of $115 per share. By 2011, he was paid back the $5 billion loan portion, plus interest and refinancing costs. Then, in March 2013, he exercised his right to convert the convertible bonds into stock. The price that day was about $143 per share, so Buffett could have netted an additional $1.3 billion in profit if he had sold his shares on the day he converted.

Loans

The key aspects of a loan include its maturity, its interest rate, and any pre-payment provisions. The economics of a loan are similar to those of a bond, and the two have become even more similar in recent decades as lenders have begun to combine loans into packages or pools (which may include thousands of loans) and buy them from and sell them to other financial companies. This practice enables lenders to diversify their holdings by selling off some loans and purchasing others.

An example of a loan in the sport industry is the NFL’s secured loan program called G4. The previous NFL loan facility was called G3 and had a total loan amount of $1.1 billion. Even during the economic downturn of 2008, Fitch gave the G3 loan an A rating (Nov. 18, 2008). This rating was based on large long-term television contracts and the expectation that there would continue to be a hard salary cap, which the 2011–2020 collective bargaining agreement maintains. The new G4 loan provided $200 million each for the San Francisco 49ers’ and Minnesota Vikings’ new stadiums, as well as funds for Atlanta’s new stadium. The mechanics of the secured loan account allow the lenders to access the television money prior to any distributions to teams or other outflows. The primary risk comes from the uncertain outcomes of collective bargaining.

Trade Credit

Short-term financing often takes the form of trade credit rather than a loan. Trade credit is credit granted by a manufacturer to a retailer. By agreement, after the manufacturer ships its product to the retailer for sale, the retailer may delay payment for a period of time, depending on the terms (typically 30, 60, or 90 days). In essence, the manufacturer is providing the retailer short-term financing for the retailer’s purchases from the manufacturer. It is in the best interest of manufacturers to help their downstream retailers remain solvent. In the United States, the size of trade credit (as a percentage of total business financing) is only a few percentage points less than the amount that commercial banks lend to businesses. This type of financing cannot be used for any substantial changes to the business, such as expansion, simply because the term is too short.

Nike provides a good example of trade credit. At the end of fiscal year 2014, the company had nearly $3.4 billion in accounts receivable (A/R), meaning that customers (e.g., downstream retailers, such as Foot Locker) owed the company $3.4 billion. Nike also had about $1.9 billion in accounts payable (A/P), meaning that it owed suppliers that amount (for instance, for raw materials for the production of Nike products). Nike has the leverage to pay its suppliers slowly, because they are interested in maintaining a good relationship with the large company. It can also afford to provide trade credit to its downstream retail customers in order to maintain a healthy distribution of its products. On the other hand, Foot Locker had no net receivables and
$694 million in A/P (fiscal year ending Jan. 31, 2015). This is also not surprising, because Foot Locker is being allowed to take its time in paying Nike (and other product suppliers), while collecting directly from customers, who pay in cash or with a credit card, so that Foot Locker receives the income almost immediately.

**Bankruptcy**

If a company is unable to pay its debts or restructure its debt, it is insolvent. In this situation, the company must enter bankruptcy, the process of liquidation or reorganization of an insolvent firm. A bankruptcy court either will order liquidation of the company—the sale of its assets piece by piece, effectively removing the company from existence—or will allow the company to reorganize in a way that makes it more valuable than if it were liquidated. The court will choose the method that is likely to provide the highest value to the company’s creditors. Note that the selected method will not necessarily provide the highest value to the equity holders—they took on the risk of bankruptcy when they bought into the company. If the company is to be reorganized, the court usually appoints a committee of unsecured creditors to undertake this task. They may decide to restructure the firm’s debt by reducing the interest rate on the debt, extending the date to maturity, or exchanging some of the debt for equity. The goal is to reduce the debt payments sufficiently that the company’s cash flow can cover them. If this is not possible, liquidation is the best alternative.

When a company is liquidated, its assets are usually divided according to the priority of claims, as shown in Exhibit 7.5. Secured claims take first priority. A secured claim is a debt for which the borrower provided collateral—an asset that the creditor has the right to seize if the debt is not paid. For instance, in a home mortgage, the lender (usually a bank) has the right to take ownership of the house and sell it if mortgage payments are not made. This is a secured loan, and the house is collateral. Recall that an unsecured claim is a debt in which the creditor has no right to seize any assets from the company or person who borrowed the money. Credit card debt is an example: the card issuer has no right to seize any products you purchased with the card, even if you do not repay the debt. Consistent with the concepts of risk and interest, secured debt will have a lower interest rate than unsecured debt, because the risk for unsecured debt lenders is higher.

**Exhibit 7.5 The priority of claims on the assets of a company in liquidation.**

| 1. Secured claims                  |
| 2. Trustee’s costs                |
| 3. Expenses incurred after bankruptcy was filed |
| 4. Wages due workers (up to a limit, sometimes $2,000 per worker) |
| 5. Claims for unpaid contributions to employee benefit plans |
| 6. Unsecured claims for customer deposits up to some limit (applicable to banks) |
| 7. Federal, state, and local taxes |
| 8. Unfunded pension plan liabilities |
| 9. General unsecured creditors |
| 10. Preferred stockholders, up to the par value of their stock |
| 11. Common stockholders—if anything is left |

Note that, in general, any debt that is termed *senior* or *subordinated* has higher or lower priority, respectively, than other debt obligations of the company.

One can see why the court-appointed committee that undertakes reorganization of a bankrupt business consists of unsecured creditors—they are so far down the priority list that they will be motivated to make the best decisions, in order to have a chance of getting paid. If the committee were made up of secured creditors, they would have little incentive to ensure payments to parties farther down the priority list. Shareholders would not be the best choice, either: they may prefer to reorganize, in hopes that their shares will become
worth something, even if the best move is to liquidate.
TRADE-OFFS OF EQUITY FINANCING

In Europe, especially Britain, dozens of professional soccer teams are publicly traded. One of the main reasons for selling equity has been to raise capital in order to improve the teams’ stadiums. Securing funds by selling shares to the public has also allowed some British soccer teams to pursue other ventures, such as running a chain of pubs, selling apparel and leisure products, and building hotel and restaurant facilities. Of course, the teams have also used much of the money to acquire players. This has had the effect of substantially raising soccer players’ salaries.

In the United States, in October 1996, the Florida Panthers of the NHL sold shares to the public and were listed on the NASDAQ exchange (and later on the NYSE). For less than half ownership of the team, the public paid $67 million. Independent valuation analysts had pegged the value of the entire team at $45 million only a few months earlier. At first, the Panthers were the primary asset of the company, and fans were targeted to buy shares. However, after only a month of being publicly traded, the entity began to purchase leisure assets, such as resorts and a golf course. Within two years, the hockey team accounted for only about 10% of the company’s assets.

As discussed earlier, many North American sport leagues either strictly prohibit publicly traded franchises or have rules requiring all owners to approve any transfer of ownership. Outside of spectator sports, the sport industry includes many publicly traded companies, such as Nike (ticker symbol NKE), Callaway Golf (ELY), Under Armour (UA), Madison Square Garden (MSG), and Dick’s Sporting Goods (DKS). The remainder of this section will discuss the pros and cons of equity financing, specifically of publicly traded equity financing, where applicable contrasting it with debt financing.

Manchester United goes public

On August 10, 2012, Manchester United sold more than 16 million shares to the public (about 10% of its shares) for $14 each. The Glazer family (owner of the Tampa Bay Buccaneers) still owns the bulk of the shares, having bought the team for $1.47 billion in 2005, and maintains decisionmaking power. Through July 2013, the stock increased about 35% from its IPO price. Revenue grew in the double digits in the first year of public ownership. Half of the proceeds from the sale of stock went to pay off a portion of the $600 million in debt that the team had amassed. However, the club is worth over $3 billion, according to its market capitalization implied by a stock price of $18 (as of July 2015), so the team’s large debt may not hinder its ability to operate successfully.

Advantages of Publicly Traded Equity Financing

Taking a company public provides many advantages to the owners. First, it provides access to capital or financing that does not require interest payments or even repayment of the principal. However, investors do expect that dividends will be paid once the capital has been used to increase the company’s profitability.

Second, once a company becomes a publicly traded entity, it is much easier to issue another round of stock or issue corporate bonds. This is because the financials are now open to the public and in compliance with Securities and Exchange Commission requirements.

A third advantage of going public is that it makes it easier for the owners to carry out an exit strategy. A privately held business does not have a readily available price for its shares. A publicly traded company allows an owner to exit the business with relative ease. If the owner’s name is tied to the brand of the business, then selling his or her shares all at once might affect the overall value of the business (and the price at which the owner can sell the shares). Think of how Bill Gates was tied to Microsoft’s success or Phil Knight to Nike’s success. For this reason, an owner may not be wise to sell his or her shares all at once, but instead would exit gradually by selling a few shares at a time.

In the initial public offering (IPO), the company for the first time offers shares to the public in order to generate cash for the business. When a publicly traded company offers shares for sale to the public, this is called a secondary offering. A secondary offering does not generate cash for the business if it consists solely of an owner’s shares, because the cash goes to the stock owner, not the business.

For example, in November 2005 Under Armour offered shares to the public in an IPO. The apparel company had seen quick growth in its short lifespan, increasing sales from $5 million in 2000 to over $240 million in 2005. The offer of 9.5 million shares owned by the company and 2.5 million owned by private
investors yielded over $100 million in capital for the company. Shares were offered at $13 and quickly closed over $25. Founder Kevin Plank was able to sell $13 million in shares, piggybacking on the IPO, but then was under a “lockout” period in which he could not legally sell any shares for 180 days. In May 2006, once the lockout was over, he sold about $50 million worth of stock. Lockouts are common after IPOs; they are intended to show the investing public that the “insiders” aren’t cashing out and leaving the company but instead are maintaining their leadership roles and navigating the company forward.

The owner of a sports team who wishes to exit will probably find a ready market of billionaires interested in buying the franchise. Given the limited number of teams and the fact that a would-be owner can’t just create a new team, there is always demand for franchises. Thus, an IPO is not a necessary exit strategy.

A fourth reason a company benefits from becoming publicly traded is the free publicity generated by the initial public offering process and subsequent coverage of the company’s financials. Unfortunately, the publicity can also be bad if the stock price plummets or the company is perceived as weak. When the Arena Football League’s Orlando Predators went public, articles in *BusinessWeek* and *Slate* were not upbeat about the team’s financial future. There were similar warnings about Manchester United’s public offering.

The ability to attract and retain key employees, a fifth rationale, is enhanced for a publicly traded company, because the company can offer stock options (an option for an employee to buy stock at a set price in the future, provided the person is still with the company). Stock options can provide incentive for the employee to help make the company more profitable and to stay with the company. Stock options can allow employees at all levels to participate in the growth of the company. Even suppliers and customers of the company may be offered stock options (sometimes at a “friends and family” discount). This helps to align the entire value chain that produces the product or service and gets it to market.

A sixth motivation for going public is that it increases the equity in the company, allowing it to issue debt, if the need arises. With increased equity, the interest rate on debt will be lower than it would otherwise be. This is because offering equity as collateral shows the lender or investor that the company already possesses funds and that owners have an interest in the company’s success.

Finally, mergers and acquisitions are more easily arranged for a publicly traded company, because its value is readily determined.

A privately held company may also offer stock options and benefit from some of the advantages discussed above. However, the value of the stock options for these companies is unknown, because the stock is not publicly traded (it has no market price). Offering stock options does not help these companies in the merger and acquisition processes.

Disadvantages of Publicly Traded Equity Financing

The above reasons for going public may give the impression that it is always a good idea, but there are disadvantages. First, the cost of issuing stock is very substantial, often up to 10% or 20% of the value of the company (depending on its size). The fees for lawyers and underwriters (bankers who arrange, finance, and execute a stock offering) may amount to a large portion of the proceeds. When the Cleveland Indians went public in 1998, they paid just above 10% of their proceeds to the lawyers and underwriters (about $6.2 million). Manchester United’s public offering in 2012 led to about $14 million in direct fees (6% of the offering). Of course, issuing debt is also costly, but usually less so than issuing stock.

Second, the time required for preparations to go public can be a burden on the operations of a company. Key executives usually travel on a “road show” to inform potential institutional buyers about the IPO.

Third, if the time is not ripe to go public, the IPO may be postponed or halted altogether. All of the expense and time involved in the process might go for naught. This could happen if the stock market or the economy takes a turn for the worse during the many months between inception of the process and the actual IPO (up to a year).

Fourth, a very important reason that many sport teams and leagues are not publicly traded is the lack of operating confidentiality. The team’s prices, margins, salaries, and future plans would be available to competitors, employees, customers, suppliers, and the general public (including fans), because the SEC requires financial disclosure and annual reports. This is a primary factor that sport team owners mention when asked why they do not go public. In fact, it is typically in a sport franchise’s interest to appear that it is struggling financially, for the following reasons:

- In negotiating with a players association, a league wants to be able to claim that revenues are low, so money is not available to share with players.
- In bargaining with a city to get a new stadium, a sport franchise benefits from an appearance that it cannot pay for a large portion of the stadium.
- From a publicity perspective, a franchise might want fans to think that it is struggling to break even (or
losing money), so that it can justify raising ticket prices.

- To avoid antitrust scrutiny, sport leagues prefer their franchises to appear that they are breaking even at best. This was the case when MLB’s Commissioner Selig was called into Congress to testify (see the case study in Chapter 10).

It would be difficult for some teams and leagues to show financial hardship and make the above claims if their financials were available to the public.

The SEC’s disclosure rules also require public announcements of changes to a company that might “materially” affect the stock, prior to those changes being made. This requirement can play havoc with team management and the timing of decisions. For example, a team would have to disclose in advance that it is going to make a trade, sign a player to a free agent contract, or fire its head coach. This could create a bargaining and public relations fiasco.

Fifth, for most publicly traded companies, the original owners do not own 50% or more of the business. This means that the founders of a company could be voted out of management (this happened to Steve Jobs, one of the founders of Apple, in 1985) or even lose their ownership completely through a takeover where their shares are purchased. The North American major sport leagues all have provisions in their bylaws allowing existing team owners to block the sale or purchase of a franchise if they do not approve the new owner. If a team were publicly traded, this kind of provision could not be legally enforced.

Sixth, public ownership reduces an organization’s strategic flexibility. For publicly traded companies, the BoD must approve all major decisions, and each quarter “Wall Street” expects income growth. In contrast, firms with more debt financing typically have greater flexibility to maneuver in changing markets. A company that is debt financed can make a strategic investment that might cause losses for a number of years but that will pay off handsomely down the road. Furthermore, investors may desire annual dividends, even if the company would be better off reinvesting that money. In sport, some owners of a franchise want to maximize profits and other owners want to maximize the chance to win championships. A publicly traded sport team would likely have many owners of both types, resulting in tension over the direction of the business. The Canucks, Celtics, and Panthers each have experienced litigation against the majority shareholders, with the “outside” shareholders claiming that the “insiders” were operating the team to their sole benefit. Traditional publicly traded businesses will almost all be run to maximize profits, so a team with a goal of winning championships may find public ownership counter to its aims.

Seventh, conforming to the SEC’s accounting and tax requirements is expensive, certainly more so than the requirements of a private company. In addition, a publicly traded company must set up an investor relations group or pay to outsource this function. When the Boston Celtics went public in 1986, sending annual reports to the many shareholders who owned one share of stock proved very expensive. The costs of printing exceeded the value that the team obtained from these shareholders’ purchases of the stock. Sport franchises learned from the Celtics’ difficulties and subsequently have required higher minimum purchases of stock. The Florida Panthers required a $1,000 minimum stock purchase.

Finally, an eighth reason for a company to avoid going public involves the financial strategy of IPOs. To ensure an initial upward movement and the positive publicity and momentum that can come with it, the underwriters usually set the price artificially below what they believe the market is willing to pay. This artificially low price means that the company is essentially selling part of itself for less than it is worth—buyers are getting the stock for less than the value of the owners’ shares.

Often, companies with low risk to their future cash flow are easily able to issue debt for their financing needs. A firm with risky future cash flows might be forced to issue equity and share the risk with other investors.
This chapter discussed the uses of and methods for debt and equity financing. The ability of firms to raise capital efficiently has allowed developed nations to sustain high economic growth rates for many decades. The financial industry creates efficiency by bringing together those parties with excess capital (investors) and those in need of capital. It allocates capital resources according to expected gains, accounting for risks. The sport industry is no different in its capital needs. In spectator sports, however, the desire to sell equity shares to the public is dampened, compared to most other industries, because of resistance to the transparency of financials.

The economic recession that began in December 2007 brought changes to the structure and regulatory oversight of the financial industry. As of this writing, the changes have not yet been completed and their impacts are not fully understood. However, the fundamental nature of the industry—providing investors with investments and businesses with financing—has not changed.

**CONCLUSION**

Using the information in Exhibit 7.4 for NewFangled Sports Products, Inc., calculate the new NPV of a share of stock if the perpetual growth rate doubled from 4% to 8%. Additionally, if the terminal year dividend payment increased from $1.40 to $2.80, what is the new share price?

A share of NewFangled Sports stock is expected to provide a $1 per year dividend payment the first year and to grow at 8% thereafter. With a discount rate of 12% and a 15-year horizon, what is the share worth? What is it worth valued into infinity? Compare these results.

A minor league professional hockey team embarks on an aggressive facility expansion that requires additional capital. Management decides to finance the expansion by borrowing $40 million and by halting dividend payments to increase retained earnings. The projected free cash flows are $5 million for the current year, $10 million for the following year, and $20 million for the third year. After the third year, free cash flow is projected to grow at a constant 6%. The overall cost of capital is 10%. What is the total value of the organization? If it has 10 million shares of stock and $40 million in total debt, what is the price per share?

**Debt Decisions**

Owners of sport franchises face tough decisions related to capital structure when they decide a new facility is needed. The St. Louis Cardinals were faced with these decisions when they decided to finance much of their new stadium privately.

The Cardinals’ owners decided that a stadium was needed to replace Busch Stadium II, the team’s home from 1966 to 2005. As the plans for the new stadium (Busch Stadium III) were announced, the owners stated that the new facility was needed to generate additional revenues for the franchise. With increased revenues, the franchise would better be able to compete for top players. However, since the facility opened in 2006, the team’s debt has limited spending on payroll.

In a presentation to business students at Webster University, Cardinals chairman Bill DeWitt outlined the expenses of the club. Player salaries made up 50% of the team’s expenses. Team operations (i.e., travel and coaching salaries) were another 10%, as were player development costs and facility operations expenses. Business operations accounted for 5% to 7% of expenses. The remaining portion of expenses was interest on the team’s debt (Strauss, 2009).

The Cardinals are in the 21st largest media market based on households. Thanks to a loyal fan base and high attendance, the team had the sixth highest revenues in MLB as of 2015 (Forbes, 2015),
generating over $290 million. However, player payroll was at $133 million in 2014. This was the 13th highest in the league. The team plans to continue to maintain a player payroll in this range as long as attendance does not decline.

The owners borrowed approximately $300 million to build Busch Stadium III. The team pays more than $20 million per year in principal and interest on the two instruments that were used to finance the club’s portion of the new stadium. The club operates on tight margins and is well managed financially. Further, with annual attendance figures for the last ten years at 3 million plus and very high local television ratings, revenues are close to maximized. Without cutting expenses elsewhere, the team has limited flexibility and cannot increase payroll without losing money.

case questions

1. Has the Cardinals’ decision to use debt financing hurt the on-field performance of the organization? If so, how?
2. What form of debt financing did the team most likely use to raise its $300 million portion of the stadium construction costs?
3. What equity financing options could the club have considered to raise some of the capital to build the new stadium?

REFERENCES

Capital Budgeting
KEY CONCEPTS

capital
capital budgeting
capital expenditure
current expenditure
discount rate
discounted payback period
incremental cash flow
initial cost
internal rate of return (IRR)
modified internal rate of return (MIRR)
net present value (NPV)
payback period
terminal value
weighted average cost of capital (WACC)
Introduction

In 2010, after 34 years of existence, Giants Stadium was demolished. The former home of the New York Giants and New York Jets, Giants Stadium was the site of Pelé’s last game and was the venue for events as diverse as a Mass celebrated by Pope John Paul II in 1995 and Bruce Springsteen and the E Street Band’s ten sold-out shows in July and August 2003. The stadium holds the record for the number of NFL games played in one venue. In addition to the Giants and Jets, the stadium also was the home of the New Jersey Generals of the United States Football League (USFL), the New York/New Jersey Knights of the World League of American Football, the New York/New Jersey Hitmen of the XFL, and the New York Sentinels of the United Football League. The Rutgers football team, the New York/ New Jersey Metrostars (New York Red Bulls), and New York Cosmos (North American Soccer League [NASL]) were also tenants at the venue. Further, many international soccer matches and a variety of concerts were held at the stadium. Its initial cost was $75 million (New Jersey Sports & Exposition Authority, 2014).

When Giants Stadium was demolished, $110 million in debt was still owed on the venue (Belson, 2010). In addition to some initial costs, the costs of renovating the facility over time were passed on by politicians to the point that debt is still owed even though the stadium is now a parking lot.

This story provides a good illustration of why capital budgeting is important. When Giants Stadium was demolished, each New Jersey resident owed almost $13 for the debt on the former NFL venue. In tangible terms, the facility should be considered to have been a bad investment for the New Jersey citizens, as debt was owed at the time of its demise.

Unfortunately, this example is not uncommon. Taxpayers in King County, Washington, owed $80 million when the Kingdome was imploded in 2000 (Belson). Similar venue debt also remained when stadiums were torn down in Indianapolis and abandoned in Houston. Debt on the RCA Dome (Indianapolis) was $61 million when the building was demolished in 2008 and will not be repaid until 2021. For Houston, debt remains on the Astrodome, which opened in 1965 (Yost, 2011). Today, taxpayers still owe $32 million on the building. Although the building has not been demolished, it lacks a major tenant, as the Houston Astros (MLB) and Houston Oilers (NFL) left the venue in 1999 and 1997, respectively. Further, this type of poor financial planning is not limited to “major league” venues and major metropolitan areas. Vero Beach, Florida, still owes $17 million on a spring training baseball facility, although the Dodgers left for Glendale, Arizona, in 2009; taxpayers in Pima County, Arizona, still owe $21.3 million in stadium debt even though the Chicago White Sox and Arizona Diamondbacks moved their spring training facilities from Tucson to Phoenix.

A capital budget can help ensure that any new taxpayer-funded facility will be paid off before the end of its useful life. As you will learn in this chapter, a capital budget can also help a manager evaluate, compare, and select projects to achieve the best long-term financial return on capital investments.
Defining Capital Budgeting

When making investment decisions that involve fixed assets, we need to examine the purchase of capital—the long-term, fixed assets that are used in production. In capital budgeting we focus on these purchases and, specifically, analyze them to decide which purchases should be made. More precisely, capital budgeting (also known as capital investment appraisal) is the process of evaluating, comparing, and selecting capital projects to achieve the best return on investment over time. Groppelli and Nikbakht (2012) define it as investment decision making that justifies capital expenditures. This process is an important factor in the success or failure of an organization, since investments in capital (or fixed) assets affect the financial health of the organization for many years.

A capital expenditure is the use of funds to acquire capital assets that will help the organization earn future revenues or reduce future costs. Typically, several different sources of debt and/or equity financing will be used to fund a capital project (see Chapter 7). The cost to obtain capital assets is the weighted average of the cost of each of the funding sources—weighted average cost of capital (WACC). Common and preferred stock, bonds, and any other form of long-term debt are included in the calculation of the project’s WACC.

Capital expenditures are long-term expenditures amortized over a period of time (Groppelli & Nikbakht). Examples of capital expenditures in sport include the purchase of a new artificial turf field for a football stadium, the purchase of a new ice resurfacer for a hockey rink, the building of a new community swimming pool, the installation of a climbing wall in a health club or college recreational center, and the construction of a stadium or arena. These expenditures require a large amount of cash, debt, and other resources that will be committed over a long period of time.

**SIDEBAR 8.A**

**Capital expenditures and the Americans with Disabilities Act**

Capital expenditures may include expenditures on mandatory projects required by law. For example, the Americans with Disabilities Act of 1990 prohibits discrimination against individuals with disabilities with regard to employment and public accommodation (Public Law 101–336 [S. 933], 42 USCS §§ 12101 et seq.). As a result of this law, the University of Michigan agreed in 2008 to modify its football venue after the Michigan Paralyzed Veterans of America filed a federal lawsuit along with the Department of Justice over lack of accessibility. In the settlement, the university was required to make changes to Michigan Stadium restrooms and provide ramp access to bring the venue into ADA compliance. Also, the venue’s wheelchair-accessible seating was modified. The modifications cost approximately $2 million (Nelson, 2008). These renovations are considered capital expenditures.

It is important to differentiate between a capital expenditure and a current expenditure. Whereas a capital expenditure is long term and amortized over time, a current expenditure is short term and is completely written off during the same year as the expense is incurred. Because capital expenses utilize resources over time, they are investments that require a commitment of resources today with the expectation of receiving benefits in the future. For a major Division I institution, this may mean an investment in a new basketball facility with luxury and club seating. A university will decide to invest in the facility with the hope that the facility will return new and additional revenue to the athletic department.

As stated previously, capital budgeting focuses on capital expenditures. Capital budgeting offers several benefits. First, a capital budget helps management plan the amount and timing of resources that will be needed. For example, a capital budget developed for a stadium renovation might include the timing and amounts of payments for a new $770,000 installation of FieldTurf. A team might put down a large amount at the beginning of the project and pay off the balance through smaller payments over time. A capital budget is also helpful in evaluating alternative capital expenditures. Should FieldTurf, AstroPlay, or a natural grass field be installed? The development of a capital budget will include an evaluation of these alternatives to determine which best utilizes the organization’s resources.

A capital budget also focuses management’s attention on cash flows. The capital budget allows the manager to identify new cash that will arise from a project and compare that new cash flow to the expenditures the project demands. This information, combined with knowledge of the timing and amount of resources needed,
helps management coordinate responsibility centers within the organization to ensure that all financial obligations are met.
THE PROCESS OF CAPITAL BUDGETING

To complete the capital budgeting process, financial managers use a method that comprises four distinct parts:

1. Determine the initial cost of the project or projects.
2. Determine the incremental cash flow of the project.
3. Select the capital budgeting method.
4. Conduct a post-audit analysis.

Most of the methods for completing a capital budget include the evaluation of cash flow risk (based on inflation, interest rates, and project length) and then the determination of an appropriate discount rate for use in analysis of the project. In the case of a capital budget, the discount rate is the required rate of return to justify an investment. After the discount rate is calculated, the asset’s value to the organization is estimated on a present value basis, and the present value of expected cash inflows is compared to the cost of the project. If the present value of the project exceeds its cost, the project should be accepted and included in the organization’s capital budget. Given a choice between two or more projects, managers should select the project that contributes most to the organization’s net income. These steps are outlined in detail below.

Determine the Initial Cost of the Project

The initial cost of a project is the actual cost of starting the project, adjusted for any installation, delivery, or packing costs; discounts to the initial price; the sale of existing equipment or machinery; and taxes. For an example of determining the initial cost of a project, let’s look at the cost of replacing a natural grass football field with FieldTurf in a university football stadium.

As athletic director of a mid-major university in Ohio, you are overseeing the renovation of the football stadium. The stadium has seating for 25,500. Several prominent boosters have approached you to request the installation of an artificial turf field. They argue that by putting artificial turf in the stadium, the school could attract better recruits and thereby improve its performance on the field. Additionally, the boosters point out that several early-round high school playoff games could be played in the stadium, increasing community goodwill, generating additional revenues for the program, and creating an economic impact for the community from out-of-town spectator spending. After listening to these arguments, you decide to analyze the facts.

Based on your research on synthetic athletic fields, you decide either to install FieldTurf or to leave the natural grass field in place. FieldTurf incorporates the latest innovations in synthetic playing surfaces and has been installed by Michigan, Boston College, Nebraska, and Notre Dame. If it makes financial sense for the department, you are leaning toward installing the synthetic field, especially since there are problems with the current natural grass field, which was installed last year. Because of these problems, the university will receive a rebate of $250,000 if it chooses to replace the grass field with an artificial surface.

The first step in calculating the initial cost of the FieldTurf installation is to record the invoice price of the investment. The cost to replace the grass field with FieldTurf is $770,000, based on the amount quoted to the university for preparation, materials, and installation.

Next, we calculate additional expenses. As the invoice price includes packing, delivery, and installation, we need not adjust for these costs. However, as mentioned above, because of problems with the current grass field, the university will receive a rebate (a discount from the initial cost) of $250,000 if it chooses to replace the grass field with an artificial surface. Hence, the initial cost of the investment must be reduced by the $250,000 rebate. Therefore, the initial cost of the investment is $520,000.

Often, another adjustment is necessary for the sale of existing machinery or equipment and the tax consequences of that sale. However, in this example, the FieldTurf will replace the damaged sod in the stadium, and nothing will be sold, so no adjustment is necessary. We use the following formulae to calculate the initial cost of a project:

\[ IC = IP + ATP − DTP − EQP + TOE \]
\[ IC = IP + ATP − DTP − EQP − TCE \]

where

- IC = initial cost of the project
- IP = invoice price of the new investment
ATP = adjustments to price, such as installation costs, delivery, and packing
DTP = any discounts to the initial price (IP)
EQP = revenue from the sale of existing equipment
TOE = taxes paid on the sale of equipment above book value
TCE = tax credit on the sale of equipment below book value

For the purchase of FieldTurf, recall that the invoice price of $770,000 includes the price of the new investment and the price for delivery and installation. The university will receive a $250,000 rebate on the installation. In this case, EQP = $0 and TOE = $0. (Note also that there is no tax liability or tax credit when equipment is sold at book value.) Hence,

\[ IC = 770,000 - 250,000 - 0 + 0 = 520,000 \]

**Determine the Incremental Cash Flow of the Project**

After calculating the initial cost of the project, we compute its incremental cash flow. Incremental cash flow is the cash flow created through the implementation of a new project. It consists of any cash flow from the project that is greater than the cash flow that currently exists. The steps to determine incremental cash flow are:

1. Calculate additional net earnings (ANE) from the new project:
   \[ ANE = ENEPI - ENEWP \]
   where ENEPI = estimated net earnings if the new project were included
   ENEWP = estimated net earnings without the new project

2. Calculate the additional tax benefit of the depreciation (ADT) on the new fixed asset:
   \[ ADT = TAX \times DEP \]
   where TAX = tax rate
   DEP = additional depreciation of the new fixed asset

3. Calculate the incremental cash flow (ICF), by using the results of steps 1 and 2:
   \[ ICF = ANE + ADT \]
   where ANE = additional net earnings from the new project
   ADT = additional tax benefit on the new fixed asset

By using these formulae, we can calculate the incremental cash flow of the FieldTurf project. For Step 1, we must first determine the estimated net earnings without the new project (ENEWP) and the estimated net earnings with the new project (ENEPI). If the university were to keep its current natural grass field, it is estimated that the annual net earnings would be $3,300,000. With the change to FieldTurf, it is estimated that earnings would rise to $3,500,000, as additional revenues would be generated from hosting state high school playoff football games.* These additional revenues would come from facility rental fees and additional parking and concessions revenue, and they amount to $200,000 after expenses for operations are removed. Therefore, to calculate Step 1:

\[ ANE = 3,500,000 - 3,300,000 = 200,000 \]

As a university is a not-for-profit entity, there are no tax ramifications resulting from additional depreciation. Hence, for Step 2:

\[ ADT = 0 \]

Thus, the calculation for the incremental cash flow (Step 3) for this project is

\[ ICF = 200,000 + 0 = 200,000 \]

If, rather than a university, the organization in this example were a professional football team, Step 3 would become important. Suppose estimated net earnings without the new project for Team X are $34.5 million. The team’s CFO determines that by installing FieldTurf, the team could host three college games and three state championship football games in addition to the current ten home NFL pre-season and regular season games. This additional revenue would lead to ENEPI of $40.5 million. For Step 1:

\[ ANE = 40,500,000 - 34,500,000 = 6,000,000 \]
As Team X is a for-profit business, the tax benefit of depreciation must be calculated. According to straight-line depreciation, the additional depreciation (DEP) is $77,000. (The cost for the FieldTurf is $770,000, and it has an estimated useful life of ten years.) At a corporate tax rate (TAX) of 35%, the calculation for Step 2 is

\[
ADT = .35 \times 77,000 = 26,950
\]

For this project, incremental cash flow (Step 3) is

\[
ICF = 6,000,000 + 26,950 = 6,026,950
\]

Select the Capital Budgeting Method

Once the initial cost of the project and the project’s incremental cash flows are calculated, we can complete the capital budgeting process by using any of several methods, including average rate of return, payback period, discounted payback period, net present value, profitability index, internal rate of return, and modified internal rate of return. Each method has advantages and disadvantages; net present value is the method most managers prefer. This chapter focuses on net present value and the two methods that are the foundation of net present value analysis: payback period and discounted payback period. We will also examine internal rate of return and modified internal rate of return.

**Payback period method**

The number of years required to recover a capital investment is called the payback period. Calculating the payback period of a project is a very basic capital budgeting tool. For any project to be accepted in a capital budget, the project’s payback period must be less than the maximum acceptable payback period set by the organization. When a choice must be made between two or more alternative projects, the one with the shortest payback period should be selected.

**Single-project payback period calculation.** Suppose a project has an initial cost of $52,700. Incremental cash flows are estimated to be $22,000 in Year 1 and $18,600, $19,250, and $23,000 in subsequent years. Your organization’s maximum acceptable payback period is three years. As the finance manager in charge of this project, should you accept it into your department’s capital budget?

To determine the answer, it is necessary to calculate the payback period. First, we list the expected cash flows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICF</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($52,700)</td>
</tr>
<tr>
<td>1</td>
<td>$22,000</td>
</tr>
<tr>
<td>2</td>
<td>$18,600</td>
</tr>
<tr>
<td>3</td>
<td>$19,250</td>
</tr>
<tr>
<td>4</td>
<td>$23,000</td>
</tr>
</tbody>
</table>

By adding the yearly incremental cash flows to the initial cost of the project, we can determine the approximate time needed to recover the project’s costs.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($52,700)</td>
<td>($52,700)</td>
</tr>
<tr>
<td>1</td>
<td>$22,000</td>
<td>($30,700)</td>
</tr>
<tr>
<td>2</td>
<td>$18,600</td>
<td>($12,100)</td>
</tr>
<tr>
<td>3</td>
<td>$19,250</td>
<td>$7,150</td>
</tr>
<tr>
<td>4</td>
<td>$23,000</td>
<td>$30,150</td>
</tr>
</tbody>
</table>

This analysis shows that the project’s costs are recovered between years 2 and 3. As the payback period is less than the three years set by your organization, the project should be accepted as part of the division’s capital budget. To determine a more exact payback date, notice that between years 2 and 3 the cumulative return moves from -$12,100 to $7,150, and during Year 3, incremental cash flow is $19,250. We know that by Year 245.
The project has reached its payback date. To determine exactly when in Year 2 the payback date is reached, we divide the amount of the last negative cumulative return by the incremental cash flow of the year the cumulative return is positive:

\[-12,100 \div 19,250 = -0.629\]

Hence, the payback period is reached 0.629 years past Year 2, or in 2.629 years. (We disregard the fact that the value is negative.) To convert the fraction of the year to weeks, we multiply 0.629 by 52 weeks:

\[0.629 \times 52 \text{ weeks} = 32.7 \text{ weeks}\]

The payoff period for this project is two years and 33 weeks.

Two-project payback period calculation. When choosing between two projects, we must compare the cash flows of the two projects. For example,

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PROJECT S ICF</th>
<th>CUMULATIVE CASH FLOW</th>
<th>PROJECT L ICF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($1,000)</td>
<td>($1,000)</td>
<td>($1,000)</td>
<td>($1,000)</td>
</tr>
<tr>
<td>1</td>
<td>$500</td>
<td>($500)</td>
<td>$100</td>
<td>($900)</td>
</tr>
<tr>
<td>2</td>
<td>$400</td>
<td>($100)</td>
<td>$300</td>
<td>($600)</td>
</tr>
<tr>
<td>3</td>
<td>$300</td>
<td>$200</td>
<td>$400</td>
<td>($200)</td>
</tr>
<tr>
<td>4</td>
<td>$100</td>
<td>$300</td>
<td>$600</td>
<td>$400</td>
</tr>
</tbody>
</table>

As always, any project must meet the maximum payback period requirement. For this organization, the maximum is three years. If both projects meet the three-year minimum, the project with the shorter payback period is preferred.

A quick analysis of each project’s cumulative cash flow reveals that Project S reaches payback faster than Project L, in 2.33 years versus 3.33 years. Project S also meets the payback period maximum. Project S should be accepted into the firm’s capital budget.

Advantages and disadvantages of the payback period method. Of all the methods available for capital budgeting, the payback period method is the easiest to use. Few calculations are required to determine how long it will take to recover the initial investment. The payback period method is also the easiest to understand. Most important, the method provides information on how long a firm’s funds will be tied up in a project. All else being equal, projects with shorter payback periods provide more liquidity than ones with longer payback periods.

This method also has two major flaws. First, it ignores time value of money concepts (see Chapter 4), as it fails to take into account the cost of capital. It does not recognize the difference between the value of a $1,000 incremental cash flow in the first year and a $1,000 incremental cash flow in the fourth year. Second, this method ignores cash flows produced beyond the payback period. Project A may reach its payback period faster, but over the useful life of the project, Project B might increase the firm’s cash flow more.

Discounted payback period method

To improve upon the payback period methodology, we may use the discounted payback period method. This method is similar to the payback period, with one major exception: it factors time value of money concepts into the calculation by discounting the expected cash flows at the project’s initial cost of capital. (Recall that the discount rate is the rate of return a company must reach in order to justify its investment.) We use this method to determine the number of years necessary to recover the initial cost of a project, by using discounted cash flows (DCFs).

Single-project discounted payback period calculation. Suppose a project has an initial cost of $52,700. Incremental cash flows are estimated to be $22,000 in Year 1 and $18,600, $19,250, and $23,000 in subsequent years. The cost of capital is 10%. Your firm’s maximum acceptable discounted payback period is three years. What is the discounted payback period for this project? How does it compare to the payback period? Should the project be accepted?

To determine the answers, we begin by examining the cash flows on a present value basis. By looking at the present value of the future cash flows, we can compare the cost of the initial outlay with those future cash flows.
flows, in today’s dollars. We use the present value interest factor (see Table A.3 in the Appendix) to discount the cash flows. In Year 0, the initial cost of $52,700 is not discounted, as the value of $52,700 today is $52,700. For Year 1, we apply the discount rate of 10% to the $22,000 cash flow for that year. From Table A.3, we find that the PVIF for one year at 10% is 0.909. We also apply the discount rate to the cash flows for years 2 through 4. By adding the discounted cash flows to the initial cost of the project, we can determine the approximate time needed to recover the project’s costs:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICF</th>
<th>PVIF</th>
<th>DCF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($52,700)</td>
<td>—</td>
<td>($52,700)</td>
<td>($52,700)</td>
</tr>
<tr>
<td>1</td>
<td>$22,000</td>
<td>0.909</td>
<td>$19,998</td>
<td>($32,702)</td>
</tr>
<tr>
<td>2</td>
<td>$18,600</td>
<td>0.826</td>
<td>$15,364</td>
<td>($17,338)</td>
</tr>
<tr>
<td>3</td>
<td>$19,250</td>
<td>0.751</td>
<td>$14,457</td>
<td>($2,881)</td>
</tr>
<tr>
<td>4</td>
<td>$23,000</td>
<td>0.683</td>
<td>$15,709</td>
<td>$12,828</td>
</tr>
</tbody>
</table>

Analysis of the discounted cash flows shows that the project’s initial costs are recovered between years 3 and 4. Additional calculations would find that the exact payback period is 3.18 years, or three years and nine weeks. As the discounted payback period is greater than the firm’s maximum payback period, the project would not be included in the capital budget.

By comparing the discounted payback period of this project to the non-discounted payback period, we can see the effect of time on the value of money. Recall that the payback period for this project is two years and 33 weeks when we do not consider this effect; it is 28 weeks later when we do.

Two-project discounted payback period calculation. When choosing between two projects, we compare the cash flows of the two projects. The following projects both have a discount rate of 10%:

<table>
<thead>
<tr>
<th>PROJECT S YEAR</th>
<th>ICF</th>
<th>PVIF</th>
<th>DCF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($1,000)</td>
<td>—</td>
<td>($1,000)</td>
<td>($1,000)</td>
</tr>
<tr>
<td>1</td>
<td>$500</td>
<td>0.909</td>
<td>$455</td>
<td>($545)</td>
</tr>
<tr>
<td>2</td>
<td>$400</td>
<td>0.826</td>
<td>$331</td>
<td>($241)</td>
</tr>
<tr>
<td>3</td>
<td>$300</td>
<td>0.751</td>
<td>$225</td>
<td>$11</td>
</tr>
<tr>
<td>4</td>
<td>$100</td>
<td>0.683</td>
<td>$68</td>
<td>$79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PROJECT L YEAR</th>
<th>ICF</th>
<th>PVIF</th>
<th>DCF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($1,000)</td>
<td>—</td>
<td>($1,000)</td>
<td>($1,000)</td>
</tr>
<tr>
<td>1</td>
<td>$100</td>
<td>0.909</td>
<td>$91</td>
<td>($909)</td>
</tr>
<tr>
<td>2</td>
<td>$300</td>
<td>0.826</td>
<td>$248</td>
<td>($661)</td>
</tr>
<tr>
<td>3</td>
<td>$400</td>
<td>0.751</td>
<td>$301</td>
<td>($360)</td>
</tr>
<tr>
<td>4</td>
<td>$600</td>
<td>0.683</td>
<td>$410</td>
<td>$50</td>
</tr>
</tbody>
</table>

The project with the shorter discounted payback period should be selected for inclusion in the company’s capital budget. Examining the cumulative returns, we see that Project S reaches discounted payback between years 2 and 3 (in 2.95 years, to be exact). Project L reaches discounted payback between years 3 and 4 (3.88 years). As Project S has a quicker discounted payback, it should be selected for inclusion in the capital budget over Project L.

Advantages and disadvantages of the discounted payback period method. As the discounted payback period method incorporates the time value of money into its calculation, it is a great improvement over the payback period method. It also provides information on the length of time funds will be committed to the project. However, this method, like the payback period method, does not consider the cash flows beyond the
discounted payback period.

**Net present value method**

As previously stated, net present value is the capital budgeting method managers generally prefer for evaluating a single project or comparing two or more projects. Net present value (NPV) is a discounted cash flow method in which the present value of a project’s future cash flows is compared to the project’s initial cost. Projects are accepted if NPV is positive. Mathematically,

\[
NPV = \sum_{t=0}^{n} \frac{CF_t}{(1+k)^t} - \text{initial cost}
\]

where \( CF_t \) is the expected net cash flow in period \( t \)

\( k \) is the project’s cost of capital

\( n \) is the number of periods

By using this formula, we first calculate the present value (PV) of cash flows for each year. Cash outflows are denoted by negative cash flows, and cash inflows are denoted by positive flows. Both the cash inflows and outflows of the project must be included. Up to this point, this process is the same as that for calculating a discounted payback period. Next, we sum the discounted cash flows (i.e, present values) to obtain the project’s NPV. If the NPV is positive (i.e., the present value of the project’s future cash flows is greater than the initial cost), the project should be accepted. If the present value is less than the initial cost (the NPV is negative), the project should be rejected. In this case, money would be lost if the project were accepted.

Two-project NPV calculation. With two (or more) projects, we calculate each project’s NPV. For Project S and Project L above, the NPV of each project is the sum of the discounted cash flows. This will be the same as the final cumulative cash flow figure. The NPV of Project S is $79 and of Project L is $50. If we must choose one, we would select the project with the higher NPV (Project S) for inclusion in the capital budget. If both projects have a negative NPV, neither project would be accepted.

Single-project NPV calculation. Often, NPV analysis focuses on a single project, and the criterion for acceptance in the capital budget is that the NPV must be equal to or greater than zero.

Suppose Project T has an initial cost of $9,000 and a cost of capital of 10%. The expected useful life is four years. In years 1 through 4, the anticipated cash flows are $6,000, $4,000, $3,000, and $2,000, respectively. Should this project be recommended? To answer the question, we first calculate the discounted cash flows by using the PVIF from Appendix Table A.3:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICF</th>
<th>PVIF</th>
<th>DCF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($9,000)</td>
<td>—</td>
<td>($9,000)</td>
<td>($9,000)</td>
</tr>
<tr>
<td>1</td>
<td>$6,000</td>
<td>0.909</td>
<td>$5,454</td>
<td>($3,546)</td>
</tr>
<tr>
<td>2</td>
<td>$4,000</td>
<td>0.826</td>
<td>$3,304</td>
<td>($242)</td>
</tr>
<tr>
<td>3</td>
<td>$3,000</td>
<td>0.751</td>
<td>$2,253</td>
<td>$2,011</td>
</tr>
<tr>
<td>4</td>
<td>$2,000</td>
<td>0.683</td>
<td>$1,366</td>
<td>$3,377</td>
</tr>
</tbody>
</table>

After determining the discounted cash flow for each year, we calculate the sum of the discounted cash flows or look at the final cumulative cash flow figure. As the sum of the discounted cash flows is $3,377, Project T would be accepted into the firm’s capital budget.

Another proposal, Project Z, would require an initial investment of $40,000. The cost of capital is 8%. The expected cash flows and discounted cash flows are as follows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>ICF</th>
<th>PVIF</th>
<th>DCF</th>
<th>CUMULATIVE CASH FLOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>($40,000)</td>
<td>—</td>
<td>($40,000)</td>
<td>($40,000)</td>
</tr>
<tr>
<td>1</td>
<td>$16,000</td>
<td>0.926</td>
<td>$14,816</td>
<td>($25,184)</td>
</tr>
</tbody>
</table>
Because the total present value of the cash inflows, $37,391, is less than the present value of the cash outflows, $40,000, the NPV for Project Z is negative. Hence, the project is not recommended for inclusion in the organization’s capital budget.

If a project has a positive NPV, it will generate cash above its debt service. Therefore, it provides the required return to shareholders, and the excess cash accrues to the shareholders. Because Project Z has a negative NPV, it would remove cash from the firm to service the project’s debt. If wealth maximization is the goal, only projects that improve the firm’s cash flows should be accepted.

Advantages and disadvantages of NPV. Most managers prefer to use the NPV method for capital budgeting. The method analyzes cash flows rather than net earnings, consistent with modern finance theory. Furthermore, it considers time value of money concepts, discounting cash flows by the project’s cost of capital. Most important, it identifies projects with a positive NPV, which will increase the firm’s value. Therefore, the owners of the firm will gain wealth.

The NPV method does have some disadvantages. One major disadvantage is that the method requires a detailed prediction of the project’s future cash flows. For the hypothetical examples in this section, the useful life of each project is four years. In sport, however, the useful life of a capital investment is often much longer. For example, computing the NPV of a new stadium, such as Target Field in Minnesota, would require forecasting cash flows for the entire useful life of the stadium. Usually, this period is assumed to be 30 years. Hence, the Minnesota Ballpark Authority, owners of Target Field, had to calculate the stadium’s NPV by using forecasted cash flows from 2010 until 2040. Given that stadium revenue streams have experienced massive changes over time (primarily driven by the addition of luxury suites, club seating, and personal seat licenses; Brown, Nagel, & Rascher, 2003), forecasting these revenues is extremely difficult. A second disadvantage of the NPV method is that it assumes that the discount rate will remain the same over the useful life of the project. In many instances, the cost of capital and, therefore, the discount rate change as firms refinance debt.

Using technology to calculate NPV

The use of either a spreadsheet or a financial calculator can make the calculation of NPV easy. To illustrate, let’s return to the example of replacing natural grass with artificial turf in a university football stadium.

As discussed previously, installing FieldTurf would cost $770,000. The initial cost of the investment would be only $520,000, however, as a $250,000 rebate would be applied to the invoice cost of the field. You estimate that with this field you can host three high school playoff dates per year. These games would generate $200,000 in incremental cash flow from parking, rental fees, and concession revenues, after expenses, as demonstrated earlier. The department would have to make payments on the field at an annual rate of 7%. The life of the field is estimated to be ten years.

You are now ready to decide whether to install FieldTurf or keep the stadium’s current natural grass field. You will use a spreadsheet to examine the cash flows over the life of the project (see Exhibit 8.1).* NPV can be determined in two ways. First, as discussed earlier, NPV is the sum of the discounted cash flows (see Cell E14 in Exhibit 8.1). Second, NPV can be calculated with the NPV function in Excel (see Cell B16 in Exhibit 8.1). In the NPV function’s dialog box, the 7% discount rate is entered as the rate, and the series of incremental cash flows for years 1 to 10 is entered into the Value1 box. The cost of the project must be subtracted “manually” from the formula’s result. From the spreadsheet analysis, you see that the NPV for the FieldTurf installation is positive, so you decide to move forward with the project.

The discounted payback period in this example is found to be two years and 50 weeks. At the end of the second year, the project will begin to create additional cash inflows that can benefit the athletic department’s operations.

Finding the NPV of this project with a financial calculator is also easy. We simply enter the cash flows into the cash flow register, along with the value of the discount rate, and press the NPV key.

*Usually, financial managers use a spreadsheet to conduct capital budgeting analyses. Once a spreadsheet with formulas has been set up, values can easily be changed to show how variations would affect the project’s NPV.
EXHIBIT 8.1 Calculating net present value with Excel.

![Excel table](image)

**Internal rate of return**

Internal rate of return (IRR) is the term for the discount rate at which the present value of estimated cash flows from an investment is equal to the initial cost of the investment. In other words, IRR is the discount rate at which the NPV is equal to zero. The NPV method is a more advantageous capital budgeting method than the internal rate of return. However, IRR is widely used in business, and, therefore, it is important for financial managers to understand how to calculate it (Brigham & Houston, 2012). We calculate IRR as follows:

\[
\sum_{t=0}^{n} \frac{CF_t}{(1 - IRR)^t} = 0
\]

where \( CF_t \) = the expected net cash flow in period \( t \)

\( n \) = the number of periods

IRR = the internal rate of return

The only unknown in this equation is IRR. We simply solve for the value of IRR to find the internal rate of return.

IRR is a measure of a project’s rate of profitability. A project with an IRR greater than its cost of capital is advantageous to the organization and should be accepted into the capital budget. When the IRR exceeds the cost of capital, a surplus accrues to the firm’s stockholders. By accepting a project whose IRR is greater than the cost of capital, the financial manager increases shareholder wealth.

To calculate IRR with a financial calculator, enter the expected cash flows into the cash flow register and press the IRR key.

Calculating IRR with constant cash flows. If cash flows are constant over the useful life of a project, we can calculate IRR without a financial calculator or a spreadsheet. Dividing the initial cost of the project by its annual cash flow gives the present value interest factor of an annuity (PVIFA). We can look up this value in a PVIFA table (see Appendix Table A.4) to discover an approximation of IRR.
For example, suppose Project D has an expected useful life of six years and anticipated annual cash flows of $5,000. The initial cost is $20,555. If the cost of capital is 10%, should the project be accepted into the firm’s capital budget?

We divide the initial cost of the project by the annual cash flow to find the PVIFA:

\[
\text{PVIFA} = \frac{20,555}{5,000} = 4.111
\]

In the PVIFA table (Appendix Table A.4), we find that for a term of six years a PVIFA of 4.111 results from a rate of 12%; therefore, the project’s IRR is 12%. As this value is greater than Project D’s cost of capital (10%), the project should be accepted.

Now, suppose Project F has an initial cost of $42,560, an anticipated useful life of eight years, cost of capital of 18%, and expected cash flows of $9,800 per year. Should Project F be accepted into the company’s capital budget? The PVIFA for this project is

\[
\text{PVIFA} = \frac{42,560}{9,800} = 4.343
\]

In the PVIFA table, we find that a PVIFA of 4.343 with a term of eight years implies a rate of 16%. Project D’s IRR is 16%. As this is less than the project’s cost of capital, the project should not be accepted.

### SIDEBAR 8.B

**Ballpark villages and arena districts**

In the National Football League, it is widely accepted that a new stadium, featuring all of the latest revenue-producing amenities, is an important factor in the financial success of a team (Brown, Nagel, & Rascher, 2003). Revenue accruing from these capital projects provides an important competitive edge for franchises in a league where about 70% of all revenue is shared. In other leagues, the situation is different.

Major League Baseball’s St. Louis Cardinals provide an example of the difference between the use of new revenues generated from non-NFL stadiums and NFL stadiums. The Cardinals opened Busch Stadium III in April 2006. The stadium was built for $388 million, with the team owners paying approximately 77% of the costs. Fans paid $40 million of construction costs through the purchase of seat licenses, and public money was used, as well. The public funds included a $30 million tax abatement (Miklasz, 2005b).

The Cardinals moved into their new stadium at a time when it appeared the club was awash in new revenues. In their last year at Busch II, the club drew 3.5 million fans. When these fans attended games in the new stadium, they paid higher ticket prices, and many sat in a greatly expanded section of premium seats. Additionally, the team had just left long-time radio broadcast partner KMOX for a more lucrative radio arrangement with KTRS. Finally, the Cardinals reportedly expected to receive $23 million from MLB due to the success of MLB.com, the XM Radio league rights fee, and the sale of the Washington Nationals. Despite these new revenues, the club kept its 2006 team payroll at the same level as 2005 (Miklasz, 2005a).

Team officials had claimed that a new stadium was needed to generate the revenues necessary to field a competitive team. They claimed that the revenues from the new luxury and club seating areas would increase significantly and that the team would be in a position to raise payroll significantly (Miklasz, 2005b). In fact, it was reported in *SportsBusiness Journal* that local revenue would rise between 15% and 20%, to approximately $150 million, during the 2006 season (Fisher, 2005). What was not mentioned was that a large portion of this new revenue—$15 million annually for the next 22 years—would be used to retire the debt on the stadium (Miklasz, 2005b). In all, the new stadium has generated only an additional $5 million to $10 million for the club, after bond payments.

Why would a team like the Cardinals finance a large portion of a new stadium themselves, if it would not lead to a significant improvement in the financial performance of the club? For the owners of the Cardinals and teams in similar situations, the new revenues from a stadium might not alone justify the construction. However, the financial picture changes if the land around the site presents an opportunity for commercial development.

The Cardinals are one of several teams that have built or planned to build a ballpark village or arena district to generate additional revenues. However, the Great Recession delayed many of these projects, and teams that had planned on the projects’ additional revenues found these revenues did not materialize. Ground was finally broken for the Cardinals’ Ballpark Village development in 2013—eight
years after Busch Stadium III opened (Brown, 2013). In the first phase of the project, a $100 million, 100,000-square-foot retail, restaurant, and entertainment space in two buildings was developed. This phase was greatly reduced from the plan’s initial blueprints, where the project would have included between 500 and 1,000 residential units to support the area’s new restaurants in the off-season and 20,000 to 150,000 square feet of office space, depending on demand for space (Brown, 2005; Fisher). Only after this project was completed in 2014 did the Cardinals have additional revenue available to spend on team payroll.

In New York City, three new sport facilities were planned at the time the Cardinals were initially hoping to open their retail space. The public share of funding for each of these facilities was below 25% (Zimbalist, 2005). Most ambitious was the $800 million Atlantic Yards project in Brooklyn. An arena was to be part of a $3.5 billion residential and commercial development and was to be home to the New York Nets (Fish, 2005). After financing delays caused by the recession, the $1 billion Barclays Center opened as the anchor to the Atlantic Yards project in 2012 and is now the home of the Brooklyn Nets and New York Islanders. Financial issues related to the commercial (office and residential) development led to a rebranding of the project, now Pacific Park. Eleven years after the project was proposed, Forest City Ratner, the original developer, partnered with Greenland USA, a subsidiary of a Chinese development firm, to help speed the remaining development at the site (Dailey, 2014).

Colleges are using the development of stadium districts as revenue sources, too. Arizona State University (ASU) plans to turn 300 acres near downtown Tempe, Arizona, into an athletic facilities district that will include office space, apartments, and two hotels, located next to Sun Devil Stadium. Revenues generated in the district will go to pay for building and renovating new athletic facilities on ASU’s campus. Ultimately, the district is expected to generate approximately $37.5 million for ASU’s athletic department on an annual basis (Reagor, Metcalf, & Ryman, 2015).

As the costs of new facilities continue to increase, and as organizations are obliged to pay a greater share of funds for facility construction, the trend of packaging stadiums and arenas as a part of larger redevelopment projects will continue. The organization with the most profitable redevelopment—not the most profitable stadium or arena—will gain an advantage. Organizations paying the majority of development costs for a stadium will need to use the facility as an anchor for a larger development.

Calculating IRR with irregular cash flows. When cash flows are not constant, we can find IRR by trial and error with the formula given on p. 203. A financial calculator or spreadsheet software that provides financial analysis formulae is valuable for this type of calculation.

Comparing IRR to NPV. Recall the details of the analysis involving installation of FieldTurf. The initial cost of the project was $520,000, and annual incremental cash flows of $200,000 were anticipated over the ten-year useful life of the field. The project’s cost of capital was 7%. What is the IRR? Does the IRR lead to a different decision than the NPV method?

By using the data entered in Exhibit 8.1, we can quickly calculate the project’s IRR with Excel’s IRR function (see Exhibit 8.2).

The IRR, 37%, is significantly higher than the project’s cost of capital, and both the IRR and NPV methods indicate that the project should be undertaken. When a project is being considered on its own merits, the NPV and IRR methods will give the same accept or reject decision. However, when we are analyzing two or more projects in order to select one, the results of the two methods may conflict—even if both projects have positive NPVs and IRRs greater than their costs of capital. For mutually exclusive projects, the NPV method may indicate Project A should be accepted, and the IRR method may indicate Project B should be accepted. This can occur in two circumstances:

1. The projects differ greatly in financial size.
2. The projects differ greatly in the timing of cash flows.

EXHIBIT 8.2 Calculating IRR with Excel.
It is generally accepted that when these conflicts arise, NPV is the method of evaluation that should be used (Brigham & Houston).

**Modified internal rate of return**

When a project involves a large cash outflow sometime during or at the end of its useful life, in addition to the cash outflow at the beginning, it is said to have non-normal cash flows. For a project with non-normal cash flows, IRR may not be usable as a capital budgeting method, because multiple IRRs may exist. Stadiums and arenas often have non-normal cash flows resulting from renovations or improvements. From 1995 to 1999, in the NFL alone, eight franchises, or 27%, played in stadiums that underwent at least $20 million in renovations during that time frame (Brown, Nagel, & Rascher).

For projects with non-normal cash flows, we recommend the modified internal rate of return (MIRR) for finding the rate of return. MIRR is the discount rate where the present value of the project’s costs is equal to the present value of the project’s terminal value (Brigham & Houston). Here, terminal value is the future value of the cash inflows compounded at the project’s cost of capital. When the present value of the costs equals the present value of the terminal value, we have

\[
P_{\text{costs}} = \sum_{t=0}^{n} \frac{C_{t}}{(1+k)^{t}} = \frac{TV}{(1+\text{MIRR})^{n}}
\]

where \(C_{t}\) = the cash outflow in period \(t\)  
\(k\) = the project’s cost of capital  
\(n\) = the number of periods  
\(\text{MIRR}\) = the modified internal rate of return  
\(P_{\text{costs}}\) = the present value of costs  
\(TV\) = the terminal value

In this equation, the first and second terms give the present value of the cash outflows when discounted at the cost of capital. In the rightmost term, the numerator is the compounded value of the inflows (terminal value), with the assumption that the cash inflows are reinvested at the cost of capital.

If the investment costs are all incurred during Year 0, and the first operating cash inflows occur in Year 1, then we can use the following equation for MIRR:

\[
\text{MIRR} = \left( \frac{1 + \frac{\text{terminal value}}{\text{cost of capital}}} {\text{cost of capital}} \right)^{\frac{1}{\text{number of periods}} - 1} - 1
\]
Here, CIF refers to the project’s cash inflows. Spreadsheet software provides a convenient method for calculating MIRR. Exhibit 8.3 shows such a calculation.

We calculate the terminal value by compounding the cash inflows at the cost of capital (7%). In a spreadsheet, we enter the formulas as shown in Exhibit 8.3. The present value of the project’s cost is $520,000. We calculate the terminal value of the project by summing the future values of the expected cash inflows. We then use the RATE function to calculate MIRR (the rate of growth). We enter the present value and terminal value of the project, along with the number of periods (10), into the dialog box for the RATE function, and this gives the value of MIRR. Alternatively, we can use a financial calculator and enter the following data: N = 10, PV = −520,000, PMT = 0, FV = 2,736,400. Press the I key, and the MIRR for the project, 18.18%, will be displayed.

EXHIBIT 8.3 Calculating MIRR with the equation for MIRR using Excel.

A convenient method for calculating MIRR is to use Excel’s MIRR function (see Exhibit 8.4).

The fact that the MIRR method assumes that cash inflows are reinvested at the cost of capital rather than at the project’s IRR makes MIRR a better predictor of profitability. It provides a better estimate of a project’s rate of return, and it overcomes multiple problems that arise with the IRR method when cash flows are non-normal. The MIRR method will lead to the same project selection decision as the NPV and IRR methods when we are considering two mutually exclusive projects of equal size and with the same expected useful life.

Conduct a Post-audit Analysis

The final step in the capital budgeting process is to conduct a post-audit analysis after the project has been completed. This step is often a forgotten element in the capital budgeting process. In the post-audit, we compare the project’s actual results with the predicted results and attempt to explain any differences. Post-audit analyses allow managers to make improvements to the firm’s forecasting techniques. Generally, the most successful organizations are ones that place great emphasis on post-audits.
Montreal’s Olympic Stadium

Olympic Stadium, part of Quebec’s $2.6 billion 1976 Summer Olympic construction, was paid off in 2006. Originally, the facilities for the Olympics were to cost $250 million. Many factors led to the increase in costs, including a five-month strike that halted construction in 1975, corrupt contractors, and the government’s diversion of tobacco tax dollars from the event to other governmental projects.

Surprisingly, the Montreal Olympic Games ran an operating surplus, but cost overruns at Olympic Stadium left a $1 billion debt from the stadium alone. After hosting the track and field events, as well as the opening and closing ceremonies of the 1976 Olympics, Olympic Stadium was home to the Montreal Expos from 1977 to 2004. Other events held in the venue included trade shows, monster truck rallies, concerts, and Canadian Football League games.

Over its 30-year life, the stadium needed many costly repairs. A retractable roof, called for in the original plans, never worked properly and was replaced by a permanent structure. In 1999, part of this structure collapsed while a car show was being set up, and it was discovered that the structure could no longer withstand Montreal snowfalls. Therefore, no events could be held in the stadium from December to March. In 1991, a 55-ton concrete beam fell off the side of the stadium, leading to costly repairs and forcing the Expos to play the final month of the season on the road. Engineers determined that the stadium cannot be imploded due to its unique concrete structure. The cost to dismantle the structure would be $500 million, about half of the cost of its construction. The government is faced with the problem of generating revenue from the stadium despite its lack of a major tenant and its closure for four months of the year.

Brigham and Houston indicate that several complications can arise in the post-audit analysis. First, because of uncertainty in the forecasting of cash flows, a percentage of projects undertaken will not meet the firm’s
expectations. Also, projects often fail to meet expectations for reasons beyond the firm’s control. See Sidebar 8.C for an example of a stadium project that had unexpected results. At times, these reasons for failure are ones that no one could realistically anticipate, such as Hurricane Katrina’s effect on the sport industry along the entire Gulf Coast. It is also difficult to separate the operating results of one investment, such as a new grass or artificial field, from those of a larger system, such as a stadium. Finally, if disappointments arose because of employees’ deficiencies in capital budgeting, discovering this fact will not be helpful if those responsible for entering into a project are no longer with the firm.
Capital budgeting is a process for analyzing the capital expenditures of an organization. The process involves identifying the initial cost of a capital project, determining the incremental cash flows resulting from the project’s implementation, analyzing the project with one of five capital budgeting methods, and performing a post-audit analysis. All five of the capital budgeting methods discussed in this chapter provide relevant information that will be useful when a manager is selecting a project for inclusion in a firm’s capital budget.

The risk and liquidity of a project are indicated by both the payback and the discounted payback method. We found in the FieldTurf case that the project reaches its discounted payback period in two years and 50 weeks. As the project has an expected useful life of ten years, the athletic director is taking a relatively small risk by entering into this fairly liquid project.

The NPV method, which indicates the present value of the dollar benefit of a project to the company, provides the best measure of a project’s profitability. In the FieldTurf case, the present value benefit to the athletic department of installing the artificial turf is $884,716. The IRR method also measures profitability but expresses it as a percentage of return, which some decision makers prefer. Stating that the installation of FieldTurf will return at 37% is a convincing argument that the athletic director can present to the university’s administration.

The MIRR method offers the same benefits as IRR but improves on the IRR’s reinvestment assumption while avoiding the problems that IRR presents with non-normal cash flows. When cash flows are non-normal, MIRR is the best indicator of a project’s rate of return. By using the MIRR method, the athletic director will find that the FieldTurf installation would provide an 18% rate of return, rather than the inflated 37% return indicated by the IRR. The MIRR method is preferred in analyses of stadiums and arenas, as these facilities often have non-normal cash flows.

1. What is capital budgeting?
2. What major information (data) do you need for capital budgeting when you want to compare projects?
3. What relevant information is provided in each capital budgeting method?
4. What is the problem with multiple IRRs, and when in sport would they occur?
5. In sport, which method of capital budgeting is superior? Why?
6. What is the purpose of the post-audit in the capital budgeting process?

Project M has a cost of $65,125, expected net cash inflows of $13,000 per year for ten years, and a cost of capital of 11%. What is the project’s payback period (to the closest year)?

What is the project’s NPV?

What is the project’s IRR?

What is the project’s discounted payback period?

What is the project’s MIRR?

Based on the answers to questions 1–5, should the project be accepted? Why or why not?

Your division is considering two facility investment projects, each of which requires an upfront expenditure of $15 million. You estimate that the investments will produce the following net cash flows:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PROJECT A</th>
<th>PROJECT B</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$5,000,000</td>
<td>$20,000,000</td>
</tr>
<tr>
<td>2</td>
<td>$10,000,000</td>
<td>$10,000,000</td>
</tr>
<tr>
<td>3</td>
<td>$20,000,000</td>
<td>$6,000,000</td>
</tr>
</tbody>
</table>

What are the project’s net present values, assuming the cost of capital is 10%? 5%? 15%? What does this analysis tell you about the projects?
deficiency in swimming opportunities. The Arts, Parks, and Recreation District serves a community of just over 23,800 people in the center of rural southeast Ohio. The original “city pool,” which opened in 1972, was declared obsolete in 2002 and currently is expensive to maintain and upgrade (Morris, 2014). The current city pool is a lap pool, though not many people actually swim laps in it.

The Arts, Parks, and Recreation (APR) Advisory Board, together with APR Department Director Rich Campitelli, recommended that a tax levy set to expire in 2016 be extended to fund construction of a new pool for the city during the summer of 2014. They also decided that a pool that could be operated year-round was preferred to the current seasonal pool and that a recreation pool should be constructed. Such a pool would offer a superior recreational experience compared to a traditional six- to eight-lane pool.

This pool would be able to compete with newer seasonal recreation pools in the neighboring towns of Nelsonville and Marietta. In Nelsonville, a new swimming pool with slides, diving boards, lap lanes, and a gradual-entry shallow end opened in 2004, and soon thereafter Marietta opened an aquatic center with a lazy river, slides, a splash pad, and an interactive pirate ship (Schaller, 2010). The desire for a recreation pool was also economic. Experience with leisure pools in other parts of the country suggested it was probable that revenues from such a facility would at least equal operational costs and probably exceed them. Thus, instead of losing $40,000 a year (as was currently happening), the new pool would likely produce a surplus.

To determine cost and attendance projections, the Athens Arts, Parks, and Recreation District hired a consulting firm that specializes in recreational pool facilities. Their preliminary feasibility study determined that the total development cost of the pool project would be $6.6 million and that the facility would have a 30-year useful life. The consultants estimated initial annual operation and maintenance costs to be $212,000, rising at 3.2% annually. The uniqueness of the facility led the consultants to project substantial local and regional (50-mile radius) demand, with annual attendance ranging from a conservative estimate of 80,000 to an optimistic 250,000 users each year, of which half would be children. The consultants suggested an admission price of $6 for adults and $4.50 for children, with increases of 25% every ten years. The study implied that the pool would be profitable but did not provide a detailed pro forma analysis.

The Athens City Council agreed that changes to the city pool were needed and placed the issue on the ballot for vote. An extension of the 0.1% ARP income tax in the city of Athens was approved by 68% of voters on November 4, 2014. The current rate for a 30-year general obligation bond was 3.5%.

MTB Inc., a South Carolina-based sport consulting firm, was hired to analyze the capital expenses for the new project to determine if the current pool proposal was feasible from an economic standpoint.

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**REFERENCES**


Notes

* The formula for calculating WACC is \( WACC = w_d k_d (1 - T) + w_p k_p + w_c k_c \), where \( w_d \), \( w_p \), and \( w_c \) are the weights of debt, preferred stock, and common equity, respectively; \( k_d \), \( k_p \), and \( k_c \) are the costs of debt, preferred stock, and common equity, respectively; and \( T \) is the corporate tax rate.

* Because of higher durability and lower maintenance costs, football fields with a FieldTurf installation can be scheduled for use 4.75 times as frequently as fields with a natural grass installation (FieldTurf, 2014).
PART III
Application of Financial Management in Sport

9 Facility Financing
10 Valuation
11 Feasibility Studies
12 Economic Impact Analysis
KEY CONCEPTS

asset-backed securities
benefit principle
certificate of participation
contractually obligated income (COI)
efficiency principle
franchise free agency
general obligation bond
horizontal equity
ease revenue bond
naming rights
non-excludable
non-rival
opportunity cost
payments in lieu of taxes (PILOT)
positive externalities
price elasticity of demand
private financing
psychic impact
public financing
public good
revenue bond
securitization
sin tax
tax increment financing (TIF)
tourism tax
vertical equity
Introduction

This chapter discusses why sport facilities are built with public and/or private money, how much it costs to build them, the different sources for financing them, public/private partnerships for sport facilities, and the role of public policy in their construction.
Who benefits from a new stadium? Sport teams and team owners, leagues, fans, and even businesses and the residents of a city or region may benefit from a new sport facility.

Teams and Owners

A team and its owner may benefit from a new stadium in numerous ways. A new facility can generate substantial increases in revenues from tickets, concessions, sponsorship, merchandise, personal seat licenses (PSLs), luxury suites, and other premium seating, because customers demand—and are willing to pay for—better seating and atmosphere, food, restrooms, amenities, and access. When NFL teams move into a new stadium, they witness an increase of about 85% in local revenues that are not shared with other teams and see an increase in franchise values of 35% (Brown, Nagel, McEvoy, & Rascher, 2004). MLB teams gain an additional 65% in local revenues in the first year of a new stadium (Clapp & Hakes, 2005). Another advantage is that a new facility can reduce the effect of winning on franchise revenues, by as much as half in the NFL (Rascher, Brown, Nagel, and McEvoy, 2012). This is because wins and losses are less important in getting fans to attend games at the new stadium. Instead, fans care about the experience that the new stadium offers. Fans attend games in a new facility partly because of the facility and not solely because of the team’s performance. This can smooth out overall revenues and budgets for years, lowering financial risk (and borrowing rates).

At the same time, a franchise that moves into a new facility also generally has an incentive to improve its on-the-field performance, because doing so will help it leverage the full value of the facility. Each new fan the team attracts to the facility will spend more money in a new stadium than in an old stadium on concessions, merchandise, and so forth. Thus, the return on an investment in better players is higher, so the franchise has an incentive to increase its investment in talented players. Empirically, of the 14 MLB teams that opened new ballparks from 1991 through 2001, 11 of them increased their team payrolls in the years immediately following the move into the new stadium, with an average increase of about 35% for the first year (Baade, 2003; Mellinger, 2009). Of course, the cause-and-effect might also be that the new stadium provides the financing to increase payrolls (under the assumption that the owners could not finance player payrolls from other sources).

Finally, NFL rules have given owners motivation to build new stadiums for reasons other than those listed above. According to the rules, the league shares most of the revenue that individual teams generate (specifically, national media and licensing revenues and ticket revenues). Certain revenue streams, however, that increase substantially in new stadiums belong to the owner (as long as they are used to help pay for the costs of stadium construction), such as naming rights, sponsorships, concessions, parking, and luxury suite or premium seating revenues. Additionally, the NFL has a large fund, the G-4 fund, that provides low-interest loans to help teams build new stadiums.

A franchise’s incentive to build a new stadium is further enhanced if it can obtain partial financing from local, regional, and/or state government. A city can improve its justification for investing public money if other political jurisdictions also invest (surrounding counties, the state, the federal government, or other cities), thereby lowering the direct cost to the city. In Milwaukee, Wisconsin, Miller Park was financed through several different sources, including the City of Milwaukee, which gave $18 million toward construction and loaned another $15 million. This is less than 5% of the nearly $400 million in total construction costs, including infrastructure costs. For an example of additional funding sources, see Exhibit 9.1, which outlines funding sources and amounts as they were projected for Miller Park prior to construction of the facility. The $30 million in naming rights that Miller Brewing Co. paid could be considered local public financing (discussed later), because the stadium is majority owned by the city’s special baseball district. However, if the Brewers were not playing in the stadium, the value of the naming rights would be significantly less, so most of the naming rights funds invested in the stadium could be attributed to the team and not the city.

EXHIBIT 9.1 Stadium funding sources.

<table>
<thead>
<tr>
<th>MILLER PARK (2000) PROJECTED FUNDING SOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naming rights and upfront concessionaire payments</td>
</tr>
</tbody>
</table>

265
When cities and other political entities invest in a facility, the team will receive most, if not all, of the additional revenue generated within the stadium but will have to pay only part of the cost. When a team spends money on new players, however, that cost is fully borne by the team and not shared with local government.

**Leagues**

Leagues, and not just their individual teams, desire new construction, because all members benefit through revenue sharing of increased ticket sales.

**Fans**

Sport fans gain from new stadiums with enhanced offerings and better amenities, such as restrooms, food, and so forth. Although ticket prices typically increase in new stadiums, more fans attend games in these stadiums, providing evidence that fans consider themselves better off.

**Cities and Geographic Regions**

Cities and their businesses and residents may or may not be better off with a new stadium, depending on the cost to the city. Reasons commonly cited for investing public money in new sport facilities are that they will

- provide economic impact to the community (see Chapter 12),
- increase national and international awareness of the city and enhance its image, thereby increasing future tourism (and possibly firms and families relocating to the city),
- provide a cornerstone for economic development in a blighted or underutilized area,
- generate civic pride among residents, or give the city “major league” status,
- provide quality-of-life services similar to public parks and museums,
- provide positive externalities, including psychic impact (the emotional impact of having a local sports team),
- discussed below, and
- generate political capital for local politicians.

**Positive externalities**

Generally, businesses pay for their own offices and manufacturing facilities, without government intervention or subsidies. For very large projects, however, such as an automobile manufacturing plant or a sport facility, a company may create competition for the project between political jurisdictions (e.g., cities or states), which
can result in government intervention or subsidies. This was the case with a $754 million facility that DaimlerChrysler proposed to build in the southeastern United States. State and local subsidies totaled approximately $320 million after DaimlerChrysler chose Georgia over South Carolina. States engaged in a bidding war for the facility because of the potential increases in jobs, local earnings, and taxes. Georgia officials felt that the plant not only would generate quality jobs but also would foster growth in other automotive businesses (such as auto suppliers and parts manufacturers) in the area, creating a net positive economic gain to the region. DaimlerChrysler later backed out of the deal with Georgia and constructed the facility in South Carolina instead.

These overflow effects, or positive externalities, can help governments justify public investment in private industry. Positive externalities are benefits produced by an event that are not captured by the event owners or sport facility. In sport, it is clear that some local businesses, such as restaurants, bars, retail stores, and hotels, benefit from having sporting events in town. Local radio stations and newspapers also benefit from local sports, often dedicating an entire segment or section to them. Even newscasts commit a daily segment to sports. If sports were not important to listeners, viewers, and readers, these media outlets would focus on something else. These are clearly positive externalities from sports, for which the local teams do not collect payments. (Negative externalities, such as traffic congestion caused by sporting events, also occur.)

The fact that the team cannot charge local restaurants for increased customer traffic means that this aspect of a sporting event is a public good, a good that is non-rival and non-excludable—meaning that its consumption by one customer does not prevent another customer from consuming it, and the team cannot prevent someone from enjoying the good (via television, the Internet, the newspaper, discussions with friends, and so forth). As Allan Sanderson (1999) suggests:

Sports represent a socially-consumed commodity. Water-cooler conversations and office greetings frequently turn on casual greetings such as, “How ‘bout them Redskins?” Even if ardent fans are not present in the stands, they can watch games on television and radio, follow their favorite team or athlete through newspaper accounts, and exchange numbers and notions with friends, neighbors, and colleagues. (p. 189)

As a result of positive externalities, a local team may underinvest in a stadium, or a sports league may decide not to launch a new franchise, because it is not financially worth the cost to the team or league. However, it may be worth it to the city and its residents. The issue is that the private business (the team) cannot charge for the full value of its business to the community. As a result, the quality of the stadium or the number of teams in the league will be less than what the public wants—not socially optimal. A public subsidy might be justified on these grounds. Public subsidies for stadium development can help push a league over the threshold to offer more expansion franchises. Baade and Matheson (2006) show that stadium subsidies have evoked expansions in major professional sports in the United States, increasing the number of teams closer to the socially optimal level.

**Psychic impact**

Similarly, Sanderson discusses the fact that psychic impact, which is an externality, may justify public subsidies. The team is not able to charge residents for being happy about the local team (although it tries, through the sale of novelties, merchandise, and apparel carrying the team’s name and logo). Sanderson notes:

Studies suggest that, on average, recycling is an economic loser because the total collection costs exceed the value of the materials to be recycled. But people, even armed with that information, and knowing that recycling is implicitly taking away from other worthwhile foregone alternatives, such as more police, parks, and street repairs, or even a tax rebate, may still vote to continue recycling their newspapers, cans and bottles because the “feel-good” factor is sufficiently large. The corresponding question here is how large the feel-good factor of a professional franchise or a new stadium is, in terms of civic pride or even some “existence value.” (p. 189)

The loss of a local team, if it moves to another city, may be so devastating in terms of psychic impact that a public investment is justified to prevent it. A key task for politicians is to find a way for those who benefit to pay for it, and for those who do not care about or benefit from sports to pay nothing.

**Controversy regarding benefits to political jurisdictions**

Controversy often arises because those who gain the most from the construction of a new sport facility are not always those who pay for the facility’s construction and upkeep, and because many of the benefits discussed above may not materialize sufficiently to justify the expense. In fact, most academic studies measuring the economic impact of sport facilities (not teams or sporting events) fail to find enough net gain to a community to justify the often large public outlays (Siegfried & Zimbalist, 2000). However, non-economic reasons, such as psychic impact (or public consumption benefit), may in fact justify public investment. As Owen (2006) notes, “the focus on economic impact misses the true source of value teams have for cities as public goods.”
Owen finds that for the states of Michigan and Minnesota, psychic impact values of $100 million per major professional sport team (i.e., NFL, MLB, NHL, and NBA) are reasonable estimates, with some going much higher than that. The average public subsidy for a sport facility since 2000 is about $229 million (in 2010 dollars), with adjustments for land acquisition, forgone taxes, and other effects raising that figure to $271 million (Long, 2013, Table 2.1 and p. 81). Therefore, the psychic impact value does not typically cover the full cost of a public subsidy, but when combined with the economic impact effect it could justify some public facility investments.

So why do sport teams receive large amounts of public funding? Economic and psychic impact values exist for other businesses as well, such as an open-air mall, but those businesses often do not receive public funding. The fact that a sport league has control over the number of franchises means it can prevent a city from hosting a team even if the city wants one. The threat of relocation to another city, known as franchise free agency, often motivates a city to help build a facility for a local team. If the team cannot realistically move, it may not be able to obtain a significant subsidy. Some subsidy may be justified if the quality of the stadium, if it were financed solely by private investment, would be less than what the market demands. Perry (2002) estimates that the Washington Redskins could justify a private investment of only $155 million in a new stadium; however, as discussed below, other estimates suggest that NFL teams could finance nearly the entire cost of a new stadium. The bottom line is that the residents of a city do not want to see their hometown team move to another city, so they are usually willing to foot the bill for most of a facility’s construction and maintenance costs. For all of these reasons, we have seen unprecedented growth in the construction of sport facilities.
HISTORICAL PHASES OF FACILITY FINANCING: PUBLIC VERSUS PRIVATE FUNDING

The construction of sport facilities in the United States has come in three major waves over the past century and has seen changes in the degree of private financing—financing that does not use public dollars—and public financing—the use of public funds to finance a project.

Phase 1

Twenty-seven facilities were built from the late 1880s through the end of the Depression. One of these still stands today—Wrigley Field. During the first half of this first wave of construction, stadiums were 100% privately financed. Not until 1923 and the construction of Los Angeles Coliseum was public money used to build a major professional sport stadium. Overall, during the first wave 31% of the costs of construction was financed with public money (Keating, 1999; Baade, 2003). Of the 27 facilities built prior to World War II, only five received public funding.

Phase 2

During the second phase, from 1960 to 1979, fifty-seven major sport facilities were built, many in the all-purpose mold—able to house a baseball and football team or a basketball and hockey team. The second wave saw a significant increase in the cost of construction and in the amount the public was willing to pay, as Exhibit 9.2 shows.* On average, public financing covered 83% of the cost of a new stadium during this phase.

EXHIBIT 9.2 Public subsidies for sport stadium construction.

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>NUMBER OF STADIUMS BUILT</th>
<th>NUMBER OF STADIUMS PUBLICLY FINANCED</th>
<th>COST OF STADIUMS (SM, 1997 DOLLARS)</th>
<th>PUBLIC SUBSIDIES (SM, 1997 DOLLARS)</th>
<th>PERCENTAGE OF CONSTRUCTION PUBLICLY FINANCED</th>
</tr>
</thead>
<tbody>
<tr>
<td>1887–1923</td>
<td>14</td>
<td>0</td>
<td>129.8</td>
<td>0.0</td>
<td>0</td>
</tr>
<tr>
<td>1887–1939</td>
<td>27</td>
<td>5</td>
<td>493.6</td>
<td>155.0</td>
<td>31.4</td>
</tr>
<tr>
<td>1923–1939</td>
<td>13</td>
<td>5</td>
<td>363.9</td>
<td>155.0</td>
<td>42.6</td>
</tr>
<tr>
<td>1947–1959</td>
<td>8</td>
<td>7</td>
<td>163.2</td>
<td>161.5</td>
<td>98.9</td>
</tr>
<tr>
<td>1960–1969</td>
<td>25</td>
<td>21</td>
<td>2,601.4</td>
<td>1,720.7</td>
<td>66.1</td>
</tr>
<tr>
<td>1970–1979</td>
<td>32</td>
<td>29</td>
<td>4,279.5</td>
<td>3,989.2</td>
<td>93.2</td>
</tr>
<tr>
<td>1980–1986</td>
<td>13</td>
<td>13</td>
<td>822.0</td>
<td>704.0</td>
<td>92.9</td>
</tr>
<tr>
<td>1987–1999</td>
<td>55</td>
<td>51</td>
<td>9,488.7</td>
<td>6,220.2</td>
<td>70.6</td>
</tr>
<tr>
<td>2000–2002</td>
<td>18</td>
<td>17</td>
<td>4,968.0</td>
<td>3,118.4</td>
<td>62.8</td>
</tr>
<tr>
<td>2003–2009</td>
<td>15</td>
<td>14</td>
<td>4,726.3</td>
<td>4,270.0</td>
<td>90.3</td>
</tr>
<tr>
<td>Total 1887–2009</td>
<td>193</td>
<td>157</td>
<td>27,542.8</td>
<td>20,400.1</td>
<td>74.1</td>
</tr>
</tbody>
</table>


Phase 3

Construction was relatively quiet during the early 1980s, but in 1987—with the opening of Dolphins Stadium, quickly renamed Joe Robbie Stadium (now Sun Life Stadium)—a third building spree began. It continued, netting nearly 90 new facilities over a 20-year period. These buildings are often positioned to look like classic sport stadiums of the past (although more recent ones have begun to look more modern), but they usually house only one major tenant, not two. In fact, during this wave, over 80% of the major professional sport facilities in the United States have been replaced or substantially upgraded. Between 2000 and 2010, fifty-one new major sport facilities were opened in North America, at a cost totaling about $21 billion, with the public
paying for about $12 billion of that (Long, 2013). Exhibit 9.3 shows trends in stadium construction. Just in 2010 alone, seven major pro sport facilities were opened in the United States, with the public paying about 40% of the costs. If the privately financed MetLife Stadium is removed from the analysis, then the public’s share rises to about 72%.

Returning to Exhibit 9.2, we see that during the current phase, the percentage of the costs of sport facilities that is financed by the public has declined slightly, to about 71%. Overall, since World War II, approximately 10% of stadiums built did not receive public funding.

If we drill deeper into the ongoing trends, as Zimbalist and Long have done, we find that the public share of facility costs fell from the 1970s through the 1990s but has flattened out since 2000, at around 55% (Long, 2013). Even though the share of funding by the public has decreased, the amount in nominal terms has increased because of the steep increases in stadium construction costs.

EXHIBIT 9.3 Sport facility construction trends, 1997–2010 (nominal dollars).

**Historical Analysis of Construction Costs**

According to the Construction Cost Index (CCI, a measure of inflation in the construction industry), prices in that industry rose by 4.0% annually from 1977 through 2014. In contrast, general inflation (measured by the Consumer Price Index) was 3.4% over the same time period. The difference may seem small, but an item that cost $100 in 1977 and whose price rose at the CCI rate would cost $440 in 2014 and only $356 if it had risen at the CPI rate, a 23% difference.
Choice of an inflation index matters

An important aspect of the analysis of construction costs is that the choice of inflation index matters. If we use the more common CPI, the real cost of sport facilities has risen over time (even recently), but if we use the CCI, that is not the case. All construction costs have risen over time more than costs for consumer products in general (evident in the CPI). Therefore, if a community were to build a museum instead of a sport facility, those costs would also be much higher than in previous decades. Complaints about the rising real costs of stadium construction have little merit if the alternative is another construction project with equally high inflation, such as a library or museum. Of course, the debate over whether public money should be used for a stadium versus another building does have merit.

We can use the CCI to adjust stadium construction costs for inflation in order to compare all stadiums in real dollars. From 1960 to 1994 the real cost of stadiums (data does not include arenas) rose, on average, about 1.76% per year (doubling in price in real terms over nearly 40 years). However, since 1990 the real cost of stadium construction has risen an average of 3.1% per year, 76% higher than the previous growth rate. According to information compiled by Crompton, Howard, and Var (2003), the average cost of a stadium built from 1995 to 2003 was $339 million in 2003 dollars, whereas the cost of stadiums built during the 1960s was $179 million (in 2003 dollars). Overall, stadium construction costs have risen significantly faster than inflation in the rest of the economy, and the total dollar amount in real terms (comparable over time) has also risen substantially. (The same can be said for arenas, whose costs have grown at an average annual real rate of 2.8% since 1970, from $87 million to $301 million, on average.)

As shown in Exhibit 9.4, accounting for real costs versus nominal costs has a striking impact on the perception of the rising costs of sport facilities. In nominal terms, the costs of old stadiums were a small fraction (about 12%) of the costs of new stadiums. However, in terms of the real costs, the old stadiums were about half as expensive as new ones. It is important to make comparisons over time with real costs, not nominal costs (which, unfortunately, are often the basis of comparisons). Stadiums are of much higher quality than they used to be, with many more amenities, so the quality-adjusted cost may actually be lower than in previous eras.

EXHIBIT 9.4 Nominal versus real costs of stadiums (2003 dollars).

Given that the average percentage of a stadium’s cost that the public pays has shrunk, but the total real cost
of stadium construction has risen, we must ask whether the real amount of public dollars spent on stadiums is rising or falling. The answer depends. From 1962 to 1994, total public funding for sport stadiums (not arenas) rose in real terms by about 3.5%, when the CCI is the measure of inflation. During that same period, the public’s share of funding remained fairly constant, around 85%. These statistics suggest that the real amount of public dollars spent was rising. However, from 1995 to 2003, total public funding for sport stadiums declined in real terms by about 3.5%, when compared to the cost of all construction projects. Similarly, the real cost borne by the public for construction of sport arenas has dropped by about 1.9% per year since 1977, when compared to the cost of all construction projects. During this more recent period, the real amount of public dollars spent seems to have fallen.

Stadiums and arenas differ in two major ways in terms of public finance. One is that stadiums are much more expensive overall, which is one of the reasons why the percentage that is publicly financed dropped from about 85% during 1961–1994 to 62% during 1995–2003. Arenas are much less expensive to build overall, and they can attract many more events (upwards of 200 events per year can be held in a new arena in a large metropolitan area), so private financing is more feasible. From 1961 through 1984, 100% of the cost of arena financing was borne by the public. That figure dropped to about 44% from 1985 through 2003.
What’s in a name? Money

Twenty-five percent of the 122 major professional sport teams in North America are named after geographic regions different from their host city. For instance, the Minnesota Twins are named for Minnesota and the Twin Cities (Minneapolis and St. Paul), not just Minneapolis, where the stadium is located. The Detroit Pistons are named after the big city next to their host city, Auburn Hills, Michigan. The New York Jets actually play their home games in New Jersey. Yet the geographic moniker chosen by a team does not seem to affect the amount cities are willing to pay in public finance. For Major League Baseball teams, the percentage of stadium construction costs financed by a team’s city is 35% for teams whose name includes that of the host city and 44% for teams whose name does not include the host city. Thus, cities whose name does not adorn the team actually pay a higher percentage of construction costs. For all major professional sport teams, on average, 32% of the cost of stadium construction is paid by cities whose name is on the team and 30% by cities whose name is not on the team—not much difference. Note that this simple analysis does not account for additional factors that may affect public financing and may vary across these two sets of sport facilities, such as differences in city size.

Exhibit 9.5 lists NBA and NHL facilities built in the United States during 1998–2002 and the share of the costs borne by the public. Typically, private sources fund the more expensive facilities in larger markets because the economics of the facilities can justify it (e.g., higher luxury suite, premium seating, sponsorship, and naming rights revenues and more events), and the threat of a team leaving for another market is much less serious—would the Lakers really ever leave Los Angeles?

We must make two important points before leaving this analysis of the costs of stadium construction and how much the public bears. First, as Long (2005) notes, calculations of stadium construction costs typically do not include the cost (or opportunity cost) of land acquisition and forgone taxes. As described later, public stadium financing often involves donating the land (or leasing it cheaply) and forgoing various taxes, such as sales tax and property tax, that would normally be collected from the stadium. Long estimates these amounts would add as much as 57% to calculations of construction costs.

Second, lease arrangements with teams have become more beneficial to team owners than they used to be, often allowing the owners to receive all forms of revenue from the stadium (including from non-sport events), with the city collecting a very small annual rent for the stadium’s use. For instance, the Baltimore Ravens’ football stadium, which opened in 1998, cost approximately $200 million, with the public paying 90% of the costs. The team pays no rent and keeps all revenue streams, while the city authority covers the costs of maintenance and game-day staff. It is not hard to understand why Art Modell moved his team from Cleveland to Baltimore.

EXHIBIT 9.5 Public and private funding for NBA and NHL arenas.
Changes in Financing Methods

As noted earlier, the types and methods of financing, not just the amount, have changed over the three waves of stadium construction. During the pre-WWII wave, most facilities were privately financed. After the war, the second wave saw growth in public financing of stadiums. Typically, the financing methods of this time were quite simple. These included floating general obligation bonds (GOBs), which last for 20 years or so, with the debt and interest payments paid each year directly out of the general funds of local government(s) coffer. The general fund of a government (city, county, or state) is the pool of money that the government has collected via taxes and other revenue sources and uses to pay for all government programs except those that specifically, by law, require separate funding.

The third wave of construction, which began in 1987 with Joe Robbie Stadium, ushered in a constantly changing array of complex and creative financing methods. Initially, the public funding sources were sales taxes, property taxes, and stadium rent, but funds increasingly came from hotel and rental car taxes and other taxes. Private sources of financing included the capitalization of revenue streams from the facility (e.g., naming rights, premium seating, and sponsorships) and borrowing against those to pay for construction.

Why have financing methods changed so much in recent decades? Beginning in the mid-1970s, the United States has experienced a general tax revolt, with a push toward more privatization of public services. Hence, private industry has had to share in the cost of providing services that the public used to provide through the tax system. This general trend, along with increased public awareness of the true costs of stadium financing and who most directly benefits (i.e., owners and players), has forced team owners to increase their private financing of stadiums.

The Deficit Reduction Act of 1984 prevented tax-exempt bonds from being sold to finance luxury suites. More generally, the 1986 Tax Reform Act (a significant overhaul of the tax system) prohibited tax-exempt bonds from being used to fund sport facilities where a single organization would be responsible for 10% or more of revenues. In other words, a facility that hosted many different events but did not have a major tenant could use tax-exempt bonds, because the facility would be deemed a public use facility, whereas a facility with a single tenant could not use tax-exempt bonds. These laws caused the interest rates on bonds used to pay for sport facilities to increase (in order to give the same competitive return to investors as tax-exempt bonds). Since these bonds cost more to use, other sources of financing began to develop that were not affected by these legal changes, such as sales taxes and hotel and car rental taxes.

General growth in the demand for sports and subsequent revenues enabled owners to justify paying part of
stadium costs. City officials, recognizing this growth in demand and revenues, fought harder to convince owners to help pay for construction. In 1987 Joe Robbie discovered new revenues available from leasing luxury suites and used the initial lease payments (and guarantees of future payments) to finance part of construction. Similarly, the Carolina Panthers invented the modern use of personal seat licenses in 1993, generating about $150 million in revenues. More recent developments by sport leagues, including the G-4 fund in the NFL, have helped team owners find cheaper financing options to help pay for stadiums.

As noted earlier, the trend toward more private financing has halted or stabilized in the past few years. As Zimbalist (2006) notes, sport leagues and their owners still have leverage in negotiating with cities, especially smaller ones, because they can move a franchise to another location if a deal is not to their liking. Also, even though voters are more aware of the true financial costs and benefits of publicly financed sport facilities, they do continue to vote in favor of them. The quality-of-life or psychic impact value of sport teams playing in modern stadiums may be high enough to justify these expenditures. A $250 million public financing package costs about $20 million per year in debt payments, which, when disaggregated into per capita costs, is about $10 per person per year in a region of 2 million people. As voters have learned this, many may have decided that having a sport team is worth the cost of one movie ticket per year. Coates and Humphreys (2005) note that voters who live in close proximity to the facilities are more likely to vote yes for public subsidies.
As we have just discussed, public financing remains a major source of funding for sport facilities. This section will discuss the principles of public financing, sources and techniques of financing, and calculations involved.

**Public Financing Principles**

Public financing principles determine the financing sources that are appropriate for a given project. Two of these principles are the concepts of equity and efficiency.

**Equity principles**

*Equity* is a measure of fairness. It includes three major ideas: vertical equity, horizontal equity, and the benefit or user pays principle (Baade & Matheson, 2006). Vertical equity is concerned with the taxpayer’s ability to pay, typically calling for a tax that does not cause poorer persons to bear a disproportionate share. Horizontal equity suggests that individuals with similar incomes should pay similar amounts of a tax. The benefit principle, or user pays principle, states that those who benefit from a particular project ought to be the ones taxed. For funding a stadium, a ticket tax on sporting events would satisfy the benefit principle much more than a cigarette tax.

Consider the following examples of how the equity principles apply to public funding for sport facilities. Hotel, rental car, and sin taxes (taxes on alcohol and cigarettes) fail the user pays or benefit principle, because the users of a sport facility are not the ones being taxed, except by coincidence. Sin taxes also fail the horizontal equity principle, because people with the same ability to pay (similar income) will pay different amounts of tax, depending on whether they smoke or consume alcohol. If lower-income people smoke more than higher-income people, then a sin tax will fail the vertical equity principle, as well. However, sin taxes are efficient at generating revenues, because their demand is price inelastic (the demand does not change much as a result of a price change). A related effect of taxing specific products or services is that the tax is shared by the consumer and producer (depending on their relative elasticities). Thus, hoteliers will oppose a hotel tax, because it will cut into their profit and make them less competitive with hotels in other destinations. The hotel tax might have the effect of raising the expected amount of revenue for the hotel per guest, but it may also reduce the number of guests. Ticket taxes and personal seat licenses do satisfy the benefit principle, because users of the facility pay them. However, these sources usually cannot fully fund the public’s portion of the cost of a stadium. A television tax on sport channels might satisfy the benefit principle and generate substantial funding.

**Efficiency principle**

The efficiency principle calls for a tax to be easy to understand, simple for government to collect, low in compliance costs (meaning that it is not expensive for taxpayers to calculate and pay), and difficult for taxpayers to evade. Moreover, for a tax to be effective in raising tax revenues sufficient to pay for a stadium, it should be applied to products or services with low price elasticity of demand. Price elasticity of demand refers to the percentage decrease in the number of units sold compared to the percentage increase in the price of the product. An elasticity of $-0.5$ means that raising prices by 10% reduces sales by 5%. A product with a high price elasticity of demand would see a substantial decrease in the quantity sold if a tax were imposed, which would offset much of the proposed tax gain.

**Public Financing Sources and Techniques**

As the costs of facilities have risen, many more sources of financing beyond the general funds of a city, county, or state have been cobbled together to pay for them. Although the use of money from the general fund is on the decline compared to other techniques, it is still popular enough to have helped fund sport facilities for the Milwaukee Brewers (using city, county, and state general fund sources), Philadelphia Phillies, Cincinnati Bengals, Detroit Lions (where Wayne County sold property worth $20 million to raise funds), Houston Texans, and Tampa Bay Lightning, to name a few. This section will examine public sources of financing and how they are implemented. The list in Exhibit 9.6 provides a summary of public financing sources.
If the public pays more for the stadium, will tickets be cheaper?

Is there a *quid pro quo* between the public paying more money for a professional football stadium and then paying less for tickets once the stadium is built? In other words, if a franchise is able to save money on construction costs, will it pass some of those savings on to the ticket buyers? Consistent with economic theory, NFL franchises do not appear to set ticket prices based on the amount of public financing they receive for the stadiums in which they play. Economic theory suggests that the franchise will simply pocket any savings from building a football stadium and not pass them on to the public. Pricing decisions are based on the demand to see games and on changes in the variable costs of selling tickets and providing seating. Brown, Rascher, and Ward (2006) have shown that ticket prices are also related to general increases in demand over time, team quality, inflation, consumers’ ability to pay in the local market, and the presence of a new stadium (although not how it was financed). Overall, an increase in public funding by 10% reduces ticket prices by only 42 cents, all else being equal. Public financing does seem to reduce ticket prices, but not by much.

**EXHIBIT 9.6** Public financing sources.

- General obligation bonds
- Certificates of participation
- Revenue bonds
- Tax increment financing and property taxes
- Sales tax
- Tourism and food and beverage taxes
- Sin taxes
- Sale of government assets
- State appropriations
- Ticket tax/surcharge or parking revenues/tax
- Lotteries and gaming revenues
- Player income taxes (jock tax)
- Reallocation of existing budget
- Utility tax
- Indirect sources of public financing
  - Land donations
  - Infrastructure improvements
  - Tax abatements

**General obligation bonds**

Historically, general obligation bonds were the most common method of facility financing, besides tapping into the general fund, and they continue to be very common. This is because they spread the cost of the facility over a 20- or 30-year period. The term “general obligation” refers to the fact that the issuer (usually a city, county, or state) has a commitment to repay the principal plus interest (debt payments) through whatever means are necessary, including tapping into the general fund of the city, county, or state. Because the risks of purchasing GOBs for investment are lower than the risks of other bonds, the interest rates are lower (often up to 2% lower), allowing for smaller debt payments. Further, a debt service reserve fund (a separate, or escrow, account that can be tapped into for unforeseen reasons, funded by annual payments) is usually not required, because of the low risk, so the total dollar amount of the bonds necessary to pay for the stadium or arena is lower. Thus, the total cost of the facility may be less than if higher-interest rate instruments are used.

A disadvantage of GOBs is that their use may limit the amount of other bonds that the city, county, or state can use for schools, bridges, and other projects. These political jurisdictions are limited in the total amount of bonds (or debt) that can be outstanding or owed, and debt ceilings vary across jurisdictions. Additionally, any voter approval that is needed can raise the total cost of the financing. It is not surprising that the use of GOBs may require a vote, because the funds to pay off GOBs are public dollars, mostly supplied by residents.

To explore the advantages and disadvantages of GOBs further, let’s consider whether they satisfy the three
equity principles. To do this, we must examine the source of the funds used to pay off GOBs. At the state level, sales taxes or income taxes provide the largest source of funds; for local governments, property taxes are usually the largest source of general funds, although in some situations sales taxes generate more revenue.

Obviously, GOBs do not satisfy the benefit principle, because everyone in a given jurisdiction pays for the facility, not just those who benefit. However, to the extent that property taxes pay off the GOBs and the facility helps to increase property values (this point is debatable and specific to each case), GOBs can come closer to satisfying the benefit principle. GOBs do satisfy the efficiency principle, because they are not burdensome or difficult to understand and cannot be easily avoided. They may or may not satisfy the horizontal and vertical equity principles, depending on whether the largest sources of funding for the general fund follow those principles. Property taxes may satisfy the vertical equity principle, assuming that the individuals who earn more income own higher-valued property and pay higher taxes.

An advantage of GOBs from the bond buyer’s perspective is that they are generally tax exempt, meaning that the buyer does not pay taxes on earnings from these bonds. This allows the interest rate on the bonds to be lower compared with taxable bonds. For example, the New York City General Obligation series (2008) offers a yield of 4.02%. On a taxable equivalent basis, that is the same as 6.18% for someone in the 35% tax bracket. (Earning 6.18% but having to pay 35% of it in taxes results in a 4.02% equivalent \(6.18 \times (1 - 0.35)\)). The City of Minneapolis used GOBs to cover 85% of the purchase of the Target Center in 1995. The construction projects to build facilities for the Jacksonville Jaguars, Nashville Predators, Seattle Mariners, and Tampa Bay Rays over the past few decades all used city, county, or state GOBs as a major financing vehicle. The revenues used to pay off these bonds have included hotel taxes, rental car taxes, food and beverage taxes, sales taxes, and others. If these were to fall short, the general fund would be tapped.
Tax-exempt auction-rate bonds can backfire

A number of recently built or refurbished sport facilities have been financed through tax-exempt auction-rate bonds. For auction-rate bonds, the annualized interest rate is set at auctions held every seven to 35 days. Typically, these bonds have lower interest rates than their fixed-rate counterparts because of the risk of the interest rate going up. This is similar to residential housing mortgages, where a borrower can opt for a fixed-rate mortgage at a higher rate than an adjustable rate mortgage (ARM).

Sport facilities in Louisiana, Indiana, New Jersey, Washington D.C., and Cleveland have been financed through auction-rate bonds issued by the respective city or state. Franchise owners have also issued these bonds, including owners of the New York Giants, New England Patriots, and Dallas Cowboys. As the fallout from the sub-prime mortgage crisis reached full swing in the late 2000s, the interest rates (and monthly payments) on these bonds skyrocketed. For instance, debt payments on $238 million of bonds sold for upgrades to the Louisiana Superdome, which totaled about $500,000 during January 2008, more than tripled to $1.8 million in February because the interest rate on the bonds increased from about 4% to 12%. The interest rate increased because, for the first time, the auction lacked bidders; investors were worried about the safety of these investments because bond insurers were suffering and the investors feared they risked failure. The bond insurance companies were stretched as they were forced to pay out on many of the bonds related to sub-prime mortgages.

The rate on $190 million of bonds sold by the New Jersey Sports and Exhibition Authority in November 2007 rose from 4.3% to more than 15% during one week in February 2008. Similar events occurred for Lucas Oil Stadium (Indianapolis Colts) and Cleveland Browns Stadium (now FirstEnergy Stadium).

Certificates of participation

A certificate of participation (COP) is an instrument that a government agency or non-profit corporation that is set up to build a facility will sell to one or more financial institutions to obtain the initial capital for construction. Then, the agency or non-profit will lease the facility either directly to the tenant(s) or to a facility operator and use the lease payments to pay off the COP.

Because COPs are backed by lease payments, they are riskier than GOBs and, therefore, offer a higher interest rate. However, they do not require a public vote, so they are often used because they circumvent direct decision-making by voters. They also typically do not count against the debt ceiling of the political jurisdiction, depending on applicable law. For instance, Miller Park in Milwaukee issued $78 million in COPs that were paid back, not by the team or facility operator directly, but through sales taxes.* This example highlights the flexibility in the source of payments for COPs. The flexibility was needed to circumvent a cap on public funding for construction. The COPs did not count against the cap.

Revenue bonds

Revenue bonds are a form of public financing that is paid off solely from specific, well-defined sources, such as hotel taxes, ticket taxes, or other sources of public funding. If the specific source of funding does not meet expectations, the bonds will not be paid off in full. Thus, when compared to GOBs, the interest rates are higher for revenue bonds, and a debt service reserve is necessary. Revenue bonds require a debt service coverage payment—an annual payment into an escrow account to cushion against the risk of shortfalls in the revenue sources that back the debt. Therefore, the total cost of using revenue bonds is much higher than that of GOBs, because of the added risk. An advantage of revenue bonds is that because the funding is from a narrower source than GOBs, revenue bonds can be tailored to satisfy the benefit principle, especially if a ticket tax is used. For sport-related construction, revenue bonds typically have terms of 15 to 30 years, generally do not require voter approval, and do not count against the debt ceiling of the political entity using them.

If the source of funding for the bonds is expected to grow over time (e.g., hotel tax revenues will increase because of increasing hotel rates and tourism), then variable interest bonds may be used, which require lower payments initially and higher payments nearer to the maturity of the bonds. An example of this was the funding for the new baseball stadium for the Miami Marlins, outlined in Exhibit 9.7. County revenue bonds of $300 million were sold and are being paid off from hotel bed taxes. These revenue bond payments start out low and rise over time, in conjunction with the expected increase in hotel rates, usage, and taxes collected over time.
A creative method to attempt to achieve the advantages of both GOBs (lower interest rates) and revenue bonds (satisfaction of the benefit or user pays principle) is to arrange that any shortfalls in revenue bonds will be backed by the general fund (thus nearly ensuring their payment). Essentially, this turns the revenue bond into a GOB, but the payments still come from a specific source, such as ticket taxes. Another method of raising the investment grade of revenue bonds is to require an “insurance wrap,” whereby the payments are insured. This method can reduce the interest rate of the bonds, but the insurance expense increases the costs.

Other examples of the use of revenue bonds in sport facility construction include the following:

- For Dolphins Stadium, $30 million in revenue bonds (out of $115 million in total financing) were issued and were paid off by the private sector.
- Riverfront Stadium, built in 1970 in Cincinnati, was paid for entirely with $44 million in revenue bonds that were backed by stadium revenues (team rent and parking).
- Jacobs Field (now Progressive Field) in Cleveland was built with stadium-backed revenue bonds that financed just over 10% of its cost.
- For the Nashville Predators’ home arena, financing included $77.5 million in revenue bonds backed by a sales tax on tickets and merchandise.

EXHIBIT 9.7 Example of variable interest bonds.

<table>
<thead>
<tr>
<th>MARLINS PARK (MIAMI MARLINS)</th>
<th>Range of Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>County bonds—hotel bed taxes (county)</td>
<td>$300,000,000 (1)</td>
</tr>
<tr>
<td>County bonds—property taxes (county)</td>
<td>$50,000,000 (2)</td>
</tr>
<tr>
<td>City of Miami</td>
<td>$25,000,000 (3)</td>
</tr>
<tr>
<td>Team</td>
<td>$120,000,000 (4)</td>
</tr>
<tr>
<td>Team borrowed from County</td>
<td>$35,000,000 (4)</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$530,000,000</td>
</tr>
</tbody>
</table>

(1) Three different hotel bed taxes were used.
(2) County bonds being paid off by property taxes.
(3) The City committed $13 million from hotel bed taxes and another $12 million for improvements.
(4) The team paid $120 million, paid an additional $6 million toward construction, and borrowed an additional $35 million from the County.

The team pays rent of $2.3 million (increasing 2% per year) and $10 per parking space. An additional cost of $115 million was incurred for the parking complex and infrastructure, paid for by the City.

Lease revenue bonds are a version of revenue bonds in which the revenue stream backing the payment of the bonds is a lease. For instance, a 20-year naming rights deal (which is a contract or lease) may be the source of funds to pay off lease revenue bonds, as opposed to a tax on ticket sales (which is not a lease, but an expected or forecasted revenue stream). As stadiums and arenas have become able to generate more revenues through better amenities, financing through lease revenue bonds has become more common. These bonds are often backed by luxury suite or premium seating revenues, concessions contracts, or sponsorship deals, as well as naming rights deals. Normally, these would be considered private financing sources (discussed later). These bonds illustrate how a partnership between public and private sectors can create synergies—the public entity can float a low-interest-rate bond, and the private entity can generate funding for the bond’s payment because of demand for its sport team.

An example of lease revenue bond financing in recreation comes from Montgomery County, Maryland, which built a swim center with lease revenue bonds that were paid for through a lease between the county and the financing authority established to manage the facility. The county’s lease payments cover the principal plus interest on the bonds. The Baltimore Ravens’ football stadium was paid for through state lease revenue bonds backed by proceeds of the Maryland state lottery and personal seat licenses.

**Tax increment financing and property taxes**

Proponents of tax increment financing often claim that the public does not pay for this source of facility
funding. The rationale for this claim is that with tax increment financing (TIF), only “incremental” (additional or new) taxes generated from a certain source (traditionally property taxes) finance the facility, and those incremental tax revenues would not exist without the facility. The original uses of the taxes collected at the base value are still funded—only the additional tax revenues are used to pay the facility costs. One might argue that a second-best use of the property would also be able to generate some of those incremental tax revenues, but it is true that existing public revenues are not used for the financing. That is TIF’s main objective.

For this type of financing, a base year and tax assessed value are determined. After the facility is built, any increases in tax revenues—assumed to result from the improvement of the area—are used to pay off the tax increment bond. This method captures the assessed valuation growth within a certain TIF district (a predefined area that is geographically related to the facility being built). If the area does not witness increased tax revenues, then the TIF bond may fail. That is, essentially, how tax increment financing works. Like revenue bonds, TIF bonds are riskier than GOBs.

Because the surrounding TIF district needs to see increases in property values, tax increment financing was historically used to help revitalize blighted areas within large urban communities. Mixed-use development around the stadium is expected to increase property values and thereby help pay off the TIF financing. The risk is, of course, that property values might decline. The new arena for the Detroit Red Wings was set to be partially funded from TIF property taxes, capped at $12.8 million per year (see Exhibit 9.8).

EXHIBIT 9.8 Example of tax increment financing.

<table>
<thead>
<tr>
<th>RED WINGS ARENA (DETROIT RED WINGS)</th>
<th>Range of Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property taxes</td>
<td>$219,068,541 (1)</td>
</tr>
<tr>
<td></td>
<td>$34,165,202 (1)</td>
</tr>
<tr>
<td>Team</td>
<td>$196,766,257 (2)</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$450,000,000</td>
</tr>
</tbody>
</table>

(1) $450 million worth of bonds would be sold and partially paid off by capturing TIF property taxes.
(2) The team is associated with a development company that would develop the surrounding land and pay part of the stadium costs.

An initial proposal for a new sport arena and entertainment district in Sacramento offered an option to rely on TIF. The TIF option was to include the incremental property taxes, utility taxes, sales taxes, and hotel taxes collected in the 240-acre entertainment district. Ziets (2002) states,

The risks with this kind of a development-based financing plan are two-fold: (i) the market may not bear what is required by the developer, in which case the team may struggle to finance the development and the City may not realize sufficient taxes; and/or (ii) absent a specific requirement to develop, the hoped-for development may never materialize thus resulting in a shortfall in tax revenues. As a result, cities typically will secure any bonds backed by the incremental taxes with a general fund pledge or a more secure stream of revenues. (p. 108)

For AT&T Park (originally Pac Bell Park), often cited as being entirely privately financed, financing included $15 million of TIF funded through the Redevelopment Agency in San Francisco, while the rest of the stadium’s cost was privately financed. This is an example of stadium construction financed without using existing tax revenues. Because of the substantial property value increases in San Francisco since construction of the stadium began, this TIF project has presented virtually zero risk.

**Sales tax**

Sales tax revenues are the most common source of public financing for sport facilities. Some facilities use only sales tax revenues for the public portion of financing. Such projects have included facilities built for the Arizona Diamondbacks, Colorado Rockies (see Exhibit 9.9), Phoenix Suns, Tampa Bay Buccaneers, Arizona Coyotes, and Minnesota Wild. A number of methods are available for using sales taxes to pay for facilities. One is to raise the sales tax rate a small amount and “pay as you go.” Maricopa County, in Arizona, increased the county sales tax by 0.25% from April 1995 through November 1997, raising $238 million during the construction period. This covered most of the public financing for Bank One Ballpark (now Chase Field).

Another method is to issue government bonds and pay them off through an increase in the sales tax. In this
method, the payment period is longer (and more interest is paid), but the cost each year is lower than with the “pay as you go” method. Small increases in sales taxes do not impose a large burden on any one specific person or group, so strong opposition is often less likely—whether or not it is justified. For the baseball stadium built in 1992/1993 in Arlington, Texas, for the Rangers, the public financing package included $135 million in 15- and 20-year bonds. Sales tax revenues grew more quickly than anticipated, and the bonds were paid off after just ten years. A similar result occurred in Denver, where the 18-year bonds took only six years to pay off (see Exhibit 9.9). In another example, more than half of the cost of the 2001–2003 renovations to Lambeau Field were paid for by a one-half cent sales tax increase in Brown County, Wisconsin, whose proceeds paid off the long-term bonds in 2011, instead of the projected year of 2021.

EXHIBIT 9.9 Sales tax funding for facility construction.

<table>
<thead>
<tr>
<th>COORS FIELD (COLORADO ROCKIES)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Denver metro area sales tax (0.1% increase)</td>
<td>$72,000,000 (1)</td>
</tr>
<tr>
<td>Denver metro area sales tax bond issuance (0.1% increase)</td>
<td>103,000,000 (2)</td>
</tr>
<tr>
<td>District investment earnings</td>
<td>15,000,000 (3)</td>
</tr>
<tr>
<td>Rockies equity</td>
<td>12,000,000</td>
</tr>
<tr>
<td>Premium seating revenue</td>
<td>16,000,000</td>
</tr>
<tr>
<td>Concessionaire fees</td>
<td>7,000,000</td>
</tr>
<tr>
<td>Equipment lease proceeds</td>
<td>6,000,000 (4)</td>
</tr>
<tr>
<td><strong>Total funding sources</strong></td>
<td><strong>$231,000,000</strong></td>
</tr>
</tbody>
</table>

(1) Collected during the period of construction of the facility; spans six counties.
(2) Set to be paid back over the 18-year period of the bonds. Due to growth in sales taxes collected, this was paid off after six years.
(3) The metropolitan baseball district, which owns the facility, invested $15 million.
(4) Equipment purchased by the district and leased to the team.

Still another method is to fund a facility through sales taxes limited to those collected from the facility itself or from a district in the immediate vicinity. This may include a diversion of current sales taxes related to the immediate region or funding through new sales taxes that will be collected at the facility, with or without an increase in the sales tax rate. For the Seattle Seahawks’ football stadium, sales taxes collected at the stadium complex are being used to pay off over $100 million in financing.

Tourism and food and beverage taxes

As voters have become more adamant in opposing large amounts of public support for sport facilities, proponents have been reducing the use of sales taxes and instead have begun to tax non-residents. Tourism taxes include taxes on hotel stays and rental cars, and they may also include food and beverage taxes in certain districts. Under these plans, visitors to the area, not local residents (to the extent that local residents do not rent cars locally) help finance the stadium. The success at the ballot box for these types of financing mechanisms has been relatively high. However, as Baade and Matheson (2006) suggest, residents of one city will be tourists in another city, and they may then face high hotel and car rental taxes. Another drawback is that the number of tourists to a city may decline as the cost of visiting that city increases. Event planners (including those in the sport industry) are especially sensitive to hotel and rental car taxes when they are planning major, heavily attended events.

Nonetheless, these taxes are very popular and have been used to finance facilities for the Houston Astros (2% hotel tax increase and 5% rental car tax increase), Tampa Bay Rays (1% hotel tax increase), St. Louis Rams (3.5% hotel tax increase), Seattle Mariners (2% rental car tax increase), and Indianapolis Colts (3% increase in hotel taxes and 2% increase in car rental taxes), to name a few.

King County (Seattle) sold bonds supported by an increase in the food and beverage (F&B) tax of 0.5%. It was the single largest source of financing, providing $150 million for the stadium. Marion County, containing Indianapolis, raised F&B taxes by 1% and expected to generate $274.5 million to pay off debts on Lucas Oil Stadium (see Exhibit 9.10).
These taxes generally fail the benefit principle, because tourists (as well as hoteliers and car rental operators) are not necessarily the users of sport facilities. Although F&B taxes do not satisfy the benefit principle, they do typically fulfill some sense of vertical equity, in that people with higher incomes spend more on food and beverages outside the home and, hence, pay a larger share of the taxes than people with lower incomes.

**Sin taxes**

Sin taxes are another type of financing source that generally receives less opposition than others, presumably because the items being taxed are considered socially undesirable. These taxes are regressive, because people with low incomes tend to spend a higher proportion of their income on cigarettes and alcohol, relative to those with high incomes. The taxation of cigarettes and alcohol is sometimes claimed to have a side benefit of reducing smoking and drinking, but this assertion is paradoxical, because if the use of cigarettes and alcohol were to decline significantly, insufficient tax revenues would be generated to make sin taxes a feasible financing mechanism.

**EXHIBIT 9.10 Facility funding through tourism and food and beverage taxes.**

<table>
<thead>
<tr>
<th>LUCAS OIL STADIUM (INDIANAPOLIS COLTS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team</td>
</tr>
<tr>
<td>City for termination of Colts’ lease</td>
</tr>
<tr>
<td>Marion County F&amp;B tax (up 1%)</td>
</tr>
<tr>
<td>County hotel tax (up 3%)</td>
</tr>
<tr>
<td>County car rental tax (up 2%)</td>
</tr>
<tr>
<td>Sports development tax</td>
</tr>
<tr>
<td>Sporting event ticket tax (up 1%)</td>
</tr>
<tr>
<td>Restaurant tax (up 1%)</td>
</tr>
<tr>
<td>Sale of Colts license plates</td>
</tr>
<tr>
<td>Total funding sources</td>
</tr>
</tbody>
</table>

*Note:* Team will retain $121.5 million naming rights (20-year agreement).
Team retains all game day revenue and half of revenue from non-Colts events. City pays all operating and maintenance costs.

For construction of the baseball stadium where the Cleveland Indians play, financing included a 15-year tax on cigarettes and alcohol. Specifically, $3 per gallon was charged on liquor, 16 cents per gallon on beer, and 4.5 cents per pack of cigarettes. Minnesota used a cigarette tax as a small portion of its new NFL stadium financing. These taxes remain less common than tourism taxes.

**Sale of government assets**

Local, regional, and state governments own a great deal of land, and at times they determine that its best use is in the hands of private industry. Some sport facilities have been partially financed through government sales of land, with the proceeds serving as a direct source of funds. Land may also be an indirect source of financing (as discussed later in the chapter).

The Charlotte Bobcats’ arena was financed partially through the local government’s sale of land for $50 million and other assets for $25.8 million. Wayne County, Michigan, generated $20 million from the sale of some of its properties, to be used for the financing of Ford Field, where the Detroit Lions play.

**State appropriations**

Many sport facilities receive some funding from their state governments. Local residents might be apt to back a stadium project if they know that some money is coming from the state. For instance, Miller Park received
$36 million from the State of Wisconsin, $18 million each from the county and city, and additional funding from other sources (some of which were also public). The St. Louis Rams’ stadium received 50% of its public financing from the State of Missouri. Similarly, the Tennessee Titans’ facility received $55 million from the State of Tennessee, through general obligation bonds.

Revenues from tickets and parking
To satisfy the benefit principle, many facility financiers are turning to ticket taxes and parking revenues or taxes to help pay for stadium construction and maintenance costs. Typically, these sources do not cover the bulk of the financing, but they can make an important contribution. Many political jurisdictions (cities, townships, counties, and states) require a vote to raise taxes, but in some situations a “surcharge” does not require a vote. The economics of a tax versus a surcharge are not much different, yet the law in many cases does not require a vote for a surcharge. Facilities for the Mariners, Phillies, Pacers, Browns, Eagles, and Lightning have been partially financed through ticket taxes at the facility or general admission taxes at all local sporting events. At NRG Stadium in Houston, fans pay a 10% ticket tax (not to exceed $2 per ticket) and a $1 ticket surcharge. In many cases, local sales taxes also apply to the purchase of tickets. For the Arizona Cardinals’ football stadium, a $4.50 ticket surcharge is generating $35 million in stadium financing.

Parking taxes or surcharges function in the same way as ticket taxes. City parking revenues generated over $10 million of the $157 million cost for the Amalie Arena, home of the Tampa Bay Lightning. NRG Stadium has a 10% parking tax. At the arena for the Minnesota Wild, game-day parking revenues are helping to pay off its $65 million bond from the City of St. Paul. At Ford Field, the local sport authority (set up to build and manage the local sport facilities) sold the rights to parking revenues to the nearby Detroit Tigers for $20 million, even though Ford Field is home to the NFL’s Detroit Lions. The Tigers used the revenue for stadium funding. The Seahawks’ stadium is expected to generate $4.4 million in parking tax revenues, to fund about 1% of total stadium costs. The City of Sacramento plans to rely on parking revenues from its city-owned parking garages to help pay off a planned $258 million bond sale covering its portion of financing for the new Golden 1 Center. The backup plan, if needed, is to rely on hotel taxes.

Lotteries and gaming revenues
State-run lotteries and local gaming establishments are creative, non-sport sources of financing. The Baltimore Orioles were one of the first teams to play in a new stadium built during the latest wave of stadium financing. In 1992, the Orioles began play at Camden Yards, for which most of the construction costs were financed through lease revenue bonds and notes backed by special sport-themed state lottery tickets. The Seattle Mariners and Seahawks play in facilities that are funded partially from state lottery revenues. For Safeco Field, home of the Mariners, $50 million in bonds were secured by lottery revenue related to newly created lottery games. Public funding for the Seahawks from sport-related lottery games amounted to nearly $128 million.

The Pittsburgh Penguins flirted with moving to Kansas City but stayed in Pittsburgh because a financing deal was put in place that included approximately $7.5 million per year, for 30 years, in payments from PITG Gaming’s casino income. An additional $7.5 million per year comes from the State of Pennsylvania’s slot machine economic development fund.

Lottery and gaming sources of funding are generally considered regressive, failing the horizontal equity principle because people with lower incomes play the lottery or engage in gaming activities more often, and spend a higher proportion of their income or wealth in doing so, than those with higher incomes. Proponents of the use of lottery and gaming revenue often note that these activities are optional.

Player income taxes
Individuals in favor of charging athletes of visiting teams an income tax draw a parallel to the use of non-resident taxes, such as tourism taxes, to help fund a sport facility. It seems logical that the athletes who benefit from the facility should help to fund it. Many states and cities tax the income of visiting players, usually charging between 1% and 4% of the salary earned during the athlete’s time in the state or city. Most of the revenues go into the political jurisdiction’s general fund. However, the City of Pittsburgh uses the revenue directly to pay off the bonds on its baseball and football stadiums (PNC Park and Heinz Field). Opponents of these taxes argue that no other visiting entertainers are taxed—only athletes in major professional sports. Because minor league athletes and those outside the “Big 4” are not necessarily taxed, this tax raises questions of fairness, although it satisfies the vertical equity principle.

A public financing proposal in 2003 in Washington D.C. included a player income tax that was projected to
generate approximately $5 million per year in funding, which was to go directly to paying off the public’s portion of stadium debt. The financing plan ultimately chosen did not include this tax.

Utility and business license taxes

Utility taxes are state and local taxes on energy consumed, which are collected along with customers’ utility payments. General business taxes include state and local corporate income taxes and sales and use taxes collected from businesses. The Washington Nationals play in a baseball stadium that is funded partially by $14 million per year in general business taxes (collected from businesses with more than $3 million in annual revenue) and $15 million per year in utility tax revenues. For the FedExForum, home of the Memphis Grizzlies, financing included $30.4 million in revenues from the city’s electric utility. Instead of the utility paying franchise, property, or sales taxes to the City of Memphis, Memphis Light, Gas, and Water (MLGW) provides payments in lieu of taxes (PILOT). Essentially, the City is simply using some of the payments that it receives from MLGW to pay for the stadium. PILOT financing is common when the land used for a stadium does not generate property taxes (because it is owned by the government). The Yankees’ new stadium used PILOT financing for most of the cost of the stadium. The tax revenues related directly to the stadium (e.g., sales taxes) have been directed toward paying off the New York City bonds that were sold in 2006 and 2009, as shown in Exhibit 9.11.

Reallocation of existing budget

In a very few cases, cities have funded sport facilities through their existing budgets, either by reallocating budget dollars or by assuming new incremental revenues from a specific source (e.g., hotel taxes). This funding method is uncommon because the public is often not willing to reduce funding for existing government programs in order to build sport facilities. Allegheny County, Pennsylvania, partially funded new stadiums for the Pittsburgh Pirates and Steelers through reallocation of its existing Regional Asset District (RAD) budget (which included local revenues from certain sales taxes). Allegheny County was successful in this approach, in part because the RAD was already funding the existing Three Rivers Stadium. The savings achieved by demolishing Three Rivers Stadium were applied to the new buildings. The same concept was used in Philadelphia, when the city funded Veterans Stadium. This approach may be appropriate in any situation where the public sector funds operating costs of the current facility. In other situations, states have simply budgeted for these projects in their general fund. Pennsylvania, Tennessee, and Ohio are examples of states that have assisted local municipalities in funding sport facilities through budget allocations or through debt as part of the state’s capital budget.

EXHIBIT 9.11 Example of PILOT financing.

<table>
<thead>
<tr>
<th>YANKEE STADIUM (NEW YORK YANKEES)</th>
<th>Range of Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of New York Bonds (2006)</td>
<td>$942,500,000 (1)</td>
</tr>
<tr>
<td>City of New York Bonds (2009)</td>
<td>$259,000,000 (1)</td>
</tr>
<tr>
<td>City interest earnings</td>
<td>$46,400,000 (2)</td>
</tr>
<tr>
<td>Yankees cash payment</td>
<td>$77,000,000</td>
</tr>
<tr>
<td>Equity contributions (Yankees)</td>
<td>$225,500,000 (3)</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$1,550,400,000</td>
</tr>
</tbody>
</table>

(1) All tax revenues related to Yankee Stadium are used to pay off the bonds, making this a PILOT (payments in lieu of taxes) financing plan.
(2) Interest earned by the City after selling the bonds, during the period of construction.
(3) Yankees equity contributions come from new revenue streams in the new stadium (e.g., suites and sponsorships).

The team retains all revenues (including naming rights), but pays operating costs and PILOTs and makes an annual lease payment to the City of $10 (enabling the team to obtain rev. sharing from MLB).

Indirect sources of public financing
Indirect sources of public financing include non-cash sources (land donations, infrastructure improvements) and exemptions from payments such as property or sales taxes (i.e., tax abatements).

Land donations. The San Francisco 49ers struggled in 2008 to develop a stadium plan for a location in the San Francisco Bay Area. In June 2008, voters in the city approved an advisory measure (a non-binding measure, similar to a survey of residents) to allow a developer to use 720 acres of City-owned land for free to build a football stadium and other structures. A common misperception about arrangements such as this one is that if a city or county provides land for free for the construction of a sport facility (whether it is given outright to the team owner or is leased), the cost is zero, because no dollars change hands. However, the actual cost to the political jurisdiction includes the opportunity cost—the lost opportunity to do something else with the land, such sell the land to a private entity at a market price. Most stadium financing plans have some form of opportunity cost, although it is rarely mentioned as part of the total cost of the facility.

Perhaps a more important type of “land donation” is the government’s use of eminent domain to obtain access to land owned by private citizens. In November 2009, the New York State Court of Appeals ruled that New York City could secure the land needed for the New Jersey Nets’ new basketball arena in Brooklyn by forcing current residents and businesses to move and paying them a fair market value for their real estate.

Infrastructure improvements. Infrastructure improvements to accommodate new facilities—such as freeway exits, road expansions, parking lot entrances and exits, and sewer and electrical systems—are most often paid for by local and state governments (or sometimes the federal government, through special transportation grants). These costs are rarely included in the overall cost of financing a facility. One could argue that any new use of land would require some form of infrastructure improvements, so these should not be considered when sport facility construction is compared to other options. However, this would be true only if the developer would not be paying any of these costs and if the cost of infrastructure improvements would be the same for various alternative uses. The City of Orlando paid for the $100 million in land and infrastructure improvements needed for the new arena for the Orlando Magic, as shown in Exhibit 9.12.

Tax abatements. Tax abatements exempt the beneficiary from paying certain taxes, such as property or sales taxes. Thus, the local government is helping to finance the stadium by not charging the franchise taxes that would presumably have been paid by an alternative user of the space. The City of Sandy, Utah, for example, provided a $10 million property tax rebate to the ownership group that built an MLS stadium there.

Most sport facilities are publicly owned and leased to the team that plays there, which exempts the team from paying property taxes altogether. As will be discussed in Chapter 12, many states are reviewing these situations to determine whether these are actually private businesses operating in public buildings. In Florida, sport teams are now required to pay property taxes (although each county can lower the property tax payments or even reduce the assessed value of the facility). The Columbus Blue Jackets pay property taxes that amount to about half of what would normally be paid based on the county assessor’s valuation of Nationwide Arena.

EXHIBIT 9.12 Examples of land and infrastructure improvements paid for by a city.

<table>
<thead>
<tr>
<th>AMWAY CENTER (ORLANDO MAGIC)</th>
<th>Range of Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team sources</td>
<td>$70,000,000 (1)</td>
</tr>
<tr>
<td>County bonds</td>
<td>$310,000,000 (2)</td>
</tr>
<tr>
<td>City</td>
<td>$100,000,000 (3)</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$480,000,000</td>
</tr>
</tbody>
</table>

(1) The team can choose how to cover this, but it typically comes from new suites and sponsorships.
(2) This is covered by Tourist Development Tax increase of 6%. Team has to guarantee $100 million of the bonds.
(3) The City will pick up the cost of land and infrastructure improvements.
City of Orlando keeps non-Magic event ticket revenue. Team covers construction cost overruns. Team will pay $1 million per year in rent for 30 years and an additional $1.75 million per year (increasing at 3% per year) in additional fees.

The Houston Texans, an NFL team, play in NRG Stadium, whose owners receive a sales tax rebate to cover part of the cost of the stadium. The Jaguars received similar financing in Jacksonville, Florida. The Miami Marlins are also receiving a sales tax rebate, on tickets and concessions in their new facility, that is expected
to provide $2 million per year that the team can put toward stadium financing.

Chapter Appendix 9.A summarizes some of the more common forms of public financing for stadiums and arenas.

Calculating Public Payments for Stadium Financing

To calculate the annual payment for a general obligation bond—for instance, so that public officials and residents will understand the annual cost—we use a payment schedule table similar to the one for the Minnesota Twins ballpark (shown in Exhibit 9.13). That project has a relatively simple financing mechanism. Hennepin County is paying for 75% of the stadium and related infrastructure through a 0.15% sales tax increase. Tax-free county bonds worth a total of $392 million were sold and are being paid back over 30 years. The payment schedule in Exhibit 9.13 shows the annual payments on the 30-year bonds, which are paying an average 4.98% interest rate. Note that the total payments (given at the bottom of the table) far exceed the original cost, because the interest is being paid over a lengthy period of time. To avoid having to pay $392 million during the construction period, the residents will pay only $25.4 million per year, but will have to do so for 30 years.

EXHIBIT 9.13 Example payment schedule for a new Minnesota Twins ballpark.
The annual payments are constant, but the portion of those payments that goes toward paying off principal (as opposed to interest) increases, until the final year, when the entire project is paid off.

To make the payment schedule more meaningful, we can divide the annual payment by the population of the political jurisdiction paying for the venue, to get a sense of what it is costing per person to finance the stadium. Hennepin County had a population of 1,122,093 in 2008. Thus, the payment per person began at $289...
over $22 per year and will decrease to under $20 per year, assuming a population growth rate of 0.5%. See the far right column in Exhibit 9.13.
PRIVATE FINANCING

A fair question to ask is: why aren’t sport facilities 100% privately financed, like the buildings of other industries? As discussed above, one reason is that private investors may not be willing to build spectacular palaces that lure many high-profile events, because much of the revenue will flow to businesses outside the building. For this reason, the public has to contribute to the construction. But what is the private return on new sport facilities?

Private Return on New Facilities

As discussed at the beginning of this chapter, private returns on new sport facilities can be quite substantial. Put in terms of attendance, Coates and Humphreys (2005) show that the impact is largest in Major League Baseball, with a typical franchise selling about 2.5 million incremental tickets over the eight seasons that follow the opening of a new facility. An NFL team sells only about 138,000 additional tickets over a five-year period (the likely reason for the lower number is that most NFL teams sell out even in old stadiums). In terms of return on investment, Baade (2003) shows that MLB teams earn an ROI of about 20.5% when they build new stadiums. For a new football stadium for the Washington Redskins, analysis showed that the maximum private investment that would break even would be only $155 million. Anything beyond that would create a loss for the investor. To get a $500 million stadium built, the public would have to finance 70% of it.

Private Financing Sources and Techniques

The sources of private financing are unlimited, in the sense that an owner can use whatever money he or she possesses, if he or she so chooses. Billionaire owners can tap their private net wealth. However, many choose to tie the financing sources to the franchise itself, rather than to their own finances. For instance, most stadium financing packages include annual rent payments from the team to the owner of the facility. However, annual rents range from zero to a few million dollars (e.g., the Texas Rangers pay $3.5 million per year). Rents, therefore, cannot cover the entire private facility financing obligation.

Contractually obligated income

Contractually obligated income (COI) is a revenue stream that a team receives under multi-year contracts. For example, the San Francisco Giants signed luxury suite holders to five- and seven-year contracts and club seat holders to three- and five-year contracts, thus nearly guaranteeing those revenue streams. Other possibilities for COI are multi-year pouring rights sold to concessionaires, naming rights, and sponsorship. Often, it is important that the team secure these revenue streams up front (or sign contracts with terms of five to seven years or more). These revenue sources may serve as collateral for loans. For instance, a team can pledge as collateral the revenues from naming rights, sponsorship rights, pouring or concessionaire’s rights, premium seating deposits, or ticket surcharges. In 2000, the San Francisco Giants borrowed $170 million from Chase Manhattan Bank with collateral from naming rights, signage, and other COI. The team also collected charter seat license revenue of approximately $70 million. In 2013, the San Francisco 49ers signed a 20-year naming rights deal with Levi Strauss for $220 million, of which 70% will go to help pay off the government bonds sold to get construction underway (Exhibit 9.14). The 100% privately financed MetLife Stadium, opened in 2010, hosts both the New York Jets and the New York Giants. MetLife is paying $425 million over 25 years for the naming rights.

Asset-backed securities

Instead of borrowing from a bank, a franchise may package guaranteed COI or expected revenue streams together and sell bonds based on these assets, known as asset-backed securities (ABS). This technique, called securitization, is most often used with financial instruments that pay interest, instead of COIs or revenue streams. Because COIs provide known and consistent payments, they can be securitized in this way, as can other predictable revenue streams. Staples Center in Los Angeles was financed partially through securitization. The “security” is derived from the naming rights revenue from Staples, ten corporate founding partners’ agreements, two concessions agreements, premium seat revenues, a ticket sales contract with TicketMaster, and the revenues from 101 of 160 luxury suites. The naming rights deal alone is reportedly worth $100 million over 20 years. The $315 million in bonds are taxable, pay an interest rate of 7.653%, and mature in 27 years.
EXHIBIT 9.14 Example of naming rights revenue use in stadium funding.

<table>
<thead>
<tr>
<th>LEVI’S STADIUM (SAN FRANCISCO 49ERS)</th>
<th>Range of Sources</th>
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<tr>
<td>G-4 loan from the NFL to the 49ers franchise</td>
<td>$200,000,000 (1)</td>
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<tr>
<td>Naming rights revenue</td>
<td>$154,000,000 (2)</td>
</tr>
<tr>
<td>Tax increment bonds</td>
<td>$42,000,000 (3)</td>
</tr>
<tr>
<td>Parking garage revenue bonds</td>
<td>$17,000,000 (3)</td>
</tr>
<tr>
<td>Electric utility contribution</td>
<td>$20,000,000 (3)</td>
</tr>
<tr>
<td>Hotel tax increase (2.0%)</td>
<td>$65,000,000 (3)</td>
</tr>
<tr>
<td>Team sources such as PSLs, suites, and sponsorships</td>
<td>$613,000,000</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$1,111,000,000</td>
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</table>

1. The NFL has created its fourth loan vehicle (G-4) used to help finance stadium construction.
2. Levi’s agreed to pay $220 million over 20 years for naming rights to the local government. The team gets 30% of that.
3. These are local government sources of revenue.
   Construction and operating cost overruns are paid for by the team. The team will pay $30 million per year in stadium costs but get half of non-NFL event revenue.
PUBLIC/PRIVATE PARTNERSHIPS

As Perry (2002) notes, the dominant paradigm going forward in stadium financing is public/private partnerships, with the major tenant (e.g., the team) generating equity via stadium-related revenues and additional capital provided by a municipal bond that is also backed by stadium revenues. This paradigm does not preclude the use of revenues not directly related to the stadium, such as hotel and car rental taxes, but it places the onus of payment on those who use and benefit from the facility. A public/private partnership is essentially a co-production of a sport facility with the goal of producing surplus value that would not be produced by either partner working alone. For example, a private entity might have difficulty improving the ingress and egress for a new facility without government cooperation. Similarly, a government entity is not likely to be in a position to maximize the revenues within a new facility.

As Ziets has noted (2002), the trend in funding of new sport facilities appears to be shifting away from tax increases. Public officials are now looking to alternative sources of capital, including

- taxes generated directly from the facility, the team, players, and other facility users or vendors;
- taxes generated from redevelopment surrounding the facility; and
- special assessments in a uniquely identified sports and entertainment district.

The most compelling justification for a strategy of this type is that, in effect, the users or beneficiaries who frequent the district fund the facility over time through their use of the district. These mega-real estate projects are often developed by partnerships of public and private entities. For instance, the public entity may set up special tax districts to collect revenue to help pay for the district financing and may provide infrastructure for the area (e.g., roads, water, and electricity). The private developer might build the facility and the surrounding district, with the help of many private businesses.

The issue of who pays—along with many others—is a matter of public policy. This section discusses, first, the sometimes congruent but often conflicting goals of public and private parties and, second, the public policy issues that affect public/private partnerships related to facility financing.

Goals of Public versus Private Parties

Public and private parties in partnership focus on different goals. Franchises are concerned with league restrictions, site/design control, facility control/management, revenue control, and cash flow. Most leagues restrict the debt ratio that a team may establish. For instance, an NBA team can have at most $175 million in debt, whereas an NHL team can have debt up to half of the franchise’s value (Kaplan, 2008).

The financing goals of team owners are to maximize contractually obligated income and minimize debt service payments and coverage requirements. Team owners also desire a strong voice in the design of a facility in order to maximize COI, even if they are paying a minority of the cost of construction. The revenue potential of a sport facility is affected by the number and design of luxury suites, club seats, food venues, and so forth. Often, the owner will advocate a higher total cost, in order to provide better amenities and generate better contracts for luxury seating, than the government counterpart or partner will favor.

In the past, team owners did not manage the publicly owned facilities in which their teams played. In recent decades, team owners have desired complete management of the sport facility. This allows them not only to control scheduling for their teams but also to schedule other events, such as family shows, motorcycle or monster truck events, and professional wrestling. Many leases provide for the team owner to retain most, if not all, of the revenues generated by the facility. Management of the facility and control over revenue are complementary. Team owners have done a much better job of getting the most use out of facilities than have government managers. The management of facilities is currently an issue in Japan, where local government owns and operates most buildings, and there is no strong push to maximize net revenues flowing from the buildings.

The financing goals of government in these partnerships are to maximize the credit quality of pledged revenues, maintain debt service coverage, and maintain a reserve fund. Government agencies tasked with overseeing sport facilities also care about resource allocation, the amount of public financing required, the impact on the government’s borrowing credit, the government’s share in the upside of a facility (e.g., revenues from naming rights, parking, and rent), and the possibility that the team might relocate if the facility is not built.

The question of resource allocation is always of concern to local and regional governments. Is $200 million of the public’s money better spent on a sport facility or on a new library and school? As discussed above, there may or may not be justification for spending millions of dollars from public coffers on a sport facility.
Most cities limit how much outstanding debt they will take on. Public financing that is to be paid back from sources other than the general fund, such as sources related to the stadium itself (e.g., ticket taxes and parking revenues), does not typically count against a city’s debt limit. Washington D.C. used revenue bonds rather than general obligation bonds to help finance the Washington Nationals’ ballpark. One of the reasons for the use of revenue bonds may be that they do not count against the City’s debt limit.

When the Cleveland Browns relocated to Baltimore to become the Baltimore Ravens, the City of Cleveland immediately went to the NFL with a request for an expansion team for the city, which it received a few years later. The cost to the public of building a stadium for the expansion team was approximately $200 million (another $100 million was private money). According to people familiar with the situation, to keep the Browns from moving to Baltimore would have cost approximately $190 million (and this likely would not have resolved the owner’s personal desire to move).

Public Policy Issues and Public/Private Partnerships

Before policy makers determine the type of financing sources to be used in a public/private partnership, they must consider some important issues in regard to financing, such as the following:

- Who will own the facility?
- Should the public financing package be put to a vote?
- What should be the payment terms?
- Who will be responsible for cost overruns?
- Who will pay the costs of and keep the revenue from future revenue streams?
- What sources of public financing can be used?
Where do we start? The mayor knows

In the early stages of a feasibility study to build a new arena for the Sacramento Kings, the mayor of Sacramento noted that the following issues had to be addressed before any type of public/private financing partnership could be determined:

1. Which sources of financing would require voter approval and which could be passed by the local government without a vote?
2. Of the possible financing sources, who would pay for them—would users of the arena pay, or local residents, or tourists, or local businesses?
3. Would the arena be paid for now, or in the distant future with government bonds of 20- or 30-year terms?
4. Who would be responsible for cost overruns or financing shortfalls?
5. Who would pay the costs of selling the various revenue streams at the arena (naming rights, sponsorships, luxury suites, and so forth), given that the City would own the arena, but the team would manage and operate it?
6. Between the City and the team, who would keep which revenue streams, such as parking, concessions, and naming rights?

Public policy analysis of stadiums projects focuses on these and other essential questions.

Ownership

Most likely, the first question that policy makers will consider is who will own the facility: the major tenant (or other private organization) or the city, county, state, or a combination thereof? Most facilities are owned by a public entity, often a joint authority of multiple political jurisdictions. For example, the Oracle Arena in Oakland, California, is owned by the Oakland-Alameda County Coliseum Authority, a joint authority of the City of Oakland and Alameda County.

Why would a public entity own a facility? The most obvious reason relates to property taxes. Public entities (i.e., cities or stadium authorities) do not pay property taxes, but private businesses do. For a $475 million stadium sitting on $25 million worth of land, a 1% property tax would cost about $5 million per year to the stadium owner. The franchise saves $5 million per year in property taxes when the city owns the stadium and leases it to the major tenant. As discussed in Chapter 12, some states are changing these laws to begin charging the major tenant a property tax. Another reason that a city might own a stadium is that it has paid most of the cost of building the structure and can use it for additional events. In the end, however, cities often allow the team to manage the entire facility and all of its events. An example is the new Dallas Cowboys stadium in Arlington, Texas, renamed AT&T Stadium in 2013 after a naming rights deal was arrived at worth a reported $17 million to $19 million per year.

Voter approval

A second important decision for policy makers is whether the public financing package should be voted upon by local residents or decided upon by politicians without a popular vote. Some sources of financing, such as raising sales taxes or hotel taxes, require voter approval in most jurisdictions, but reallocation of existing sales tax revenues often does not require voter approval. There have been instances when voters turned down a public financing package, but a version was approved outside the voting process. In Milwaukee, for instance, a statewide vote to create a sports lottery to fund a new Brewers stadium failed, so the state legislature passed a bill that raised the sales tax by 0.1% in the counties surrounding the stadium (see Exhibit 9.1). The decision to hold a public vote opens up many sources of financing, but compliance with a requirement for a public vote can be very costly. It also adds risk to the process: all of the work and effort involved in building a financing package might go for naught if the public votes no. However, if this is the will of the people, so be it.

In Texas, the residents of Arlington voted 55% to 45% in favor of spending over $400 million toward a billion-dollar stadium and associated complex. Along with a contribution from the county, the City agreed to increase the sales, hotel, and car rental taxes and to add a parking tax and admissions tax at the stadium. The team pays rent toward the debt service payments, funds the rest of the facility itself (through sponsorship and premium seat sales), and controls the stadium (Exhibit 9.15). This public/private partnership is on pace to pay off the public debt earlier than expected.
**Payment terms**

A third policy decision to be made prior to choosing financing sources is whether to pay for the facility now or later. Some facilities have been paid for with a current increase in sales taxes, whose revenues pay off the facility within a few years (as in Denver and San Antonio). Many more facilities are financed through the sale of 20- or 30-year bonds paid for through sales tax revenues; the actual payments occur over the 20- or 30-year term of the bonds. This is a fundamental decision for all sorts of public financing, not just sport-related financing. It is essentially the same as deciding whether to buy a house with cash or take out a 30-year mortgage. The total payments will be much higher, but they will occur over a longer period of time, thus pushing most of the cost into the future.

EXHIBIT 9.15 A public/private finance package with taxes approved by voters.

<table>
<thead>
<tr>
<th>AT&amp;T STADIUM (DALLAS COWBOYS)</th>
<th>Range of Sources</th>
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<tbody>
<tr>
<td>Team rent payments</td>
<td>$20,000,000</td>
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<tr>
<td>County contribution</td>
<td>$25,000,000</td>
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<tr>
<td>Admissions tax (10%) and parking tax ($3)</td>
<td>$115,000,000</td>
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<tr>
<td>City tax increases: Sales (0.5%), Hotel (2.0%), Car rental (5.0%)</td>
<td>$304,000,000</td>
</tr>
<tr>
<td>NFL G-3 Loan</td>
<td>$150,000,000</td>
</tr>
<tr>
<td>Team’s private sources (usually from sponsorships and premium seating sales)</td>
<td>$580,000,000</td>
</tr>
<tr>
<td>Total Funding Sources</td>
<td>$1,194,000,000</td>
</tr>
</tbody>
</table>

(1) The team will pay this to the City over the life of the lease.
(2) Financing approved by public vote.
(3) The team sold hundreds of suites and dozens of sponsorships worth hundreds of millions of dollars. Five years after opening, the team landed a $17–$19 million per year naming rights deal from AT&T.

**Responsibility for cost overruns**

As with many complex construction projects, the final actual cost of a stadium or arena often exceeds the expected cost. A study done in the mid-1990s of 14 facilities showed that cost overruns for stadiums averaged about 73% (see Bess, 1995). Policy makers must determine in advance who will be responsible for cost overruns—the public entity, the franchise, or some other organization. The Mariners’ new stadium cost $517 million, about $100 million over budget. The franchise paid the additional costs, thus protecting the public (see Exhibit 9.16). As part of the negotiation, a city can protect itself from cost overruns such as Arlington did with respect to the Cowboys stadium. The city agreed to pay the lesser of $325 million or 50%—an important consideration given that the facility cost over $1 billion.

**Management of future revenue streams**

When a new sport facility is created, many revenue streams must be initiated and managed. The sale of naming rights—the right to place a firm’s name on a facility (a form of sponsorship)—is paramount to the financing and completion of a new stadium. Policy makers must determine who will pay the costs of selling those rights. Similarly, who will pay the costs of selling luxury suites, concessions rights, sponsorship rights, PSLs, and so forth? The overall cost of selling these revenue sources frequently runs into the millions of dollars. Additionally, when it comes time to renegotiate these deals, who will pay those costs?

EXHIBIT 9.16 Cost overruns in stadium construction.
Lottery proceeds $50,000,000
Team bank loans $25,000,000
Interest income $5,000,000
County GO bonds (0.5% F&B tax) 150,000,000
County GO bonds (2% rental car tax) 71,000,000
County GO bonds (0.017% state tax credit) 71,000,000
5% admission tax $25,000,000
Personal seat licenses $20,000,000
Team owner (covering cost overruns) 100,000,000
Total Funding Sources $517,000,000

(1) The state has a 6.5% sales tax, of which 0.017% will be returned to the county.

Even more important is the question of who will keep which of the revenue streams. Although the cost of selling those assets is substantial, it is a fraction of the revenue that will flow from them. In the case of naming rights, the purchaser often pledges the payment for them as part of the financing package. As discussed in the section on private sources of financing, naming rights revenue can exceed $100 million (e.g., Philips paid $168 million in a 20-year deal). In some very complicated leases, the public entity shared a small portion of ticket sales (via an admissions tax) and parking (perhaps the first $500,000 after the first $1 million) or even was able to rent out the facility on some non-game days for certain events in which it would share net revenues.

More recently, cities have opted to exit the stadium management business and allow the team or a third party (such as AEG or Service Management Group [SMG]) to manage the facility in exchange for a fee. Often the managing entity receives a portion of net revenues from hosting any events in the facilities, plus a minimum management fee. For example, SMG signed a deal to manage the Liberty Bowl stadium under which it will receive 20% of any revenues above $1.66 million (Masilak, 2008).

**Financing sources**

A key general question about the sources of financing, addressed earlier in this chapter, is what sources of public financing can be used and who, ultimately, will pay for those sources. Just about everyone in a community pays a little when the source is a general sales tax. On the other hand, only attendees of events at the facility pay when the source is a ticket tax. This is probably the most important fundamental factor in facility financing.
CONCLUSION

As the nominal and real costs of sport facilities continue to rise, the sources and methods of financing have become very complex and creative. Moreover, partnerships between political jurisdictions and team owners have increased, as has the public’s understanding of the benefits and costs of sport facilities. What will the next wave of stadium financing bring?

concept CHECK

1. How can a stadium or arena be built without putting too much financial burden on a local government?
2. How does location affect the costs of a stadium or arena project? What are the pros and cons of locating a stadium downtown versus out near a highway?
3. When the construction ends up costing more than initial projections, should the local government be responsible for paying the additional costs?
4. Of the following list of public financing sources, which ones satisfy the principles of horizontal equity, vertical equity, the benefit principle, and efficiency?

- general obligation bonds
- certificates of participation
- revenue bonds
- tax increment financing and property taxes
- sales tax
- tourism and food and beverage taxes
- sin taxes
- sale of government assets
- state appropriations
- ticket and parking revenues
- player income taxes
- lotteries and gaming revenues
- land donations
- reallocation of existing budget
- infrastructure improvements
- tax abatements

PRACTICE problems

Calculate the savings in total construction costs from issuing a $100 million GOB paying out at 5% rather than a revenue bond paying out at 7%, both with a 25-year maturity.

Financing an NBA Arena

Develop a public financing plan for a new NBA arena in the city of Sacramento. The arena will have a total cost of $350 million, and the public will finance 60% of the construction cost. Both the City of Sacramento and Sacramento County will participate in the financing of the arena. Devise a public financing plan that uses funds from at least three different sources.

case questions

1. Determine the total amount that must be financed.
2. Determine which sources will be used and what changes to those sources must be made (e.g., raising hotel taxes 0.5%).
3. Determine the amount of financing that will be generated from each source. These amounts should sum to the total amount that must be financed.
4. Determine the timing: when money will be collected from each source and when it will be paid back. For instance, if a general obligation bond is used and it is paid for with an increase in hotel taxes, what is the annual payment necessary to pay it off?
5. Create a table showing the sources of financing, the total amount financed from each source, the annual payment amounts, and the time period of those payments.
APPENDIX 9.A Sources of financing for stadiums and arenas.

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Source: Goal Group Estimates, Mark Nagel

REFERENCES


Notes

* Psychic impact is also termed *psychic income* or *public consumption benefit* in the academic literature.
* In fact, the public financing trend began immediately after World War II, but not many facilities were built until 1960.
* Note that the projected COP funding was for $45 million, but the actual amount needed, due to unexpected major construction delays and costs, was $78 million.
KEY CONCEPTS

arm’s length
asset-based approach
capital structure
controlling interest
cost approach
discounted cash flow (DCF) analysis
discount factor (DF)
fair market value
fair value
fiduciary duty
income approach
liquidation value
market approach
market multiples approach
market transactions approach
marketability
media equivalency
mid-year convention
minority discount
net working capital (NWC)
price-to-revenue (P/R) ratio
related-party transaction
residual value
strategic value
synergistic premium
transfer pricing
valuation date
Introduction

This chapter will discuss general approaches and specific techniques for valuing an enterprise or asset. An
*asset* is any item of economic value. Examples include cash, securities, inventory, equipment, property, and
intellectual property. An *enterprise* is generally considered to be a legal entity, association, business,
corporation or the like, or unit of an organization. Enterprises often hold many assets. Determining the value
of individual assets or of an enterprise as a whole is the job of an appraiser or valuation analyst.

It is often easier to value an entire business than a portion of a business, such as a brand or the name of a
sport team. One reason for this is that a successful organization creates complementarities or synergies among
its assets, which increase the value of the business beyond the sum of the values of the individual assets. For
instance, a hockey team without a compelling name, logo, and so forth has a certain value. A name and a logo,
although they may be very compelling, have very small values separate from a team. Putting the name and
logo together with the team increases the value of the combined entity more than the sum of the individual
values. Attempting to value the name and logo is very difficult, because revenues that flow from the name and
logo are not easy to separate from revenues that flow from the team itself (whose games create fans who
purchase products imprinted with the logo). This obvious example shows that it is easier to value an entire
franchise, by using its total revenues, than to try to value a portion of the franchise.

The valuation of assets is a common task in sport finance. Consider the following scenarios:

- A person may wish to purchase a sport franchise. How much should he or she pay for the franchise? At
what price should the seller be willing to sell?
- A corporation may be interested in sponsoring a sport organization by paying a fee to place its name on a
facility or on signage within the facility. How much should the company pay for this form of marketing?
What price should the facility owners charge for the naming rights? This type of valuation is known as
*sponsorship valuation*. It is a fundamental aspect of sport marketing, especially for corporations—such
as Coca-Cola or MillerCoors—that regularly spend in excess of $100 million annually on sport
sponsorships.
- A professional golfer may be interested in receiving endorsement income in exchange for wearing
clothing or golf shoes, using clubs, or carrying a golf bag that represents a corporation. How much can
the golfer charge for the endorsement? Valuation techniques can help her determine a fair endorsement
value.

In sport, as in other industries, it is extremely important to understand the context of a valuation. Most
financial valuation tasks require a clear description of the industry in which the subject enterprise participates
and the future expectations for the industry. For example, let’s consider the context of Major League Soccer.
An important first step in understanding this context is to determine where the league is headed. A few years
ago, the league’s expansion plans included the goal of having 16 teams by 2010 (up from 12 in 2006). By
2013, the league had 19 teams and was in talks to add a few more. Attendance has been growing. New soccer-
specific stadiums have been built that are enhancing the teams’ revenues. MLS’s sponsorship and media deals
have grown and are expected to continue to grow. Soccer viewership is up in the United States, and the game
is played by more American kids than just about any other sport.

Next, knowing how an entity is organized is another important aspect of its context. MLS is organized as a
single entity, meaning that it is a single business or one company. (This structure has been successfully
defended in court.) A person who wants to run an MLS team invests in the league as opposed to an individual
team, and the league assigns the operation of a team. This method helps control costs, especially player costs.

This is just a snippet of what an analyst would consider in order to understand the context of a valuation.
The context is important because valuation is forward looking. For valuation, understanding where the
business is headed is actually more important than understanding where it came from. However, aside from
plans, expectations, and hopes, the information that is available is necessarily historical: we look into the
future by looking backward through a rearview mirror.

Valuation is part science and part art. The result is an estimate of the asset’s true underlying value. A
valuation is always uncertain, with the uncertainty arising both from the asset being valued and from the
valuation methodology.

We will begin this chapter by discussing common standards of value and the adjustments made to
valuations for marketability and controlling interest (defined below). Then we will present three important
approaches to valuation. When valuing any asset, it is important to consider multiple valuation approaches. If
more than one approach can be used, then the findings from each can be compared to arrive at a final estimate.
of value.
FAIR MARKET VALUE

A final determination of value depends on the standard of value being used. A widely used standard of valuation is fair market value—the net price for an asset that would result in a transaction between a willing buyer and a willing seller, neither of whom is under compulsion to buy or sell, both having reasonable knowledge of the relevant facts, and the two parties being at arm’s length. A willing seller is one who is not being forced to sell the asset. If a person files for bankruptcy and is forced to sell an ownership interest in a local sporting goods store, this is not a willing seller, but a forced seller. Being at arm’s length means that the buyer and seller (whether they are individuals, businesses, or estates) are not “related” in any way. This means that

- they have no familial relationship,
- neither party is a subsidiary of the other,
- neither party has an ownership interest in the other, and
- the parties have no financial relationship.

If any of these statements is not true, then the price of the transaction might not be at fair market value. However, the parties could choose to determine the fair market value and use that price for the transaction. Thus, one could show that even though the two entities are not at arm’s length, they chose a price as if they were.

Other standards of value include fair value, strategic value, and liquidation value. Fair value is based on the transaction price of “two specific parties taking into account the respective advantages or disadvantages that each will gain from the transaction” (International Valuation Standards, 2007). In other words, the parties are not a typical willing buyer and willing seller, but actual specific buyers and sellers. Strategic value is the value that a buyer would be willing to pay in order to obtain the assets because it has the ability to use the assets in a way to get more value out of them than a typical buyer would (e.g., adidas buying Reebok or Comcast buying NBC). Liquidation value is the value of the assets when they are not being used together. In other words, this is the value when the company’s assets are sold separately, piece by piece.
ADJUSTMENTS TO VALUE

Once the value of a business has been determined, certain adjustments may be required to arrive at the appropriate value of a specific ownership interest in the business. The two most common adjustments relate to whether the ownership interest effectively controls the business (controlling interest) and whether the ownership interest is freely marketable (marketability or liquidity).

A third type of adjustment is necessary if the business will be purchased for strategic or synergistic reasons. In this case, the purchaser might pay more for it than would someone purchasing it for stand-alone financial reasons. As an example, suppose that a regional brewery purchased an MLB team. One reason for the purchase might be that the brewery would be able to sell beer at the stadium during games. The brewery might be willing to pay a higher price than another investor would because of this synergistic tie with its core business. The incremental or added price is sometimes called the synergistic premium. The adjustments for controlling interest, marketability, and synergy are discussed below.

Controlling Interest

A controlling interest is an ownership interest that effectively controls the business. The necessary elements of control must be in place. These include

- choosing management and their compensation and perquisites,
- acquiring or liquidating assets,
- setting dividend policies, and
- controlling company strategy and direction.

To understand the value of control, it is helpful to review the basic principles of corporate governance. The stockholders of a corporation do not directly manage the corporation’s affairs; instead, they elect directors who are charged with this responsibility. The majority stockholder controls the corporation by controlling the board of directors. Only if the majority stockholder happens to run the business along with owning a share in it does that stockholder have direct control instead of indirect control. The ability to control the board of directors offers a number of benefits to a majority stockholder. For example, he can cause the corporation to employ himself or family members. Control of the corporation provides a higher degree of job security for the controlling stockholder or family members than is normally available in the current market.

Thus, an individual who owns a majority of stock normally will control the board of directors and, therefore, control selection of management, dividend distribution policy, and his or her own employment. For a sport team, a controlling interest allows an owner to choose the general manager, coaches, and even players. It also allows the owner to control ticket prices, team colors, the team name, logos, and perhaps even location. An investor without controlling interest would not possess these elements of control. However, many companies are set up (and laws and regulations are in place) to provide certain protections for the minority owners, so that not having control of the business does not put them at an undue disadvantage.

A minority discount is an adjustment to the value of a share because it is not controlling. A non-controlling interest is also termed a minority interest. The key to identifying a controlling versus a minority interest is whether the owner possesses the elements of control listed above. In certain situations, a shareholder may possess these elements of control even though the interest is less than 50% of the voting stock.

As you might expect, a controlling interest in a business is worth more than a non-controlling interest on a per-share basis. In other words, an investor might pay $10 per share to buy into a business without gaining controlling interest. Another investor might be willing to pay $18 per share to buy into that same business if she thereby gained control of the business. If the seller understands this and if there are enough bidders, the fair market value of the controlling interest will be higher than that of the non-controlling interest.

Prior to performing an appraisal (another term for valuation), it is necessary to evaluate the facts and circumstances of the situation to determine whether the asset will provide effective control. The conclusion from the analysis must reflect the appropriate standard of value. That is, if the valuation technique that is used gives a conclusion based on a non-controlling interest, then, if the transaction is for a controlling interest, a controlling interest premium (also called a control premium) may be required. If on the other hand, the valuation technique gives a conclusion based on a controlling interest, but the asset being valued is not a controlling interest, then the analyst must make an adjustment downward (apply a minority discount) to reflect the fact that the interest is non-controlling.

Estimating a non-controlling interest discount
The minority discount is the difference in the price that an investor would pay to purchase a non-controlling interest (typically a small ownership stake) versus a controlling interest in a business. The prices of stocks listed on stock exchanges include a minority discount, because these are prices that individuals have paid to purchase shares without acquiring control.

When estimating the appropriate discount for a minority or non-controlling interest, it is important to specify the aspects of control that are not available to the minority block of owners. (If there is nothing different about being a minority shareholder versus a majority shareholder, then control is worth nothing.) The following are a few important general principles:

- Valuation of a minority interest discount is highly dependent on the specific circumstances, such as those listed here.
- Fiduciary duties reduce the value of control. Here, fiduciary duty means the responsibility of management to act in the best interests of all shareholders. For example, a majority owner has a duty not to keep an unfair portion of cash flow, compared to what goes to a minority shareholder (e.g., through overpaying herself in her role as manager or expensing items to the company that are not directly related to the business). In modern corporations, ownership and control do not necessarily go together, and fiduciary duties ensure that those who do have control act in the interests of the owners.
- If the distribution of cash flows is based on ownership percentages, the valuation of control should be reduced.
- An owner of a significant minority interest may possess some aspects of control. This is one area in which a publicly traded company differs significantly from a privately held one, where there are fewer minority owners and each has a larger stake.
- A minority interest that is expected to become a controlling interest at some point in time has elements of control.

**Estimating controlling interest premiums**

When the valuation approach results in a valuation based on a non-controlling interest, the analyst may need to estimate the value of a controlling interest. The following methods provide information for determining the incremental value of control.

Controlling/non-controlling changes in ownership. Perhaps the most direct evidence for the value of control would be changes in ownership that involve both controlling and minority interests at about the same time. Given the prices of these transactions, the analyst could determine the fair market value of the price of one share for a minority interest and for a controlling interest. The equation for controlling interest premium (CP) is

$$CP = \left( \frac{\text{price paid for control}}{\text{price paid for minority interest}} - 1 \right) \times 100\%$$

If the price in the minority interest transaction was $10 per share and in the controlling interest transaction was $18 per share, then the control premium would be 80%. The minority discount is given by

$$\text{minority discount} = \frac{CP}{100 + CP}$$

Thus, for the example above, the minority discount is

$$\frac{80}{100 + 80} = 44.4\%$$

If the analyst does not have the necessary information on recent transactions in the subject company, an alternative is to discover similar businesses for which the control premium (or the minority discount) is known. Suppose the analyst needs to know the control premium for a sport team. One source of information is the stock market, where the price per share for minority interests in similar companies is provided on a second by second basis. Bear in mind that if the subject franchise is privately held, there may be important differences between it and publicly traded sport franchises that might make the comparison difficult or inapt.

**Sidebar 10.A** provides an example of measuring a minority interest stock price and a controlling interest stock price.
Measuring controlling and minority interest stock prices

In 2002, the Boston Celtics were publicly traded (the ticker symbol was BOS), meaning that the team’s shares were available to the general public to buy and sell. On September 26, 2002, the closing price was $10.60 for one share of BOS. On the next day, it was announced that Lake Carnegie LLC would purchase a controlling interest in the team. The NYSE halted trading in the stock.* Trading resumed nearly two weeks later (on October 9, 2002) at a price of $28. A few months later (on December 31, 2002), the Lake Carnegie transaction was completed, with a final price listed on the stock exchange of $27.50. The non-controlling price (or unaffected price, as it is also known) was $10.60, and the controlling interest price was $27.50. Thus, the controlling interest premium was

\[
\frac{27.50}{10.60} = 159.43\%
\]

*Although it is rare, stock exchanges sometimes prevent trading in certain companies for part of a day or longer if there are irregularities in the company’s financials or if significant information about the company is unclear. In addition, stock trading that is done automatically by computers (program trading) can be halted if the market indexes move up or down too much.

†If any shareholders knew or speculated about the acquisition prior to the public announcement, the stock price might have crept up in the days or weeks prior to the announcement. To measure the unaffected price, we must find a price where no knowledge about the announcement was incorporated into the stock price.

When we compare stock prices on different dates, we must keep in mind the possibility that the stock market in general could change substantially between the two dates and that the difference in the stock prices reflects, at least in part, general changes in the market (and economy) instead of a control premium. For the Boston Celtics purchase, it turns out that the S&P 500 did not change much over the time period, so the initial estimate of the net control premium is probably fairly accurate. (Recall that the S&P 500 is simply the aggregation of 500 stocks into an index that Standard & Poors deems to be reflective of the stock market in general. We can study the S&P 500 and apply the conclusions to the stock market as a whole.) To account for general movement in the stock market between the unaffected price date and the transaction price date, we discount the premium by the growth in the S&P 500 over the same time period. The final adjusted controlling interest premium is 154.80%. Exhibit 10.1 shows that the announcement of the controlling interest transaction caused a substantial increase in the stock price.

The Cleveland Indians, a publicly traded company in the late 1990s, provide another example. On May 12, 1999, the stock traded at $9.94. The next day, Richard Jacobs announced that he intended to sell his controlling interest in the team (although no specific buyer was named at the time). At the end of the day, the stock price had risen to $16.25. On November 4 of that year, Lawrence Dolan announced his intention to purchase the team. The stock price went up to $20.63. The transaction was completed on February 15, 2000, with the stock price at $22.56. If it can be shown that the unaffected price was $9.94, the controlling interest premium in the Cleveland Indians purchase was 127.04%. When we adjust for movement in the S&P 500 over the same time period (from 1,364 to 1,402), the controlling interest premium becomes 123.5%. The control premium is confirmed in Exhibit 10.2.

The examples described above are two of the few cases in which we can calculate a controlling interest premium in the sale of a sport business, because these teams were publicly traded rather than privately held corporations. Another example involves the soccer club Aston Villa of the English Premier League. In August of 2006, Randy Lerner announced a bid to take over the club and pay $10.36 per share, a price that was 47% higher than the club’s price prior to all announcements of possible takeovers that had occurred during the previous nine months (which would have caused the share price to change on the belief that a sale was imminent) and 10% higher than the previous day’s closing price. Further, among sports apparel and sporting goods companies we can find many examples of publicly traded companies. For instance, in August 2005, adidas-Salomon offered to buy Reebok for $59 per share, a jump of 34% over Reebok’s share price just prior to the announcement. The deal closed at the end of January 2006 at the same price, $59 per share. Thus, the control premium was 34%, assuming Reebok’s price prior to the announcement did not reflect any knowledge of the possible takeover. In 2012, adidas AG purchased Adams Golf Inc. for a 9.5% controlling interest premium over the share price just prior to the announcement, at a price that was over 40% higher than the price just two months earlier.

EXHIBIT 10.1 Example 1: Effect on a stock price of announcing a controlling interest transaction.
EXHIBIT 10.2 Example 2: Effect on a stock price of announcing a controlling interest transaction.

In fact, for the Boston Celtics and Cleveland Indians purchases, the control premium was much higher than is typical for companies in other industries (e.g., Reebok’s control premium of 34%). When we compare the control premiums of the sports apparel/sporting goods companies mentioned above to those of the Celtics and Indians, we should not be surprised that sport franchises may have high control premiums, for reasons discussed later in this chapter.

Mergerstat/Shannon Pratt’s Control Premium Study. To determine control premiums, we can also refer to a database of control premium estimates compiled by the company Mergerstat, along with appraiser Shannon Pratt, aptly named the Mergerstat/Shannon Pratt’s Control Premium Study (CPS for short). The median
control premium (based on hundreds of company transactions) for 2012 was approximately 44% across all industries. For the Amusement and Recreation Services industry (SIC 79), the CPS shows a control premium for 2012 of about 24% across the 13 transactions analyzed. The control premium has shrunk since a decade ago, when between 2000 and 2005 the control premium for SIC 79 was about 55%.

Bona fide offers. Another source of information on control premiums—and asset valuation in general—is bona fide offers on sport-related businesses. A remarkable and rare example was an offer in 2005 to purchase an entire major professional sport league. On March 2, 2005, Game Plan LLC and Bain & Company offered $3.5 billion to purchase the entire NHL. This figure later rose to $4.3 billion (Eichelberger, 2006). A few weeks earlier, on February 16, 2005, the NHL season had been cancelled, and uncertainty about the future of the NHL was very high. During the time between the cancellation of the season and the Game Plan/Bain offer, the Anaheim Mighty Ducks were sold to Henry Samueli for $70 million, substantially below the $108 million pre-lockout value that Forbes had placed on the team. It is understandable that in a time of high uncertainty about the future of the league, the price for a franchise would decrease. These pieces of information provide some evidence as to the controlling interest premium of the NHL. We have a transaction for one team and an offer to buy the entire league during the same time period. Information about the future of the league was likely similar across these two situations. We can calculate a discount on the value of the Mighty Ducks due to the lockout and extrapolate that value to all NHL teams. The result is a league value of $3,176 billion. (The lockout discount is simply the transaction price of $70 million divided by Forbes’s estimate of $108 million.) The Game Plan/Bain offer of $4.3 billion for control of the league, during this time of uncertainty, establishes a controlling interest premium of 35.4% (4.3/3.176 – 1). This is a lower bound, because the NHL owners did not accept that offer. A sale of the NHL would have required an offer higher than $4.3 billion; hence, the actual control premium would have been higher.

In this example, a bona fide offer provided some evidence about the value and control premium of the NHL. This example, however, took place during a period of high uncertainty, so although it provides information about the value of league control, we probably do not have reasonable knowledge of the facts, given that the specifics of the future of the league were highly uncertain.

Value of the control premium in sport versus other industries. The control premium is generally higher for sport teams than for many other industries (or even sporting goods, sports retail, and other non-team sport companies) because there are many reasons to own a sport franchise above and beyond annual operating profits. Besides profits, ownership of a sport team can provide

- benefit as a consumption good (meaning that the owner enjoys the role of operating the team),
- associated rights or income streams,
- synergies with the owner’s other businesses or assets,
- shelters from federal income tax,
- profit taking from the expense side (e.g., paying oneself an inflated salary or lawfully charging parts of one’s personal life on the company’s books), and
- league revenue sharing and future expansion fees.

As Randy Vataha, co-founder of Game Plan LLC, one of the companies that sought to purchase the NHL, has stated, “In non-sports businesses, the control premium is generally a function of operational control and does not include the notoriety factor that can add significant value to the control premium of a professional sports team” (Rascher, 2006). An owner has authority over who coaches the team, who plays on the team, the style of offense and defense, the type of entertainment provided at home games, and so forth. As a result, for many people, control of the management and decision making for a sport team would be far more exciting than, say, controlling an iron-ore extraction company.

Researchers have studied whether “sportsman” owners exist in professional sport. A “sportsman” owner is an owner who purchases and manages a team mostly for its consumption benefits (i.e., the enjoyment of winning games and operating a team) instead of its investment benefits. According to Stefan Kesenne, analysis of soccer clubs in Europe shows that some are not managed under a pure profit maximization objective; management includes the desire to win (separate from its effects on profitability) in the decision process (2006). As another example, the major reason the NHL did not accept the Game Plan/Bain offer was that a number of owners did not want to sell at any price. They liked owning a hockey franchise. Economist Rod Fort finds that “the portion of ownership value not associated with annual operations appears to be significant” (Fort, 2006, p. 9). Explaining why he purchased the Boston Celtics along with Wycliffe Grousbeck, Stephen Pagliuca said, “We both viewed the Celtics as a community asset, a labor of love, really,
not as an investment for investors” (Shanahan, 2004).

Another reason to own a sport franchise, beyond direct net cash flow and enjoyment, is that team ownership may bring associated rights or income streams. For example, team owners in most sport leagues have complete or nearly complete operating rights to the facilities in which their teams play. Thus, owning a team might provide income through the facility operation itself. Wayne Huizenga owned the Florida Marlins and the stadium in which the team played. He earned revenues from premium seating, naming rights, parking, signage, and merchandise through the stadium company, not the team—yet without the team, the stadium would not have provided these revenue sources (Zimbalist, 1998). This is a typical example of a related-party transaction, a transaction between two businesses that have some form of pre-existing relationship (more generally defined as transfer pricing, the pricing of assets transferred within an organization).

Similarly, an owner’s other businesses may benefit. For instance, the late George Steinbrenner, former owner of the New York Yankees, created YES, a regional sports network, reportedly worth $3.9 billion in 2014 (Ozanian, 2014). Rupert Murdoch claimed that his then-ownership of the Dodgers prevented Disney from creating a regional sports network in Southern California, and that alone was worth his investment in the team (Zimbalist, 2003). The Atlanta Braves were once owned by Ted Turner, who also owned the Braves’ media company, TBS. Reportedly, the media fees paid to the Braves were zero.

Another reason for ownership is that management salaries and payments, an expense item on the franchise’s income statement, often go to the owner—who is also an executive of the team. Franchise ownership can also provide shelters from federal taxes through vehicles such as the roster depreciation allowance. The IRS allows the full purchase price of a team to be allocated to player contracts over 15 years. The contracts are considered depreciable assets for tax purposes (Brunner, 2006).

Synergistic Premium

When we calculate a control premium, we must be very careful to account for synergistic premiums—amounts that a buyer might pay over the control premium for reasons of strategy or synergy. The concept of control relates to making decisions regarding the business, such as the direction of the firm, marketing, compensation, and so forth. Often, however, buyers acquire companies for strategic or synergistic reasons (such as a regional brewery purchasing a sport team). Synergistic relationships are often revealed in related-party transactions and transfer pricing.

Where synergies exist, the purchase price may include a synergistic premium. A brewery might pay a price that is higher than the current per-share price for a franchise, not just because it wants control of the franchise but also because it desires the synergy of selling and promoting its beer at the games. The 34% premium that adidas paid to Reebok not only gives adidas control of Reebok, but also—as adi-das has stated to its shareholders and the public—offers many synergies for adidas. For instance, adidas’ ties and distribution network in Europe can help Reebok sell there (as is the case for Reebok’s ties in the United States). Reebok is a sales-driven company, while adidas focuses on technology and performance. Combining these two strengths will enhance the offerings of both brands. Further, the combined size of the business will enable both adidas and Reebok to negotiate better terms from retailers. The 34% premium that adidas paid likely includes both a control premium and a synergistic premium. Separating these is very difficult.

Often the synergies for a franchise transaction can be characterized as either horizontal or vertical. It is becoming more common for an owner of a sport franchise to buy another sport franchise (horizontal purchase), such as Stan Kroenke’s ownership of the St. Louis Rams, Arsenal FC, Denver Nuggets, and Colorado Avalanche. Horizontal synergistic value can exist in the potential cost savings in managing the franchises, for instance, or in additional revenues from selling a sponsorship that includes all of the teams. A synergistic vertical relationship is Comcast Spectacor’s ownership of Wells Fargo Center, the Philadelphia Flyers, Paciolan (a ticketing company), and Ovations Food Services. In this case the same company owns the facility, the team, the ticketing company, and the food service business. Cost savings and enhanced revenue generation are possible with this arrangement.

On the other hand, there are not likely to be any substantial synergistic reasons for the previously discussed purchases of the Indians and the Celtics, or the offer for the NHL. Zimbalist (2003) discusses synergistic ownerships in MLB. He finds these relationships for approximately half of the teams in MLB, but not for the Cleveland Indians. The press coverage regarding the Celtics purchase does not mention any synergistic reasons (although some may exist). The offer for the NHL by finance-related companies does not suggest any obvious synergistic benefits. Thus, we can assume that the control premium for these transactions did not have a component for synergies.

Marketability Discount
Sometimes we value an equity interest in a closely held (privately held) business based on observations of transactions in a publicly traded stock, by using price-to-earnings or other multiples. In these cases we must apply a marketability discount, also known as a liquidity discount, because the sale of stock in publicly traded companies is easier than that of privately held companies. The marketability discount, therefore, is based on the premise that an ownership interest that is readily marketable is worth more than an interest that is not readily marketable. This premise is justified because the owner of an interest in a closely held company cannot sell shares in the public market to achieve liquidity.

If, on the other hand, we estimate the value of a non-marketable asset by reference to appraisals of or transactions in similarly non-marketable assets, no marketability adjustment is necessary. For example, a real estate appraiser could estimate the value of a building by reference to recent sales of similar buildings in similar locations. All of the buildings would have similar relative marketability, and no marketability discount would be needed.

Generally, in a situation involving a controlling interest in a closely held company, any marketability discount is greatly reduced. This is the case because the owner of a controlling interest can market the company without any impediment— the only consideration is the cost of doing so. In addition, a controlling interest generally will be easier to market than a minority interest in a closely held stock.

Information on liquidity discounts can be found in Valuing a Business: The Analysis and Appraisal of Closely Held Companies (Pratt, 2008). According to this book, two comprehensive studies of liquidity discounts (conducted by Emory and by Willamette Management Associates) covering 1975–1995 show liquidity discounts ranging to just above 40%. The median value for liquidity discounts allowed by the courts has been about 20%.
APPROACHES TO VALUING AN ASSET

The adjustments for controlling interest, marketability, and synergistic purchases discussed previously are made after a baseline valuation has been determined. The remainder of this chapter discusses various approaches to making the baseline valuation.

The many methods for valuing an asset, a business, or an interest or equity in a business may be categorized into the following three approaches. The market approach relies on prices that similar assets sell for in the marketplace. To account for differences across the assets being compared, such methods use financial ratios, such as price-to-ticket revenue, price-to-revenue, or price-to-earnings. Under the income approach, income or cash flow serves as the basis for the value of the business or asset. For the cost or asset-based approach, we determine what it would cost to re-create the business or asset.

Some businesses or assets lend themselves to certain valuation approaches more readily, whereas others can be valued with all three approaches. As we will see, sport franchises are best valued under the market approach. On the other hand, a golf course can be valued with all three approaches. (What are other, similar golf courses selling for? What income is the golf course generating through greens fees and other revenue sources? What would it cost to build a similar golf course?)

The valuation of sponsorships is an important and growing concern in sport. The methods most commonly used today are based on the market approach (What are similar sponsorships selling for?), but these methods are less than satisfying because the “similar” sponsorships may be under- or over-priced in terms of their true underlying value. Alternatively, some analyses measure the exposure (the number of people seeing the sponsor’s ad or signage) and determine what it would cost to achieve the same exposure through some other form of media, often called media equivalency. Ultimately, though, we want to understand how a sponsorship leads to sales of the sponsoring company’s products. Thus, the income approach would make the most sense. However, it is difficult to link a sponsorship directly to sales, because many other pieces of the marketing mix occur concurrently with the sponsorship, and because external factors (such as competitors’ actions) and the economy in general affect sales, as well. Regardless of whether you are valuing a golf course or a sponsorship, it is appropriate to review many possible methods for valuing the business, unless you are constrained by time or budget.

Market Approach

Under one type of market approach, often called the market transactions approach, we determine the value of a company by reference to the value of comparable firms that have been sold within a reasonably recent period of time, with appropriate adjustments for the time value of money (see Chapter 4). The comparable firms may include closely held corporations, publicly traded firms, divisions or subsidiaries of larger firms, and so forth. Additionally, transactions involving some of the ownership or equity of the subject firm itself can provide excellent evidence as to its value. For instance, if the entire company was sold two years ago, this would provide some evidence for its value today. If one of the owners sold her 5% stake in the business nine months ago, that would also provide useful valuation information. For instance, in March 2012, the owners of the New York Mets sold twelve 4% shares of the team for $20 million each. This puts the non-controlling interest of the team at $500 million. However, the sale was under duress—the owners were essentially being forced to sell shares in order to raise money. Using the 2012 SIC 79 control premium average of 24% (see above) would put the team’s value at around $620 million. This figure likely underestimates the franchise value because the transactions were under duress. Forbes estimated the value of the team at $719 million in its March 21, 2012, issue. This is an example of minority transactions (twelve of them at 4%) that provide information on the overall franchise value, albeit likely a lower-bound value.

The choice of comparable firms is the first step in the market transactions approach, and an important one. It may be necessary to make adjustments reflecting the differences between the comparable firms and the subject company. By comparing transaction price-to-revenue ratios or transaction price-to-earnings ratios (discussed later in this chapter), we can establish a basis for applying information about one firm to another. For valuation of sport franchises, it is also common to examine differences in attendance (price-to-ticket revenues) across comparables, the quality of the stadium and the terms of the team’s lease, whether a new facility is in the works, and the status of future television and other media revenues.

Another type of market approach, similar to the market transactions approach, is often called the market multiples approach. This approach is based on the premise that the value of the business enterprise depends on what investors in a competitive market actually pay to own equity or shares of stock in similar companies. The first step is to select a sample of firms that are comparable to the subject firm. These are typically selected from companies that are traded on organized capital market exchanges (for example, the NYSE, American
Stock Exchange, NASDAQ, and over-the-counter market). It is possible, however, to use closely held businesses and their information, assuming that the information is accessible and reliable. In the next step, we perform a financial analysis to select and apply appropriate multiples (for example, price-to-earnings ratio) to estimate the value of the subject company. The resulting estimate represents the fair market value of the subject company.

It is important to realize that market pricing multiples among comparable firms will vary depending on differences in expected growth rates, risk, and capital structure. These factors can vary across businesses in the same industry for many reasons. For instance, a firm with a new patent in place or a new line of products can expect higher growth rates than a firm without new products or patents. A firm with higher volatility in its quarterly earnings is a riskier business than one with stable earnings, and the price of a share of the riskier firm will likely be lower to reflect that risk. A firm’s capital structure (amount of debt and equity) can affect its returns to shareholders and, in turn, its stock price and valuation.

Sometimes, a large sample of comparable firms is available, and we can employ statistical analyses to determine how observed market multiples correspond to fundamental attributes of the companies in the sample. For example, statistical analysis may reveal a relationship between price-to-sales ratio and gross margin. Then, we can use the statistical relationship to select the multiple for use in valuing the subject firm. The market multiples for a comparable firm may be unusually high or low due to transitory changes in the firm’s operating performance. For example, if a comparable firm has temporarily low earnings or stock price, we must account for that in the analysis and choose the appropriate dates on which to compare the firms.

An important difference between the market transactions approach and the market multiples approach is that, whereas the market multiples observed for publicly traded securities provide a value of the subject company’s equity on a minority-interest basis (because the observed stock prices reflect transactions in minority interests), the market transactions approach provides an estimate of the value to a control buyer. Observed prices in the market transactions approach will include premiums reflecting expected benefits to a buyer who seeks to benefit from synergies or better utilization of assets.

Let’s put the market approach into practice and consider the various methods within this approach for measuring the value of a business: the price-to-revenue ratio, price-to-earnings ratio, and equity shares sold. For the purpose of this discussion, we will use examples from baseball, football, soccer, and auto racing. If we wish to determine the value of MLS on June 30, 2013, we could use the market approach as a starting point. Recall that under this approach, we refer to the value of comparable firms or assets. To find a value for MLS, we could use the value of one team as a basis for valuing the other teams, and then we could determine how to value the activities of the league office itself and any other non-team assets.

In March 2006, Red Bull GmbH, a maker of energy drinks, purchased the operating interests of the MetroStars from Anschutz Entertainment Group and renamed the team the New York Red Bulls. The transaction price was $25 million. Fast forward six years and, in 2012, the Montreal Impact paid $40 million to join MLS. In 2015, New York City Football Club (NYCFC) paid a $100 million expansion fee to join. One cannot simply compare the Red Bulls and Montreal fees and make a simple conclusion about the growth of expansion fees or team values, because the two markets are vastly different. However, a New York-based MLS franchise is now four times as expensive as it was, and the new franchise has to share the market with the Red Bulls. The conclusion that an MLS franchise is now worth at least four times what it was less than a decade ago is a good starting point in determining the growth in the value of MLS.

Similarly, in 2007 DC United was purchased for about $33 million. Five and a half years later, the owner sold 60% of the team for $30 million (valuing the team at $50 million). Thus, the team’s value grew at an annual rate of about 11.5%. The Columbus Crew sold for $68 million in July 2013 (Ozanian, 2013). The Crew were an original MLS club, having paid $5 million to join in 1995. The team also invested $28.5 million to build Crew Stadium.

These are important pieces of information for valuing MLS. To value each of the teams in MLS, we could start with the price-to-revenue ratio. Because this ratio relies on market transactions and revenue, it is considered an application of the market approach. Typically, an analyst would have access to the organization’s financial information, including a team’s total revenues. However, as we have discussed, most sport teams are privately owned and their revenues (and other financials) are not made available to the public. Since we do not have information on the franchises’ revenues, we will use an estimate in order to illustrate the principles of valuation. For DC United, we have a transaction price of $50 million and an estimate of annual revenues of $17.5 million. This implies a price-to-revenue ratio of 2.86x. The “x” in 2.86x is a symbol meaning 2.86 is a multiplier that we use on revenue to find price (or value).

**Price-to-revenue ratio**
In professional sport, a common starting point for franchise valuation is to examine the transaction price (or some other estimate of franchise value) divided by total annual revenues for the franchise. This is the price-to-revenue (P/R) ratio. To develop the popular franchise value estimates found in *Forbes* magazine, analysts begin with price-to-revenue ratios based on actual transactions, apply them to all the teams in a league, and make adjustments for other factors, such as a new stadium under construction, a new local television contract about to begin, or a historical brand (Ozanian, 1999). In an interview, Randy Vataha stated that only the price-to-revenue ratio has any real value in professional sports (Rascher, 2006). As further evidence of the importance of P/R ratios in valuing professional sport teams, in late 2001 Allan “Bud” Selig, Commissioner of MLB, in testimony before the U.S. Congress stated his estimates for each team’s valuation and total revenues. He had estimated that the average price-to-revenue ratio was 1.96x, with only a very small variation across teams.* These estimates indicate that multiplying team revenue by 1.96 provides a very accurate starting point for team values in MLB as of 2001. Academic research concurs. For instance, George Foster discusses the usefulness of market multiples in valuing sport teams, noting that financial statements (and the income estimates presented in them) offer a noisy basis for valuation (Foster, Greyser, & Walsh, 2005).

Returning to the MLS valuation, to estimate the league’s value as a whole, we would generate a P/R ratio from an actual transaction (or multiple transactions) and apply this ratio—which accounts for differences in market size, attendance, and other factors that make each team unique, via total revenues—to the other teams in MLS. Exhibit 10.3 shows the application of the DC United P/R ratio of 2.86x to each of the MLS clubs. We then add up the values for all teams. Exhibit 10.3 also reflects the fact that an expansion team was added in New York for 2015. Since the $100 million fee could have changed or the franchise could have chosen not to enter MLS, it is appropriate to discount the $100 million in order to account for that uncertainty. Since the MLS had to wait two years (from 2013 to 2015) in order to receive its expansion fee, we ought to discount it based on the time value of money (TMV). With an 8% discount rate, the $100 million had a present value in 2013 of about $85.7 million. Hence, the preliminary value for MLS is $1,350 billion.

EXHIBIT 10.3 Valuation analysis of Major League Soccer as of June 30, 2013—similar transactions methodology.

<table>
<thead>
<tr>
<th>SIMILAR TRANSACTIONS METHODOLOGY—TOTAL REVENUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>$s in thousands</td>
</tr>
<tr>
<td>FRANCHISE (1)</td>
</tr>
<tr>
<td>2013 TOTAL REVENUE (2)</td>
</tr>
<tr>
<td>TEAM VALUE USING P/REV RATIO* 2.86X (3)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>2013 TOTAL REVENUE (2)</th>
<th>TEAM VALUE USING P/REV RATIO* 2.86X (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Fire</td>
<td>$15,200</td>
<td>$43,472</td>
</tr>
<tr>
<td>Chivas USA</td>
<td>11,400</td>
<td>32,604</td>
</tr>
<tr>
<td>Colorado Rapids</td>
<td>16,200</td>
<td>46,332</td>
</tr>
<tr>
<td>Columbus Crew</td>
<td>14,400</td>
<td>41,184</td>
</tr>
<tr>
<td>D.C. United</td>
<td>17,500</td>
<td>50,050</td>
</tr>
<tr>
<td>FC Dallas</td>
<td>17,900</td>
<td>51,194</td>
</tr>
<tr>
<td>Houston Dynamo</td>
<td>26,600</td>
<td>76,076</td>
</tr>
<tr>
<td>Los Angeles Galaxy</td>
<td>45,700</td>
<td>130,702</td>
</tr>
<tr>
<td>Montreal Impact</td>
<td>23,400</td>
<td>66,924</td>
</tr>
<tr>
<td>New England Revolution</td>
<td>16,100</td>
<td>46,046</td>
</tr>
<tr>
<td>New York Red Bulls</td>
<td>27,500</td>
<td>78,650</td>
</tr>
<tr>
<td>Philadelphia Union</td>
<td>23,600</td>
<td>67,496</td>
</tr>
<tr>
<td>Portland Timbers</td>
<td>27,600</td>
<td>78,936</td>
</tr>
<tr>
<td>Real Salt Lake</td>
<td>23,200</td>
<td>66,352</td>
</tr>
<tr>
<td>San Jose Earthquakes</td>
<td>10,400</td>
<td>29,744</td>
</tr>
<tr>
<td>Seattle Sounders</td>
<td>47,200</td>
<td>134,992</td>
</tr>
</tbody>
</table>

318
<table>
<thead>
<tr>
<th>Club</th>
<th>Attendance</th>
<th>Value Indications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sporting Kansas City</td>
<td>26,000</td>
<td>$1,264,000</td>
</tr>
<tr>
<td>Toronto FC</td>
<td>26,400</td>
<td>Plus: One New Expansion Team $85,700</td>
</tr>
<tr>
<td>Vancouver Whitecaps</td>
<td>25,800</td>
<td>Preliminary Team Value Indication (June 30, 2013) $1,349,700</td>
</tr>
<tr>
<td></td>
<td>442,100</td>
<td>Adjustments for Control 24%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Implied Value of MLS $1,674,000</td>
</tr>
</tbody>
</table>

Value Indications:
- $1,264,000
- Plus: One New Expansion Team $85,700
- Preliminary Team Value Indication (June 30, 2013) $1,349,700
- Adjustments for Control 24%
- Implied Value of MLS $1,674,000

*DC United price/revenue multiple based on transaction price for DC United of $50 million and revenue estimate.

Source: 2013 total revenue estimated from The Shin Guardian

Selecting the valuation date. Recall that we wished to calculate a valuation of MLS as of June 30, 2013. For any valuation, we must select a specific date, the valuation date. Obviously, the value of a business can change from month to month or even day to day. An important principle of valuation is to consider only information that is reasonably known for the valuation date. In litigation, the parties must use an exact date so that they can work on the same issue (e.g., the value of company X on the date on which the contract stipulates that it will be sold). For a merger, the analyst might choose a current date, and if the merger is actually consummated six months later, then an adjustment might be made to reflect any change in value.

A very important aspect of valuation (discussed in Chapter 4) is to incorporate the concept of the time value of money. In our valuation of MLS, we used revenue figures and an expansion fee for the year 2013 (we adjusted the expansion fee from 2015 to 2013). However, in order to perform time value of money calculations, we need a specific beginning date, not just the year 2013. How do we select a date?

Revenue in MLS is generated and paid throughout the year, with most of it coming in during the season (April through November). Often, when exact details for the flow of revenue over the year are not available, the analyst may choose to use the mid-year convention—selecting a date halfway through the year (i.e., June 30), based on the notion that if half of the revenue came in before this date and half after this date, then a good approximation for valuation purposes is to treat the revenue as if all of it came in on June 30. Alternatively, the analyst may choose to be “conservative” and treat the revenue as if it became available on December 31. This approach is considered conservative because it accounts for the revenue later than it was actually generated and, therefore, based on the time value of money, this approach reduces the asset’s value. In the MLS valuation, we can use the assumption that all of the revenue came in on June 30. We will also assume, for the sake of simplicity, that the NYCFC expansion fee was paid on June 30, 2015. Hence, because we seek a valuation as of June 30, 2013, we do not need to make a midyear convention adjustment, but instead only annual TMV adjustments. In fact, this is why the specific valuation date of June 30 was selected.

Adjusting for the controlling interest premium. The final adjustment in Exhibit 10.3 is made to account for the controlling interest premium. The purchase of DC United operations allows the new owners to run the team. They now own equity in MLS, but they do not control MLS. In fact, DC United is just one of 20 teams in the league. Therefore, this transaction provides controlling interest in the team’s operation (subject to the restrictions placed on it by MLS), but it does not provide control of MLS as a whole. In fact, if some party were to buy MLS outright, the new owner would be able to choose, among other things, the location of and the number of teams, the salary cap and revenue sharing rules (subject to any collective bargaining agreement with players that may be relevant), the types of players and coaches, the length of the season, and so forth. Given that the comparable transaction that we have used to value MLS (DC United) is not one that provides controlling interest in MLS, we must make an adjustment to account for control, in order to estimate the full value of MLS as a whole.

To estimate the control premium for MLS, we can use any of the control premiums discussed earlier (for the Celtics, Indians, NHL, and SIC 79), because these are comparable, in that they involve other sport teams and leagues. However, to be conservative (and simply for illustrative purposes), we will choose the 2012 CPS...
A control premium of 24% for SIC 79. Applying this control premium of 24% to $1,350 billion gives a value for the control of MLS of $1.674 billion ($1,350 billion X 1.24 $1,674 billion).

In this example, we assume that the total value of MLS is captured by its franchises/clubs. If the league office has a separate value, then we would need to include this in each owner’s revenue estimates or add it as a separate asset with its relevant revenues and ratio. MLS does (mostly via Soccer United Marketing) sell national television and sponsorship rights. A complete analysis would account for these additional sources of revenue, if they are not already included at the franchise level.

Choosing a multiple. In choosing a multiple to apply to a variable such as total revenue, it is important to be able to compare the subject at hand to the comparable assets (“comps”) being used. The DC United transaction is only one transaction. It is often the case that adjustments to the multiple (2.86x) would be applied to each team based on their individual circumstances. Another transaction is the purchase of the Crew for a reported $68 million. The revenue estimates for the Crew shown in Exhibit 10.3 provide a P/R ratio of 4.72x; however, the purchase includes complete ownership of the stadium. It might be that another team is about to move into a new stadium, which will increase its revenues. Thus, use of a backward-looking revenue number for 2013 would not account for the growth in revenue expected with the new stadium. Alternatively, we might look to other similar leagues to see what price-to-revenue multiples are used in those leagues. Key considerations in choosing a revenue multiple for the valuation of MLS include:

- Franchise value appreciation,
- Stability of the league,
- Cross-marketing and promotional opportunities,
- Strategic/synergistic benefits with other business interests,
- Image and public relations benefits,
- Personal/corporate prestige and recognition, and
- Corporate/personal tax benefits.

In terms of these considerations, MLS compares satisfactorily to the other sport leagues. It has experienced franchise appreciation, as shown above by the DC United transaction and high growth in expansion fees. As of 2015, the league was stable, entering its 20th season and on its way to having a full slate of soccer-specific stadiums and 20-plus teams. The cross-marketing and promotional opportunities are strong—for example, the investment by the Yankees and Manchester City in the new NYCFC club. The potential synergistic and tax benefits in MLS are the same as in other major sport leagues (perhaps even greater in MLS, with many team operators owning or managing their own stadiums). Although the image and corporate prestige of MLS are not what they are in the NFL, MLS has certainly gained ground with its media deals and expanded coverage.

The median price-to-revenue multiple of MLB, the NHL, the NBA, and the NFL (the Big 4) is 3.46, based on 2012 figures (see Exhibit 10.4). A review of other sport-related properties reveals somewhat similar ratios, although the variation is quite large for these other properties, from 0.80 to 3.70. One reason the Big 4 have higher multiples than MLS is that those leagues contain many more clubs that are profitable compared to MLS, which claims that only a few of its clubs are profitable. Alternatively, if MLS were expected to grow faster (in terms of revenues) than these more mature leagues, it could have a higher price-to-revenue multiple.

**SIDEBAR 10.B**

The value of Major League Baseball teams: Take annual revenue and quadruple it!

In December 2001, MLB Commissioner Allan “Bud” Selig was called before the House Judiciary Committee to discuss baseball’s antitrust exemption and the possible contraction of a number of teams. As part of the proceedings, Selig released financial information about MLB and its franchises. Exhibit 10.5 (p. 272) summarizes the information. At that time, the franchise valuations fell within a tight range around a price-to-revenue multiple of 1.96x. Since then, MLB revenues have more than doubled and franchise valuations have more than tripled, as shown in Exhibit 10.6 (p. 273). Why have franchise valuations increased more than revenues? One answer is that profits are much higher than they were in 2001, and ultimately net income or profit is what owners are after (besides winning). Price-to-revenue multiples serve as a stable proxy to looking directly at income or earnings figures, which are less stable. In 2015 for MLB the price-to-revenue multiple was about 4.4, compared to 1.96 in 2001.
EXHIBIT 10.4 Professional sport valuations.

<table>
<thead>
<tr>
<th>SIC CODE</th>
<th>ANNUAL REVENUES</th>
<th>PRICE/REV RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIC 7941</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Churchill Downs</td>
<td>$515</td>
<td>1.00</td>
</tr>
<tr>
<td>Magna Entertainment</td>
<td>$658</td>
<td>1.10</td>
</tr>
<tr>
<td>Global Entertainment (Central Hockey League)</td>
<td>$14</td>
<td>2.60</td>
</tr>
<tr>
<td>Association of Volleyball Professionals, Inc.</td>
<td>$13</td>
<td>0.80</td>
</tr>
<tr>
<td>SIC 7948</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canterbury Park</td>
<td>$55</td>
<td>1.00</td>
</tr>
<tr>
<td>Dover Motorsports</td>
<td>$91</td>
<td>2.20</td>
</tr>
<tr>
<td>International Speedway</td>
<td>$740</td>
<td>3.70</td>
</tr>
<tr>
<td>Penn National Gaming</td>
<td>$1,165</td>
<td>3.00</td>
</tr>
<tr>
<td>Speedway Motor Sports</td>
<td>$481</td>
<td>3.50</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continental Basketball Association</td>
<td>$10</td>
<td>1.00</td>
</tr>
<tr>
<td>Median NHL Team (2012)</td>
<td>$106</td>
<td>2.20</td>
</tr>
<tr>
<td>NHL Bain final offer in 2005</td>
<td>$2,238</td>
<td>2.15</td>
</tr>
<tr>
<td>Median MLB Team (2012)</td>
<td>$215</td>
<td>3.00</td>
</tr>
<tr>
<td>Median NBA Team (2012)</td>
<td>$119</td>
<td>3.91</td>
</tr>
<tr>
<td>Median NFL Team (2012)</td>
<td>$261</td>
<td>4.00</td>
</tr>
<tr>
<td>Median NFL Team (2001)</td>
<td>$134</td>
<td>3.90</td>
</tr>
<tr>
<td>Median International Soccer Club (2012)</td>
<td>$244</td>
<td>2.23</td>
</tr>
</tbody>
</table>

Average 2.43
Median 2.23
Average of 2012 estimates 3.07
Median of 2012 estimates 3.00


Price-to-earnings ratio

As discussed in Chapter 2, investors who are analyzing stocks commonly use a ratio called price-to-earnings (P/E): the cost of purchasing the stock relative to the earnings that it generates. The P/E ratio provides an estimate of how much money an investor will pay for each dollar of a company’s earnings and allows for comparisons of the market values of companies of various sizes. Chapter 2 presents an example of the calculation of price-to-earnings for a sport retail organization, Under Armour. For sport teams, earnings are not reflective of value, because many owners are willing to tolerate low earnings or even lose money if it means winning more games, or just for the satisfaction of operating a team. Also, related-party transactions in sport make it difficult to assess actual earnings. Therefore, analysts do not use P/E ratios to value sport team properties and instead employ P/R ratios.

EXHIBIT 10.5 2001 financial information for MLB and its franchises, including estimates of
franchise values.

<table>
<thead>
<tr>
<th>FRANCHISE</th>
<th>2001 REVENUES</th>
<th>SELIG VALUATION</th>
<th>SELIG MULTIPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaheim Angels</td>
<td>$91,731,000</td>
<td>$193,056,000</td>
<td>2.10</td>
</tr>
<tr>
<td>Arizona Diamondbacks</td>
<td>$125,132,000</td>
<td>$243,832,000</td>
<td>1.95</td>
</tr>
<tr>
<td>Atlanta Braves</td>
<td>$146,851,000</td>
<td>$283,055,000</td>
<td>1.93</td>
</tr>
<tr>
<td>Baltimore Orioles</td>
<td>$128,302,000</td>
<td>$251,257,000</td>
<td>1.96</td>
</tr>
<tr>
<td>Boston Red Sox</td>
<td>$176,982,000</td>
<td>$337,526,000</td>
<td>1.91</td>
</tr>
<tr>
<td>Chicago Cubs</td>
<td>$129,774,000</td>
<td>$252,980,000</td>
<td>1.95</td>
</tr>
<tr>
<td>Chicago White Sox</td>
<td>$111,682,000</td>
<td>$219,163,000</td>
<td>1.96</td>
</tr>
<tr>
<td>Cincinnati Reds</td>
<td>$70,887,000</td>
<td>$155,178,000</td>
<td>2.19</td>
</tr>
<tr>
<td>Cleveland Indians</td>
<td>$162,242,000</td>
<td>$311,230,000</td>
<td>1.92</td>
</tr>
<tr>
<td>Colorado Rockies</td>
<td>$131,813,000</td>
<td>$257,597,000</td>
<td>1.95</td>
</tr>
<tr>
<td>Detroit Tigers</td>
<td>$106,791,000</td>
<td>$218,709,000</td>
<td>2.05</td>
</tr>
<tr>
<td>Florida Marlins</td>
<td>$60,547,000</td>
<td>$139,655,000</td>
<td>2.31</td>
</tr>
<tr>
<td>Houston Astros</td>
<td>$124,629,000</td>
<td>$244,073,000</td>
<td>1.92</td>
</tr>
<tr>
<td>Kansas City Royals</td>
<td>$63,696,000</td>
<td>$143,389,000</td>
<td>2.25</td>
</tr>
<tr>
<td>Los Angeles Dodgers</td>
<td>$143,607,000</td>
<td>$278,107,000</td>
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<tr>
<td>Milwaukee Brewers</td>
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<td>Montreal Expos*</td>
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<td>Philadelphia Phillies</td>
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</tr>
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<td>St. Louis Cardinals</td>
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<td>Texas Rangers</td>
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*In 2005, the Montreal Expos relocated to Washington, D.C., and became the Nationals.
EXHIBIT 10.6 2015 financial information for MLB and its franchises, including estimates of franchise values.*

<table>
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<tr>
<th>RANK</th>
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<th>1-YR VALUE CHANGE (%)</th>
<th>DEBT/VALUE (%)</th>
<th>REVENUE ($MIL)</th>
<th>OPERATING INCOME ($MIL)</th>
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<td>8.9</td>
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<tr>
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<td>29</td>
<td>22</td>
<td>188</td>
<td>7.9</td>
</tr>
</tbody>
</table>

*Current value of team based on current stadium deal (unless new stadium is pending) without deductions for debt (other than stadium debt). Debt/value includes stadium debt. Operating income is earnings before interest, taxes, depreciation, and amortization. Source: Forbes, http://www.forbes.com/mlb-valuations/list. Reprinted with permission of Forbes Media, LLC.

EXHIBIT 10.7

<table>
<thead>
<tr>
<th></th>
<th>P/REV</th>
<th>P/INCOME</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

323
### Price-to-earnings ratios are volatile for sport teams

Stock market investors often use P/E ratios to estimate enterprise or firm values, but for sport teams...

| 6.3 | 395.1 |
| 6.0 | -196.7 |
| 5.7 | 42.7 |
| 5.2 | 29.2 |
| 6.0 | 24.6 |
| 4.8 | 19.0 |
| 5.1 | 54.0 |
| 4.3 | 77.8 |
| 4.5 | 30.9 |
| 4.7 | -32.1 |
| 4.6 | 348.6 |
| 4.3 | 34.6 |
| 4.4 | -54.3 |
| 4.4 | 41.7 |
| 4.1 | 31.8 |
| 4.3 | 30.6 |
| 3.9 | 20.6 |
| 4.0 | 42.0 |
| 4.0 | 25.4 |
| 3.9 | 402.3 |
| 3.9 | 77.4 |
| 3.8 | -48.6 |
| 4.0 | 67.9 |
| 4.0 | -381.8 |
| 4.0 | 92.7 |
| 4.6 | 37.0 |
| 3.6 | 34.9 |
| 3.0 | 26.3 |
| 3.5 | 42.2 |
| 3.3 | 79.1 |

**MEDIAN** 4.3 34.7

**STANDARD DEVIATION** 0.8 145.9
valuations we use P/R ratios, because sport team owners do not always seek maximization of earnings. Also, because of related-party transactions, reported sport franchise earnings do not necessarily reflect a team’s true value.

In 2001, MLB Commissioner Selig claimed that each franchise was worth about twice its annual revenues. In fact, the standard deviation was so small that only three low-revenue teams (the Marlins, Twins, and Expos) appeared above a 2.30x multiple, and only the Yankees fell below 1.89x. Yet, data provided in the Forbes 2001 MLB team valuations yields a P/R multiple of around 2.35x (Forbes, 2002). Why would Forbes give a significantly higher multiple than Selig? One reason is that it was in MLB’s interests to appear small and financially poor before Congress, rather than presenting itself as a highly profitable monopoly.

Similarly, Selig’s information shows that MLB had total operating losses of $232 million for 2001, whereas Forbes shows an operating profit of about $74 million. Because of related-party transactions and transfer pricing for MLB, it is possible to report differing amounts of revenues and expenses, depending on how the revenues and expenses are assigned.

Based on Forbes’s data for 2015 (Exhibit 10.6), MLB’s average P/R multiple is 4.4 (and median of 4.3; Exhibit 10.7). Yet, the standard deviation is quite low at 0.8, meaning that most of the teams are valued at around the 4.4 multiple. The notable exception is the Los Angeles Dodgers, which had just transacted for about $2 billion, a value strongly affected by their television deal.

Given the changes in the traditional advertising business model of television, sports programming has become very important because it is one of the few types of programming that people want to watch live (and thus will be exposed to commercials).

Comparing price-to-revenue to price-to-income ratios shows that the latter ratio is so volatile as not to be of much use as a tool for valuing MLB clubs. Recall from Chapter 2 that another term for earnings is income. While the median price-to-income ratio is about 35, which is reasonable and comparable to the stock market, the standard deviation is over 146. One can easily see in Exhibit 10.7 how much the P/I ratios vary across the clubs.

In the NFL, the median P/R ratio has remained stable. For example, according to Forbes (Ozanian, 2003), the value of NFL franchises in 2002 was estimated at $20.1 billion with revenues of $4.9 billion. Thus, the median P/R ratio ranged from 4.0 in 2002 to 4.7 in 2015 (based on data in Exhibits 10.8 and 10.9). Since 2002, revenues in the NFL have nearly doubled; thus, franchise values have doubled, too. One reason that the P/R ratio has not changed is that the average operating margin (operating income divided by revenue) has remained fairly constant, around 16% to 17%. Therefore, the revenue growth has been matched by income growth, so the underlying value of owning an NFL franchise has not changed. In addition, to the extent that winning matters to owners, there is no evidence that the desire to win has changed, either. Yet, in this stable environment, the price-to-income ratio also has a lot of volatility associated with it, as the high standard deviation shows in Exhibit 10.9.

**Equity shares of the same business**

Within the market approach, another method for measuring the value of a business is to look at market transactions for known equity amounts in the subject business. For example, if an owner sold 1% of a sports league for $5 million, the implied value of the business (on a non-controlling basis) would be $500 million. Exhibit 10.10 shows the adjustment for the time value of money from the actual transaction date of January 1, 2011, up to the valuation date of June 30, 2013. The valuation growth rate used here is 6.5%. Based on this rate, $500 million on January 1, 2011, is equivalent to $585 million on June 30, 2013. Adding the controlling interest premium of 24% puts the value of the sports business at $726 million. (We add the control premium because the 1% stake does not provide control of the league, whereas the value of the league in its entirety includes control.)

A transaction that occurred 2.5 years in the past would be adjusted to reflect changes in the underlying revenue or income. For example, if the league’s income grew at 6.5% annually during those 2.5 years, then it stands to reason that the value of the league grew at a similar rate, because the owner will receive a higher income along with the same (assumed) other benefits of owning the league.

**EXHIBIT 10.8 2015 financial information for the NFL and its franchises, including estimates of franchise values.*
<table>
<thead>
<tr>
<th>RANK</th>
<th>TEAM</th>
<th>CURRENT VALUE ($M)</th>
<th>CURRENT VALUE CHANGE (%)</th>
<th>DEBT/VALUE (%)</th>
<th>REVENUE ($M)</th>
<th>OPERATING INCOME</th>
</tr>
</thead>
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*Current value of team based on current stadium deal (unless new stadium is pending) without deductions for debt (other than stadium debt). Debt/value includes stadium debt. Operating income is earnings before interest, taxes, depreciation, and amortization.


### EXHIBIT 10.9

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<td>17.7</td>
</tr>
<tr>
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<td>16.7</td>
</tr>
<tr>
<td></td>
<td>5.9</td>
<td>24.1</td>
</tr>
<tr>
<td></td>
<td>1-JAN-11</td>
<td>1-JAN-12</td>
</tr>
<tr>
<td>----------------</td>
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<td>----------</td>
</tr>
<tr>
<td><strong>EQUITY TRANSACTIONS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$s in thousands</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

EXHIBIT 10.10 Adjustments in the valuation of a sports league reflecting the time value of money.
<table>
<thead>
<tr>
<th>Interest Purchased</th>
<th>1.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Repurchase Price</td>
<td>$5,000 $5,000</td>
</tr>
<tr>
<td>Implied Business Valuation on a Minority Basis (a)</td>
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</tr>
<tr>
<td>Annual Income Growth</td>
<td>6.5%</td>
</tr>
<tr>
<td>Adjustments for Control</td>
<td>24.0% 24.0%</td>
</tr>
<tr>
<td>Implied League Valuation on a Control Basis</td>
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</tr>
<tr>
<td>Implied Value of Sports League</td>
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</tr>
</tbody>
</table>

**SIDEBAR 10.D**

Sponsorship valuation … it’s all about the comps

The valuation of sponsorships or endorsements is difficult because, typically, product sales have many other drivers besides the sponsorship. In other words, suppose a telecom company sponsors an auto racing team and notices that sales increase. Can the company attribute those sales to the sponsorship? Perhaps the sales increase was the result of other factors, such as advertising, public relations, new product features, or the economy. Most current methods of sponsorship valuation rely on understanding what others pay in the marketplace for similar exposure to that of a prospective sponsor.

Information is available from companies such as IEG about the racing teams in each sport and the amounts that other sponsors are paying for their sponsorships. This gives both the property (racing team) and the sponsor an idea of the value of a sponsorship at a given level. Essentially, the information is presented with an approach akin to the market approach, in that other similar sponsorships are the points of reference.

To measure the value that a specific sponsor has received from a sponsorship, we would need to look at the assets that are included in the sponsorship. In a recent racing sponsorship, the sponsor received television exposure, in-person exposure, hospitality, online presence/exposure via the racing team’s website and sanctioning body website, the ability to sit in a car and go around the track, and the ability to use the sponsorship in advertising. For measurements of the value of each of those assets within the sponsorship package, we can turn to any of a number of companies that offer this service.

For instance, the TV exposure can be measured and compared (taking a market approach) to what it would cost to buy a corresponding amount of advertising time and create a commercial instead of having the camera show the sponsor’s logo. This is often called media equivalency, as stated earlier. The in-person or on-site exposure can be compared to the cost of signage at the event. Similarly, online exposure can be compared to the cost per thousand for getting members of the target market to visit a website. Additionally, we can add up the cost of providing hospitality at an event (taking a cost approach) to measure the value of the hospitality portion of the sponsorship.

Other assets, such as obtaining direct business from a company, are potentially very valuable. For example, Mobil 1 sponsored the Corvette Racing team in American Le Mans. It was also a business partner of General Motors, which owns the Corvette brand. This sponsorship may help Mobil 1 develop or maintain its relationship with GM. The measurement of the value of the direct business is often based on the income (taking an income approach) that the company would earn if it received more business from another company. Indirect business relationships can be developed among sponsors of the same racing team, too.

As an example of a sponsorship that included all of these elements, a racing team in American Le Mans was shown to have provided about $6 million of value to its primary sponsor, most of that coming from television exposure (*Vici Racing v. T-Mobile*, 2014).

**Income Approach**

The income approach is based on the idea that the fair market value of an asset is equal to the present value of its expected future cash flows. An analysis of this type is often referred to as a discounted cash flow (DCF) analysis. We project cash flows for a number of years into the future and discount them back to the present (or
the date of valuation), using a suitable discount rate. To calculate the fair market value of a business, we add the present value of expected future net cash flows to the residual value of the business and subtract outstanding debt. In other words, we discount each year’s cash flow (whether positive or negative) and add these figures together. Separately, we estimate and discount the residual value of the business—what the business will be worth at the end of the period for which we have projected cash flows, whether the company will be liquidated or continue operations. Finally, we calculate the discounted value of debt that will remain at that time. The sum of all these amounts provides an estimate of the value of the business.

**Steps in the income approach**

Exhibit 10.11 provides an example of a DCF valuation analysis for NewFangled Sports Products, Inc. (NFSP), a fictitious sports product manufacturing company. Recall that the principle behind the DCF method is that the value of a business or asset is based on the cash that it is expected to generate, as opposed to what an investor would pay for a similar business (as in the market approach) or what it would cost to recreate the business (as in the cost approach, discussed later).

How far out should the analyst project cash flows? The answer is: for the lifetime of the business. Two important qualifications make the application of DCF manageable. First, it is seldom necessary in practice to project cash flows beyond 10 or 15 years, because a cash flow that far in the future is not worth a significant amount today, when typical discount rates are used (see Chapter 4). Second, once the business reaches a stable, mature growth period, we can calculate a “terminal” value. In fact, analysts typically assume that a company cannot continue to grow faster than the economy forever into the future, so its growth rate is constrained by the growth rate of the economy.

In Exhibit 10.11, we value NFSP from the current year (CY) to CY+4 at a higher than average growth rate. Then, we project that it will settle into a 3% annual growth rate in perpetuity (going forward forever). The revenues forecasted for a five-year period typically have the most impact on the final value: revenue growth drives income growth, which drives cash flow growth. To forecast revenue growth, we must consider

1. whether the industry in which the company operates is growing or shrinking, and at what rate,
2. how the company is doing in terms of market share compared with its competitors,
3. expectations for new product offerings,
4. expected price changes, and
5. any other factors that would affect demand for the company’s product(s).

The revenue growth projected for NFSP is between 4.5% and 6.0%, based on business forecasts. To calculate net cash flow for CY, we start with revenue and then

1. subtract variable costs, such as the cost of goods sold (COGS), to obtain gross profit,
This information is typically drawn from audited financial statements and business forecasts.

2. subtract other expenses, such as selling, general, and administrative costs (SG&A) and research and development (R&D), to obtain earnings before interest, taxes, depreciation, and amortization (EBITDA),
3. subtract depreciation and amortization (D&A) to obtain earnings before interest and taxes (EBIT),
4. subtract interest expenses to obtain earnings before taxes (EBT),
5. subtract income taxes to obtain net income (a 40% corporate income tax rate is assumed),
6. add back depreciation and amortization (D&A) to determine gross cash flow, and
7. subtract capital expenditures and increases in net working capital to obtain net cash flow (NCF).
In Step 6, we add back depreciation and amortization after calculating income taxes to determine gross cash flow. This is because D&A expenses reduce the company’s income tax liability, but they do not actually lower the real cash flow that is available to the company’s owners—so we add them back after calculating income tax.

In Step 7, we subtract increases in net working capital and capital expenditures from gross cash flow to determine net cash flow. Net working capital (NWC) refers to the cash needed to run the business on a daily basis (measured in annual dollars needed), which is not available to be given to the owners of the business because it is needed for operations. We calculate it simply by subtracting current liabilities from current assets. The change in working capital is its difference from year to year. We subtract increases in net working capital because these increases in net working capital are needed to run the business; therefore, that cash is not available as a cash flow to the owners of the company. We add decreases in net working capital because a decrease in net working capital means it is less expensive to run the business throughout the year, so that extra cash is now available to the owners of the business. Thus, we add it to cash flow. In other words, if more working capital is required each year, more cash is needed for operations, and that cash is not available to the owners; the converse is also true.

Valuation calculations in the income approach

Exhibit 10.11 shows that NCF for NFSP is negative during CY (even though net income is positive), but it becomes positive thereafter. Once we have estimated NCF, we discount it back to the middle of CY (June 30 of CY). For NFSP, at the end of CY, NCF is $118,000, but when this figure is multiplied by the discount factor (DF, defined in note (a) in Exhibit 10.11) it becomes $111,000 (noted as present value in Exhibit 10.11). We calculate the discount factor as follows:

\[
DF = \frac{1}{(1 + r)^n}
\]

where \( r \) is the discount rate

\( n \) is the number of years in the period

For the current year, we are discounting the December CY value back to June CY, so \( n = 0.5 \). For CY+1, the estimate is for December of the year following CY, which is 1.5 years ahead of June CY, so \( n = 1.5 \), and so on for CY+2 through CY+4. We select a discount rate of 12.8%, which Ibbotson (2006) reports for SIC 3949 (Sporting and Athletic Goods, Not Elsewhere Classified). SIC 3949 includes K2, Inc. and Callaway Golf Co., among other smaller companies. We would normally use the actual weighted average cost of capital (WACC) that NFSP faces. The rate of 12.8% is simply the median that Ibbotson reports for this industry, and we have selected it for illustrative purposes.

SIDEBAR 10.E

What discount rate would provide NFSP investors with their required return?

As discussed in Chapter 4, if $100 to be received in one year is worth $90 today (implying a discount rate of 11.1%), then an investor with $90 today would invest in a company only if that investment could grow from $90 to $100 in one year, or at a rate of 11.1%. Otherwise, the investor might go elsewhere to invest the $90. Thus, the discount rate comes from the opportunity cost that the investor faces when making an investment decision. If the investor requires a 11.1% return, then the cost of capital for the company (the price it must pay in order to return $100 to the investor at the end of one year) is 11.1%. NFSP is anticipating $273,000 in cash flow for CY+2. If this cash flow is required by the investors of the company, and they put $202,000 in during mid-year CY, then, essentially, those investors are asking for a 12.8% return. Therefore, 12.8% is the discount rate needed to provide the investors’ required return.

The perpetual growth rate—the implied growth rate of NCF year after year beyond CY+4—impacts the expected NCF only beyond the terminal year. To obtain the terminal year PV, we subtract the perpetual growth rate from the discount rate and divide the terminal year NCF, $455,000, by this number.* The capitalized value of the company in CY+5 and beyond is $4.7 million. To bring that back to mid-year CY, we multiply it by the discount factor (0.5825). The resulting present value of the terminal value of the company is
$2,717 million. Finally, we add all present values to obtain the net present value (NPV) of expected future net cash flows, $3,349 million. In this example, there is no residual value, because the business is expected to continue operations indefinitely. Assuming the present value of outstanding debt is $500,000, a fair market value for NFSP is $2.85 million.

**The income approach and sport franchises**

The DCF method does not apply well to sport franchises because of the non-financial reasons for franchise ownership and related-party transactions. As further evidence that the DCF approach is not applicable to—or at a minimum understates the value of—sport franchises and leagues, Forbes’s estimates of team values for MLB for 2015 show that some teams valued at over $1 billion report negative income (the Tigers, Dodgers, and Phillies; see Exhibit 10.6). Thus, the DCF approach would find a negative value for these franchises, even though they clearly have positive value (i.e., someone would pay a positive amount to buy the franchise).

An accurate DCF analysis requires information about all of the net cash flows available to the team’s owner, not just those that are accounted for on the team’s financial statements. The analyst will need to know each team’s net cash flow; each owner’s salary, if any; the net cash flows from national sponsorships, licensing, and media; the net cash flow of the facility in which the team plays; and any revenues from other sources. For instance, a team owner might generate substantial net cash flow through local sponsorships, parking, and concessions but might “book” that information on a facility management company that he or she also owns. Without all of this information, DCF analysis of a sport team will likely show a value that is lower than the team’s true value.

**SIDEBAR 10.F**

**What’s Amalie Arena worth? The cost approach in action**

Most sport arenas are publicly owned or situated on public land and, therefore, are not subject to property taxes; also, they are not frequently bought and sold. Thus, it is rarely necessary to determine the value of a sport arena. However, in 2001, the Florida State Supreme Court determined that private organizations that lease space at public facilities are not necessarily exempt from paying property taxes (Sebring Airport Authority v. McIntyre, 1993). This judgment quickly became an important concern for the state’s sport teams. Essentially, each team was going to be asked to pay property taxes for the sport arena in which it played.

A sport arena, such as Amalie Arena in Florida (formerly known as the St. Pete Times Forum, Tampa Bay Times Forum, and Ice Palace), has a different value to a private buyer than to a public buyer. This is because the private buyer does not fully internalize the benefit of the arena to the community. Sport arenas often create positive externalities that overflow into the community. In the case of Amalie Arena, these benefits include, but are not limited to, an increase in sales to nearby businesses (at least partially driven by spending from visitors to the community who attend arena events), an increase in value to nearby properties, a positive psychic impact on the community, additional tax revenues, and advertisement for the Tampa Bay region. The value of each of these aspects is difficult to measure. (See Chapter 12 on economic impact.)

The arena, of course, also has a positive value to the owner of the Tampa Bay Lightning (an NHL team), which plays in the arena. The arena, therefore, would have a positive internality to a private buyer, and it has a positive externality to the surrounding community and county (counties in Florida assess and collect property taxes). Whenever a particular entity has these characteristics, without public intervention the free market will produce an arena of less than the socially optimal size and quality. This is one of the reasons why the public often chooses to finance all or part of sport arena construction, notwithstanding whether the public actually receives the full value of the arena. The other reason for the public’s willingness to finance arena construction is that the market for sport teams is competitive. If a team can credibly threaten to locate elsewhere, then it can extract more public financing for an arena than if there were plenty of alternative teams (see Chapter 9). As a result, when valuing Amalie Arena, we must account for the private and public value.

The arena originally cost $166 million to build, with the franchise (the Lightning’s first ownership group) paying about $73 million of the costs. The day the arena opened, it would not have been worth $166 million to a private buyer, because that buyer would not have been able to capture the arena’s full value, especially the overflow value that accrued to local businesses from arena attendees who spent money in local restaurants, hotels, and retail stores. Thus, from a private perspective, we could estimate
that the arena is worth, say, $73 million (a reasonable figure because this is the price the franchise paid to gain access to the arena’s cash flows). The public receives about $93 million in additional value from the arena ($166 million less $73 million). Under the cost approach to valuation, the arena was worth $166 million on opening day—the replacement cost. Under the income or market approach, the value is only about $73 million (as a rough estimate, not accounting for negotiating leverage and other factors)—what a private buyer would pay. So, which is it?

The appeals court in Florida sided with the Tampa Bay Lightning franchise, claiming that an arena’s value is what a willing buyer would pay for the facility. The Lightning’s second ownership group paid $25 million for the facility when it bought the team for $100 million ($25 million was allocated to the facility). Originally, the county assessed the building at $110 million, based on the construction cost (cost approach) and depreciation of approximately $50 million. The decrease from $110 million to $25 million reduces the franchise’s property tax burden by 77%.

This example shows that even under an apparently simple approach, the cost approach, the valuation of an asset depends on the standard of value that is accepted. One could argue that the county was actually already collecting property taxes that related to the cost of the arena, because the arena’s construction raised property values for those restaurants and other businesses that benefit from it, thus increasing the property taxes of those businesses.

Cost Approach

Under the cost approach to determining the value of a business, the analyst discreetly determines the replacement costs of all of the firm’s assets. This approach requires a discreet appraisal of current assets, tangible personal property, real property, and, occasionally, intangible assets. The sum of the asset values serves as an estimate of the business’s fair market value. This approach is appropriate for valuing assets for which substitutes could reasonably be bought or built.

The cost approach has never been an accepted approach for measuring sport franchise or league values. The cost approach can be an effective tool for measuring the value of certain assets, such as equipment or a training facility, but it is not helpful for estimating the values of intangible assets that make up a substantial part of enterprise value in sport. Much of the value of a sport franchise, for instance, is in its ability to schedule games with other teams in the league as part of a championship season. This is not something that can be re-created in the marketplace. Consider, for example, the Kentucky Derby horse race. A competitor could host another race, but the value of the competing derby would not be as high as the Kentucky Derby, simply because the Derby has a brand and history that will garner larger revenues.

As the sidebar illustrates, the valuation of sport arenas is complex, because of the difference between the value of the arena to a private business owner and the value to the public in general.

Another example of a valuation in which the market and income approaches were not helpful for valuing the key asset, but the cost approach was useful, involved the valuation of a sponsorship in auto racing. A marketing agent was hired to seek sponsorships for a racing team in Champ Car (now part of IndyCar Racing). The agent was able to secure Toyota as a sponsor. In the agreement, Toyota was to provide $2 million in cash; approximately 50 racing engines; the use of three fully loaded trucks for use to transport equipment, the crew, and so forth; and two engineers from Toyota who were experts on the racing engines.

The marketing agent was due a 15% commission based on the value of the sponsorship. The valuation of the cash was simple ($2 million in cash is worth $2 million)—although, since payments were to occur over three years, the time value of money needed to be accounted for. The analyst valued the use of the three trucks by looking elsewhere for what it would cost to lease similar trucks from a dealer (essentially, the market approach). Similarly, the engineers’ time was valued based on how much they were being paid by Toyota. The racing engines, which generate 800 horsepower, were more difficult to value.

To use the income approach, the analyst would need to determine how much more income the racing team earned by using those engines, compared with the next best alternative. Given that winning races and prize money involves many different factors, the income approach was not applicable. The market approach involves understanding what similar engines sell for in the “marketplace.” Yet, these engines are generally not sold, but are used in racing as part of these sponsorships in exchange for the sponsor’s signage on the car, hospitality, and all of the other benefits from sponsorship. Finally, the analyst employed the cost approach and worked with Toyota Racing Development to determine the incremental cost of making one engines (including parts, labor, and so forth). It turned out that the engines were worth about $50,000 each.
Cases Analysis

1. In Exhibit 10.5, which shows 2001 valuations, why did the Montreal Expos have the highest price-to-revenue multiple under Selig’s valuation?
2. Give examples of ways in which the majority owner of a sport team could violate fiduciary duties and financially harm the minority shareholders.
3. In a discounted cash flow analysis, what happens to the NPV if, all else being equal, the discount rate goes up? What happens to the NPV if the growth rate for the terminal value (perpetual growth rate) rises?
4. Give examples of how a sport franchise can use related-party transactions to reduce its net income. For each example, how does it reduce net income?
5. When an analyst determines the value of a private company owned 100% by a single investor by analyzing the share prices of publicly traded companies, what adjustments must he or she make in order to arrive at a final value?

Practice problems

1. If the minority price for a single share of stock of a company is $20, there are 500,000 shares of stock, and a person offers to buy the entire company for $14.5 million, what is the controlling interest premium being offered?
2. Based on the same information, what is the minority or non-controlling interest discount for this company?

Net Present Value Calculated Under the Discounted Cash Flow Income Approach

As described in Sidebar 4.C (p. 96), the Silna family had a contract to receive 1/7th of the television revenue of four NBA teams (Denver Nuggets, San Antonio Spurs, Brooklyn Nets, and Indiana Pacers) in perpetuity. The NBA’s television deal running from the 2008–2009 season through the 2015–2016 season paid the family $18.9 million annually.

Use the above information and the following parameters to calculate the NPV of the contract.

- The valuation date is January 1, 2009.
- Assume that the Silnas received their first payment on January 1, 2009, and that the payments will continue annually thereafter.
- Assume that the Silnas are taxed at 35% for their income on this deal.
- Assume that their payments from this NBA deal will grow at 2% per year in perpetuity after the final year of this contract. (Although the Silnas’ deal has ended in reality, for purposes of this exercise we will assume that the deal will continue forever.)
- Assume a discount rate of 8%.
- Create a table that shows the results you found and gives a brief description of your steps, assumptions, and so forth.
- What would the value be if the discount rate were 10% and the NCF growth rate were 4%?

Fair Market Valuation: Market Approach, Income Approach, and Liquidation Value

335
Valuation Case Study: The Duke’s Sporting Goods Store

You’ll be shocked by our low prices!

OBJECTIVE
The goal of this analysis is to determine a financial valuation of the fair market value of 100% of The Duke’s Sporting Goods Store (“Duke’s”), by using two of the three approaches to valuation (income and market approaches, but not the cost approach). The valuation date is December 31 of the current year.

Your instructor will provide you with an Excel file containing two spreadsheets: Duke’s Discounted Cash Flow Analysis and Market Approach. Data have been entered in these spreadsheets that will allow you to calculate valuations for Duke’s under the income and market approaches.

FACTS
1. The company’s assets are cash ($100,000), inventory (worth $400,000 based on cost), and accounts receivable ($25,000).
   a. Inventory can be sold back to manufacturers for 50% of its cost.
   b. Accounts receivable can be sold to a collections agency for 40% of its current level.
2. The company’s liabilities are accounts payable of $75,000 and accrued expenses of $75,000.
3. The Discounted Cash Flow Analysis spreadsheet shows the most recent three years’ income statements in simplified form.
4. Assume the company pays a corporate tax rate of 40%.
5. For the current year, depreciation and amortization is $25,000. The company is using straight-line depreciation. Thus, D&A is expected to be $25,000 going forward.
6. The physical depreciation and/or amortization of fixed assets is allowed to be booked as an expense, thus lowering the taxable income. Yet, it is not an actual decrease in dollars so it is not a decrease in cash flow. That is why it is added back in to Net Income on the way to calculating Net Cash Flow. Net Cash Flow is actual physical dollars coming out of the business during the time period.
7. There is no interest expense.
8. For the current year, capital expenditures (CAPEX) is $50,000. CAPEX refers to the current expenditure of money by the company to purchase equipment and other assets that will help the company earn more money in the future. It directly affects net cash flow because it is spent in the current year instead of being passed through to the owners (as NCF).

ASSUMPTIONS
1. Assume the discount rate is 16% (based on comparables collected from Ibbotson’s database and other adjustments for risk).
2. Assume that the perpetual growth rate of net cash flow is 3.5% for the terminal year and beyond (the terminal year is the fourth year out from the current year, and it represents every year thereafter, adjusted for the perpetual growth rate).
3. Assume CAPEX is constant over the relevant time periods because the company is consistently and constantly investing in its future.
4. Assume D&A will continue to be $25,000 per year, given that the equipment and capital expenditures are being used to obtain fixed assets that are depreciable.

INCOME APPROACH (worth 45 points)
1. Forecast. Use the Discounted Cash Flow Analysis spreadsheet provided by your instructor and forecast revenues and expenses for Current Year + 1 (CY+1), CY+2, CY+3, and Terminal Year. For
this case study, use only the previous years’ revenues and expenses as a guide. (Normally, you would also use other information about the economy, the industry, the company, and so forth). Come up with your own reasonable forecast.

2. Net income. Calculate the net income for CY+1, CY+2, CY+3, and terminal year.
3. Net cash flow. Calculate the net cash flow for CY+1, CY+2, CY+3, and terminal year.
   a. As described on p. 277–279 and illustrated in Exhibit 10.9, calculate NCF from net income.
   b. Start with net income and add back depreciation and amortization to find gross cash flow.
   c. Subtract CAPEX from gross cash flow.
   d. Subtract any increase (or add any decrease) in net working capital. To calculate changes in NWC, subtract current liabilities (not including inventory, since, even though inventory is technically a current asset, a manager would not want to rely on inventory to pay workers). Make a reasonable assumption for changes in NWC for future years.
   e. The result is net cash flow.
   a. Determine the discount period for each year (CY and going forward).
   b. Determine the discount factor for each year, including the terminal year.
   c. Enter the discount rate and perpetual growth rate in the spreadsheet.
   d. Calculate the terminal value.
   e. Calculate the present value of the NCF for each year, including the terminal year.
   f. Add up each year’s present value to find the net present value of the entire business, based on cash flow.

MARKET APPROACH (worth 45 points)

After an exhaustive search, three businesses that appear to be comparable to Duke’s are found. The Market Approach spreadsheet gives basic financial information about the businesses and recent transactions involving them and provides space for the calculations. The comparable businesses are the following:

1. Charlie’s Sporting Goods. Charlie’s is located in a neighboring town and has a similar clientele to Duke’s. It has been in operation for seven years and over the past three years has generated steady revenues and net income. The current majority owner, Bill, purchased Charlie’s from the founder two years ago for $1.5 million. He sold a small piece of it recently for $60,000.
2. Mary’s Sporting Goods. Mary’s is located a few towns away and has existed for over a decade. It specializes in women’s and girls’ sporting goods and draws from a larger market area than Duke’s. Mary’s offers free training on its equipment, which adds to its expenses, but Sally (the current owner) feels that this policy grows its customer base and leads to more sales. Sally, who is quite risk averse (like Mary), purchased the business outright in the current year.
3. Jamie’s Sporting Goods. Jamie’s is a three-store chain located on the north and south sides of the nearest large city. It has been operating for over two decades. It recently added its third store and financed this expansion with a loan from a local bank. It is paying substantial interest on that loan. While it produces a high net income, it is also more leveraged than Mary’s or Charlie’s. Jamie, the current majority owner, sold 8% of the business for $500,000 in the current year.

LIQUIDATION VALUE (worth 10 points)

What is the liquidation value (as opposed to the fair market value) of Duke’s? Look at the present value of all assets that could be liquidated and account for all debts (at their present value). Determine the sum of those values. In other words, if the company were to be liquidated, how much cash would be left over?

CHAPTER 10 APPENDIX

APPENDIX 10.A Proof of the calculation of the NPV of the terminal value

Following is proof that the net present value of the terminal value is equal to the net cash flow divided by the difference between the discount rate and the growth rate of the business’s NCF. Since $\infty-1$ does not exist, but reduces to $\infty$, the last component of Eq. (1) has the same exponent in the numerator and denominator. Eq. (3) recognizes that the right-hand side of Eq. (2)) is equal to NPV, as written in Eq. (1), plus $NCF/(1 + g)$.

$$NPV = \frac{NCF}{(1 + r)} + \frac{NCF(1 + g)^t}{(1 + r)^2} + \ldots + \frac{NCF(1 + g)^{-\infty}}{(1 + r)^{-\infty}}$$

(1)
\[
\frac{(1 + r)^{n}}{1 + g} = \frac{NCF}{(1 + g)^{1}} + \frac{NCF(1 + g)}{(1 + g)^{2}} + \ldots + \frac{NCF(1 + g)^{n}}{(1 + g)^{n}}
\]

\[
\frac{(1 + r)^{n}}{1 + g} = \frac{NCF}{(1 + g)^{1}} + \frac{NPV}{(1 + g)^{2}}
\]

\[
NPV = \frac{NCF}{r - g}
\]

REFERENCES

Sebring Airport Authority v. McIntyre, 623 So. 2d 541 (Fla. 2d DCA 1993).
The standard deviation was 0.19, which is very small when compared with the mean. The P/R ratio for all but four teams was between 1.89 and 2.15.

See Appendix 10.A for a proof that the discount factor’s infinite geometric series converges such that NPV = NCF/(r — g), where r is the discount rate and g is the perpetual growth rate.

Suppose a business’s sole income is a patent that is expected to run out in a certain number of years, and the business will cease operations at that time. In such a situation, the analyst would determine the residual value of the assets (perhaps an office building, land, and cash), add that to the NPV of NCF, and subtract the NPV of any debt.
KEY CONCEPTS
comparables analysis
competitive analysis
corporate depth
cost-benefit analysis
feasibility study
financing analysis
market demand
primary research
secondary research
Introduction

When the construction of a new stadium or arena is under consideration, many questions must be answered: What would it cost to build? Where would it be located? How would it be paid for? Does it make sense for local government to help fund it? Would events at the facility generate enough revenue to justify building it? Feasibility studies help answer these questions.
FEASIBILITY STUDIES DEFINED

In general, a feasibility study is a study conducted to determine whether a project is likely to be sensible and successful, considering such items as engineering, land use, financing, demand, and economic impact. Feasibility studies in sport are undertaken to determine the practicality and likely success of large projects. They can answer such questions as:

- whether a city should build a community recreation center, a professional sport stadium or arena, or a public pool,
- whether a metropolitan area should lure a sport team to town, and how it could be done,
- whether a city should bid to host a major sporting event,
- whether an athletic director should build a new facility or renovate an existing one,
- whether a university should add a locker room to the campus recreation center,
- whether an entrepreneur should open a new health club, and
- whether a small town should build a new soccer field.

A feasibility study incorporates many cost-benefit analyses—analyses of the cost of a project in relation to its potential benefits. For a sport facility, a cost-benefit analysis assesses whether there is likely to be enough demand for events at the new facility and enough corporate support for sponsorship of the facility. Together, these two assessments determine whether there is a market for the project. Additionally, a feasibility study analyzes how to fund a project, where it should be located, its cost, and its scale. It may also include information on the operation of the facility once it is in place or methods to secure a major tenant.

Phases of a Feasibility Study

Feasibility studies are often broken into two phases. The initial phase, or a Phase I feasibility study, tests whether a more in-depth analysis should be undertaken. It is typically based on secondary sources of information, including comparisons with other sport facilities and other similar cities or communities. Phase I is quicker to complete and is significantly less costly than a more in-depth study. The general purpose is to present the information that the parties need in order to proceed with project development discussions. If the project passes muster, then often a Phase II, or more in-depth, study is completed, based on primary data that are generated specifically for the study. A Phase II feasibility study for a sport facility lays out a specific financing plan (whereas a Phase I financing analysis will present a number of possible financing sources), actual site selection (not just possibilities), facility design details and renderings, a market demand analysis based on primary research about location (not just comparisons to other facilities and cities), and primary research on economic impact.

Parts of a Feasibility Study

A feasibility study typically consists of four main parts, which provide analyses of

1. market demand;
2. location, construction cost, and engineering;
3. financing; and
4. economic and fiscal impact.

The findings in each of these sections will affect or be affected by the findings of the other sections. As Exhibit 11.1 illustrates, the analysis of market demand will help determine the suggested size of the facility, including the number of seats, luxury suites, premium food areas, and so forth (see arrow 1). The location, construction cost, and engineering analysis suggests a suitable location for the facility and determines the overall cost of construction, based on the size suggested by the market demand analysis. That cost will be an input into the financing analysis—an assessment of how much money will be needed to build the facility (arrow 2). The information about the cost and process of construction will help determine the economic and fiscal impact of the facility during the construction period (arrow 3).

The fiscal impact portion of the economic impact analysis provides information on how much government revenue the construction and operation of the facility will generate. That revenue will be considered in the evaluation of possible financing sources, and it will also be a factor in the determination of how much public money will be used to finance the construction (arrow 4). The market demand findings provide information on expected attendance for events at the facility. That information will factor into the analysis of the facility’s
economic and fiscal impact (arrow 5). Market demand findings will also help in the determination of how much net private revenue the facility and its events will generate. These private revenue sources and amounts (especially the possible naming rights sponsorship) will be listed as possible private financing sources (arrow 6).

EXHIBIT 11.1 The parts of a feasibility study.

Feedback loops in the process will cause readjustments in the original estimates. Once the location, costs, and engineering analysis determine the size of the facility and related costs, the facility size may change from the original estimate, which was based solely on market demand (arrow 7). The change in the number of seats and luxury suites will, for instance, affect the overall estimate of the number of customers. This estimate will then affect all of the other sections of the feasibility study. Another feedback loop links financing with the overall cost and size of the facility. The financing costs, largely determined by interest rates, will affect the overall cost of construction and can limit the size of the facility (arrow 8).

A detailed examination of market demand analysis follows, making up the bulk of this chapter. Because economic impact is an important and diverse topic, it has its own chapter (Chapter 12). Similarly, facility financing, briefly mentioned here, is discussed in detail in Chapter 9. A thorough examination of construction costs and engineering is beyond the scope of this text, but at the end of this chapter we summarize the elements of this part of a feasibility study.
MARKET DEMAND

The market demand analysis often drives much of the rest of a feasibility study, and it is typically the major portion of a Phase I study. For a sport facility, it is necessary to measure the market demand—the demand in the marketplace for a facility—in order to determine whether the facility will attract enough events, patrons, and corporate dollars to justify its construction. The likely demand is also important for establishing the specifications of the facility in terms of seats, luxury suites, club seats, parking spaces, and square footage.

The researchers who are conducting a feasibility study use both primary and secondary methods to estimate market demand. Primary research is the generation of information specifically for the purpose of the study. For instance, a survey of fans or local businesses to determine their likely attendance at events is a form of primary research. The interpretation of survey results about intent to purchase requires caution. The old adage that people vote with their feet and not their mouth suggests that respondents may say one thing, but when it comes time to part with their money, they may do another. Therefore, it is best to rely on both secondary and primary research, whenever possible.

Secondary research typically involves the analysis of data that have already been generated for other purposes but might provide information for the question at hand. For instance, an analysis of attendance at other new sport facilities around the country, with adjustments for differences in the locations, might provide useful information on expected attendance at the facility that is the subject of the feasibility study. The use of information from comparable markets is similar to the use of comparables for valuation, discussed in Chapter 10. This type of secondary research is known as comparables analysis. In the case of a sport facility feasibility study, comparables analysis is based on the idea that if sport facilities are successful in comparable cities, then a facility will be successful in the city that is the subject of the study. The researchers of a feasibility study are trying to measure the expected value of various revenue streams (e.g., tickets) in order to predict the financial health of the proposed facility. An assessment of comparable markets and their facilities can provide insight about what to expect if a facility is built.

The market demand analysis for a sport facility feasibility study can be divided into the following subsections:

- individual ticket demand
- corporate demand (club seats, luxury suites, and sponsorships)
- event activity
- facility specifications and operating estimates

Exhibit 11.2 shows how these subsections (labeled through ) fit into the overall feasibility study.

EXHIBIT 11.2 The parts and subsections of a feasibility study.
**Individual Ticket Demand**

To estimate ticket demand, we may use comparables analysis. Consider that a sport arena may host 150 events annually or a football stadium may host 12 to 25 events. These events will generate revenue from purchases of tickets, concessions, merchandise, and parking. Typically, we would look at the local population of likely attendees to see how it compares with other markets that have similar sport facilities with similar tenants.

To use the NFL’s Oakland Raiders franchise as an example, a comparison of the population of Oakland’s metropolitan area to other NFL markets would be an important first step in predicting the likely success of a new NFL stadium in Oakland. Throughout this chapter we will refer to an actual feasibility study completed in 2010 on behalf of the City of Oakland and Alameda County (joint owners of the Oakland Coliseum) by CSL and JMI Sports. In such a feasibility study, the researchers study demographic and lifestyle information, such as the age, income, and purchasing habits of local residents (residents within 30 miles of the facility). The U.S. Census Bureau provides some of this information by city, county, or metropolitan statistical area. Its American Factfinder program (http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml) provides information about gender, age, education level, income, and so forth for a city or county name or ZIP code. Many private companies also provide market demographics, ethnographics, and lifestyle information down to the city block; examples are Claritas, Scarborough Research, and Insights Research Group. The researchers also analyze the revenues of comparable sport stadiums.

**Size of population**

Exhibit 11.3 compares the populations of the 30 NFL markets as measured by the number of people living in each Consolidated Metropolitan Statistical Area (CMSA) in 2010. When we divide the population by the number of major professional franchises in the area, the Oakland CMSA falls approximately in the middle of the group. Measuring the number of people per franchise is a quick way of looking at relative demand across markets. One problem, though, is that research by Andrew Zimbalist and others has shown that people who live in one market are often fans of more than one team (say, an NBA team and an NFL team); thus, two franchises that share a market of 4 million people are more likely to have higher demand per team than one team in a market of 2 million people. Yet, this is a convenient way to estimate a market.

Purely based on population, Oakland is in the fourth largest market listed; yet, once the number of teams in the market is accounted for, it is approximately in the middle of the pack. When referencing this type of...
information, we commonly speak in terms of an index where the market of interest is set at 100 and the other markets are above or below this number, according to how they compare to the market of interest. For instance, Boston’s population per team is 10% higher than Oakland’s, so its index is 110%. Given that sport facilities are useful for a number of decades, it is important to consider the expected population growth of the area surrounding the facility. Exhibit 11.3 lists the expected population in 2015 and the compounded annual growth rate (CAGR) for each area. A market that is currently relatively small can show a large growth rate (e.g., Phoenix).

EXHIBIT 11.3 Comparison of the populations of the NFL markets.
In addition to the size of the population, the age distribution of the population is another factor to consider when analyzing ticket demand in comparable markets. The target market of many NFL teams is people between the ages of 25 and 49, because these are likely ticket buyers. For the NFL, Exhibit 11.4 shows that Oakland skews slightly older than a typical NFL market (reflected in its rank of 24 out of the 30 NFL markets).

**Income**
The income of the local population is an indicator of its ability to purchase tickets for facility events. In Exhibit 11.4, we see that Oakland’s median household income is relatively high compared with the rest of the NFL. Households with larger incomes are more likely to purchase season tickets (as opposed to single-game tickets) and club seats.

Sport facilities offer tiered pricing and quality. At the bottom of the scale are the “cheap seats,” which are often sold on an individual-event basis. Season ticket seats are closer to the playing surface, and even better seats—club seats—are very close to the action and provide other amenities. At the top of the pricing tier are luxury suites, which are small rooms that overlook the playing surface and provide tables, food, TVs, restrooms, and more, in addition to seating. The fact that the typical (median) household income of the Oakland region is high suggests that it would be easier to sell season tickets and club seats in Oakland than in the average market, all else being equal.

EXHIBIT 11.4 Oakland-NFL market comparison (in 2005 dollars).

<table>
<thead>
<tr>
<th>DEMOGRAPHIC VARIABLE</th>
<th>OAKLAND</th>
<th>RANK</th>
<th>AVERAGE¹</th>
<th>MEDIAN¹</th>
<th>HIGH</th>
<th>LOW</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>6,154,900</td>
<td>5</td>
<td>4,013,600</td>
<td>2,824,600</td>
<td>18,870,000</td>
<td>1,118,900</td>
</tr>
<tr>
<td>Projected Population Growth²</td>
<td>0.81%</td>
<td>18</td>
<td>1.1%</td>
<td>1.2%</td>
<td>2.8%</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Population per Franchise</td>
<td>1,025,900</td>
<td>17</td>
<td>1,161,710</td>
<td>1,097,800</td>
<td>2,986,700</td>
<td>559,500</td>
</tr>
<tr>
<td>Median Household Income</td>
<td>$79,171</td>
<td>2</td>
<td>$56,512</td>
<td>$54,483</td>
<td>$65,427</td>
<td>$45,711</td>
</tr>
<tr>
<td>Cost of Living Index³</td>
<td>151.8</td>
<td>29</td>
<td>108.0</td>
<td>98.6</td>
<td>217.9</td>
<td>88.7</td>
</tr>
<tr>
<td>Adjusted Household EBI⁴</td>
<td>$40,059</td>
<td>22</td>
<td>$43,552</td>
<td>$43,102</td>
<td>$50,039</td>
<td>$22,285</td>
</tr>
<tr>
<td>Median Age¹</td>
<td>38.7</td>
<td>24</td>
<td>37.4</td>
<td>37.3</td>
<td>42.6</td>
<td>33.5</td>
</tr>
<tr>
<td>Corporate Inventory⁵</td>
<td>6,749</td>
<td>3</td>
<td>3,850</td>
<td>3,050</td>
<td>12,120</td>
<td>1,120</td>
</tr>
<tr>
<td>Corporations per Franchise</td>
<td>1,120</td>
<td>15</td>
<td>1,170</td>
<td>1,120</td>
<td>1,920</td>
<td>560</td>
</tr>
</tbody>
</table>

¹Averages and medians exclude Oakland.
²Annualized growth from 2010–2015.
³Rank from lowest to highest cost of living.
⁴EBI is effective buying income, which accounts for tax payments.
⁵Rank from youngest to oldest.
⁶Total corporate inventory contains corporations with at least $5 million in sales and 25 employees.

Sources: Data compiled from C2ER, Dun & Bradstreet, and Claritas.

Adjusting income to reflect the cost of living can provide a more realistic measure of disposable income, or income left over after paying for necessities. For instance, the cost of living index (COLI) for Oakland (see Exhibit 11.4) is 151.8, as measured by the Council for Community and Economic Research (C2ER). Calculating income divided by COLI provides a measure of median income that accounts for the cost of living. In Oakland that figure would be about $52,155, which is nearly equal to the average for the NFL. Alternatively, or in addition, we might want to look at income after taxes, or effective buying income. As shown, Oakland is below the average NFL market when taxes are accounted for. In other words, once we account for the cost of living in the Oakland region, it is about the same as other NFL markets in terms of disposable income; when we consider taxes, it is just below average for NFL markets.

Other possible predictors of whether many fans would attend NFL games in a new stadium might be the local television ratings of NFL games and the purchases of footballs in the local market.

Annual revenues

For additional useful information in a ticket demand analysis, we might look at the annual revenues of the sport facilities in comparable markets. These revenues would suggest how successful these facilities are. If half of the facilities are struggling financially, this would indicate that a facility in Oakland could be expected to struggle, as well. Unfortunately, revenue information is generally not available. Additionally, each tenant
has its own method of accounting for facility revenues, making comparisons difficult. See the discussion of transfer pricing and related party transactions in Chapter 10, where it discusses how revenues for certain facility events may be captured on a different set of financials, representing a different company. A separate company may secure and host events in a facility outside of the main sports team tenant and show high profits from those events, while the financial statements of the facility itself might show losses. Yet, the overall enterprise might be profitable.

Moreover, the winning prospects of the tenant(s) of a sport facility certainly affect ticket sales. However, reliance on a winning team over a few decades is not reasonable, given the tenuous and temporary nature of winning in team sports. Typically, an analyst assumes an average-quality team when conducting a feasibility study. This is one of the many assumptions that are necessary to conduct a feasibility analysis.

**Using the data to calculate ticket demand**

Average attendance for NFL games from 2005–2009 (the years prior to the Oakland feasibility study) was about 68,000, even though the Raiders averaged only 54,409. The average for teams in new stadiums was also about 68,000. A simple method for determining future expected attendance levels, and, therefore, providing information on potential ticket revenues, is to assume that the Raiders will draw the league average in a new stadium, 68,000. Preferably, an analyst could incorporate more information into the analysis, such as market size. Our research, in which we controlled for winning, market size, competition with other local franchises, and more, shows that the Raiders should expect to draw between 65,000 and 71,000 attendees in a new stadium. In the end, a feasibility study must provide an estimate of sales of the various proposed products and services, not just comparisons across markets, and this aspect of feasibility studies is discussed later in the chapter. Understanding expected future attendance is an important step in achieving this goal.

**SIDEBAR 11.A**

**Luxury suite prices: What drives them?**

Luxury suites are an increasingly important source of revenue for sport franchises and form part of the revenue forecast in feasibility studies. In 2007, on average, American sport facilities generated nearly $10 million per facility in luxury suite revenues. Suite prices in 2008 ranged from about $60,000 to $250,000, and in 2010 MetLife Stadium, home to the New York Jets and the New York Giants, opened with some of its suites priced at $1 million for the year. Not only are suite revenues significant, but they are often more consistent over time than ticket revenues (which vary more as teams win and lose).

Shapiro, DeSchriver, and Rascher (2012) analyzed the factors that drive luxury suite prices in North American facilities and found them to include population, number of mid-sized corporations, per capita income, number of games that can be watched by suite holders, the type of facility (indoor or outdoor), league (NFL, MLB, NBA, NHL, or MLS), winning percentage of the major tenants in the facility, and competition with other facilities in the area that offer suites.

For example, an increase in market population of 10% (about 480,000 people) increases annual suite prices by about 3.5% (or $6,000). Per capita income that is 10% higher is associated with a 10% jump, approximately, in suite prices. Each additional game adds about $2,000 to suite prices, which is not surprising. A 10% increase in average winning percentage points over the most recent five years (e.g., from 0.500 to 0.600) generates an extra $15,000 per suite, or a 9% increase. Finally, each additional competing facility in a marketplace lowers prices by about 15%, thus providing some evidence that facilities compete with one another for corporate dollars.

**Corporate Demand**

An important factor in sport facility market demand is corporate demand for season tickets, club seats, luxury suites, and sponsorships, which directly affects facility revenues. In the NBA, for example, over 50% of season ticket holders are corporations. The NFL tends to have a higher percentage of fans at its games who are simply fans of the team or sport, but increasingly NFL clubs are generating more revenue from sponsorships, luxury suites, and other corporate revenue streams. Accordingly, assessment of corporate demand is an important component of the market demand analysis in a feasibility study. We will use a comparables analysis to estimate corporate demand for the Oakland Raiders.
Corporate depth analysis

As suggested above, corporations are often potential purchasers of season tickets, club seats, luxury suites, and sponsorships. Corporate depth, or the depth of a market’s corporate base, provides information for predicting corporate-related revenues. One measure of corporate depth is the number of headquarters of Fortune 500 companies in the local area. We can also compile more detailed measures of the number of companies of certain sizes in an area.

Exhibit 11.5 gives the number of companies with annual sales of at least $5 million and at least 25 employees in markets that are comparable to the Oakland Raiders’. Although the Oakland metropolitan area is third in terms of the raw number of corporations, once the number of franchises is factored in, it drops to the middle of the pack, to 15. Note that in New Orleans—compared to, say, Chicago—there are many fewer corporations per franchise, and, thus, fewer opportunities to sell a club seat.

Suite and seat revenue potential

We can estimate the amount of revenue that can be generated by luxury suites by studying the results in comparable markets. Exhibit 11.6 shows the wide range of the number of suites available across NFL markets (this information is typically available from the Association of Luxury Suite Directors or team representatives). The authors of the Oakland Raiders feasibility study have listed not only the NFL suites in each market but also the NBA, NHL, and MLB suites. As discussed in the sidebar, NFL suites compete with suites in other facilities. Further, once the number of corporations is integrated into the analysis, we can see that in Buffalo, for example, suites need to be sold to about one in six of the large companies in the area—a much more difficult sales task than in Seattle, where there are 21 companies for each suite and relative demand would be nearly four times as high. In larger markets, such as Oakland’s, more suites are available for sale, but there are more companies locally to lease them. We can see this in Exhibit 11.6 by looking at the larger starred (*) cities listed (the comparables).

EXHIBIT 11.5 Corporate depth of markets comparable to Oakland.
### EXHIBIT 11.6 Number of suites across NFL markets.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Team(s)</th>
<th>Total Corporate Inventory</th>
<th>Number of Major League Franchises</th>
<th>Corporations per Team</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chicago</td>
<td>Bears</td>
<td>9,610</td>
<td>5</td>
<td>1,922</td>
</tr>
<tr>
<td>2</td>
<td>Seattle</td>
<td>Seahawks</td>
<td>3,590</td>
<td>2</td>
<td>1,795</td>
</tr>
<tr>
<td>3</td>
<td>Houston</td>
<td>Texans</td>
<td>5,320</td>
<td>3</td>
<td>1,773</td>
</tr>
<tr>
<td>4</td>
<td>Dallas</td>
<td>Cowboys</td>
<td>6,340</td>
<td>4</td>
<td>1,585</td>
</tr>
<tr>
<td>5</td>
<td>Washington D.C.</td>
<td>Redskins</td>
<td>6,200</td>
<td>4</td>
<td>1,550</td>
</tr>
<tr>
<td>6</td>
<td>San Diego</td>
<td>Chargers</td>
<td>2,940</td>
<td>2</td>
<td>1,470</td>
</tr>
<tr>
<td>7</td>
<td>Boston</td>
<td>Patriots</td>
<td>5,540</td>
<td>4</td>
<td>1,385</td>
</tr>
<tr>
<td>8</td>
<td>New York</td>
<td>Jets, Giants</td>
<td>12,120</td>
<td>9</td>
<td>1,347</td>
</tr>
<tr>
<td>9</td>
<td>Jacksonville</td>
<td>Jaguars</td>
<td>1,340</td>
<td>1</td>
<td>1,340</td>
</tr>
<tr>
<td>10</td>
<td>Baltimore</td>
<td>Ravens</td>
<td>2,850</td>
<td>2</td>
<td>1,325</td>
</tr>
<tr>
<td>11</td>
<td>Atlanta</td>
<td>Falcons</td>
<td>5,190</td>
<td>4</td>
<td>1,298</td>
</tr>
<tr>
<td>12</td>
<td>Philadelphia</td>
<td>Eagles</td>
<td>5,110</td>
<td>4</td>
<td>1,278</td>
</tr>
<tr>
<td>13</td>
<td>Detroit</td>
<td>Lions</td>
<td>4,970</td>
<td>4</td>
<td>1,243</td>
</tr>
<tr>
<td>14</td>
<td>Kansas City</td>
<td>Chiefs</td>
<td>2,250</td>
<td>2</td>
<td>1,125</td>
</tr>
<tr>
<td>15</td>
<td>Oakland/San Francisco</td>
<td>Raiders, 49ers</td>
<td>6,740</td>
<td>6</td>
<td>1,123</td>
</tr>
<tr>
<td>16</td>
<td>Cincinnati</td>
<td>Bengals</td>
<td>2,230</td>
<td>2</td>
<td>1,115</td>
</tr>
<tr>
<td>17</td>
<td>Charlotte</td>
<td>Panthers</td>
<td>2,110</td>
<td>2</td>
<td>1,055</td>
</tr>
<tr>
<td>18</td>
<td>Cleveland</td>
<td>Browns</td>
<td>3,050</td>
<td>3</td>
<td>1,017</td>
</tr>
<tr>
<td>19</td>
<td>Green Bay/Milwaukee</td>
<td>Packers</td>
<td>3,050</td>
<td>3</td>
<td>1,017</td>
</tr>
<tr>
<td>20</td>
<td>Indianapolis</td>
<td>Colts</td>
<td>2,030</td>
<td>2</td>
<td>1,015</td>
</tr>
<tr>
<td>21</td>
<td>Minneapolis</td>
<td>Vikings</td>
<td>3,820</td>
<td>4</td>
<td>955</td>
</tr>
<tr>
<td>22</td>
<td>St. Louis</td>
<td>Rams</td>
<td>2,830</td>
<td>3</td>
<td>943</td>
</tr>
<tr>
<td>23</td>
<td>Miami</td>
<td>Dolphins</td>
<td>3,740</td>
<td>4</td>
<td>935</td>
</tr>
<tr>
<td>24</td>
<td>Phoenix</td>
<td>Cardinals</td>
<td>3,450</td>
<td>4</td>
<td>863</td>
</tr>
<tr>
<td>25</td>
<td>Tampa Bay</td>
<td>Buccaneers</td>
<td>2,530</td>
<td>3</td>
<td>843</td>
</tr>
<tr>
<td>26</td>
<td>Pittsburgh</td>
<td>Steelers</td>
<td>2,490</td>
<td>3</td>
<td>830</td>
</tr>
<tr>
<td>27</td>
<td>Nashville</td>
<td>Titans</td>
<td>1,650</td>
<td>2</td>
<td>825</td>
</tr>
<tr>
<td>28</td>
<td>Denver</td>
<td>Broncos</td>
<td>3,200</td>
<td>4</td>
<td>800</td>
</tr>
<tr>
<td>29</td>
<td>Buffalo</td>
<td>Bills</td>
<td>1,180</td>
<td>2</td>
<td>590</td>
</tr>
<tr>
<td>30</td>
<td>New Orleans</td>
<td>Saints</td>
<td>1,120</td>
<td>2</td>
<td>560</td>
</tr>
<tr>
<td></td>
<td>Average (excl. Oakland)</td>
<td></td>
<td>3,850</td>
<td>3.2</td>
<td>1,168</td>
</tr>
<tr>
<td></td>
<td>Median (excl. Oakland)</td>
<td></td>
<td>3,050</td>
<td>3.0</td>
<td>1,123</td>
</tr>
</tbody>
</table>

*Total corporate inventory contains corporations with at least $5 million in sales and 25 employees.

*Includes teams in the NFL, MLB, NBA, and NHL.

*Includes the following MSAs: Green Bay, Milwaukee-Waukesha, Appleton-Oshkosh-Neenah, Racine, and Sheboygan.

Source: Data compiled from Dun & Bradstreet, 2010.
Similarly, Exhibit 11.7 shows the number of club seats available in the marketplace. The table includes corporate depth (the number of corporations) and the number of high-income households. Both corporations and high-income households (defined as earning at least $100,000) are potential customers for club seats. The list is sorted by the number of corporations divided by the number of club seats available, and the Oakland market ranks eighth out of the 30 NFL markets. It would be seventh if ranked by the number of high-income households divided by the number of club seats available. Dividing the number of potential buyers by the supply of club seats indicates the relative demand and supply for the product compared with other markets (similar to the ratio analyses across companies discussed in Chapter 2). Compared to most of the rest of the NFL markets, the Raiders should be able to sell club seats in the Oakland market more easily. However,
compared to the other markets that are similar in size, the Oakland market is just below average in number of corporations per club seat, but just above average in high-income households per club seat.

When we combine the information for luxury suites and club seats, we can see the total potential revenues in each comparable market. Exhibit 11.8 lists, in ascending order, the potential revenue for luxury suites and club seats for NFL teams in 2010, based on inventory and average premium prices. The Raiders are near the bottom for three reasons: as of this writing, they play in an older stadium, the team had not fared well on the field in recent years, and they compete with other sport franchises in the market for club seats and suites. However, in a new stadium they could raise their seat and suite prices (and possibly offer more of them) and increase those revenue streams substantially. Based on research from the Association of Luxury Suite Directors, club seats in new NFL stadiums can sell for about $4,100 on average, and suites sell for nearly $200,000 (weighted average of small and large suites). The authors of the feasibility study for the Raiders determined that the team should have about 7,500 club seats, 96 large luxury suites, and 60 mini-suites (half size). At those prices, the Raiders could expect over $60 million in revenue from those two sources, compared with just less than $18 million as of 2010.

<table>
<thead>
<tr>
<th>Primary research on corporate demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a Phase II feasibility study, rather than undertaking a comparables analysis, we may conduct primary research on corporate demand as an alternative or additional method. Surveys of corporations to investigate their likelihood of buying premium seating and sponsorships would provide some direct evidence. Bear in mind that caution is necessary in interpreting survey results about intent to purchase. We recommend relying on both secondary and primary research whenever possible.</td>
</tr>
</tbody>
</table>

EXHIBIT 11.7 Club seats, corporate depth, and high-income households in NFL markets.
### EXHIBIT 11.8 Total potential suite and club seat revenue per franchise (based on inventory and average premium prices).

<table>
<thead>
<tr>
<th>Rank</th>
<th>Market</th>
<th>Comparable Markets (per corporation; x: income)</th>
<th>NBA</th>
<th>NFL</th>
<th>MLB</th>
<th>Total Club Seats</th>
<th>Total Corporations</th>
<th>Corp. per Club Seat</th>
<th>Total High Income Households</th>
<th>High Income Households per Club Seat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Boston</td>
<td>x</td>
<td>1,063</td>
<td>6,668</td>
<td>6,668</td>
<td>8,268</td>
<td>8,268</td>
<td>5,540</td>
<td>0.60</td>
<td>541,352</td>
</tr>
<tr>
<td>2</td>
<td>Minneapolis</td>
<td>x</td>
<td>1,250</td>
<td>6,000</td>
<td>4,000</td>
<td>6,000</td>
<td>6,000</td>
<td>4,000</td>
<td>0.60</td>
<td>392,028</td>
</tr>
<tr>
<td>3</td>
<td>Detroit</td>
<td>x</td>
<td>1,000</td>
<td>7,000</td>
<td>4,000</td>
<td>7,000</td>
<td>7,000</td>
<td>4,000</td>
<td>0.60</td>
<td>337,328</td>
</tr>
<tr>
<td>4</td>
<td>Chicago</td>
<td>x</td>
<td>3,000</td>
<td>4,000</td>
<td>3,000</td>
<td>4,000</td>
<td>4,000</td>
<td>3,000</td>
<td>0.60</td>
<td>843,302</td>
</tr>
<tr>
<td>5</td>
<td>Atlanta</td>
<td>x</td>
<td>1,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>433,302</td>
</tr>
<tr>
<td>6</td>
<td>Houston</td>
<td>x</td>
<td>2,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>462,248</td>
</tr>
<tr>
<td>7</td>
<td>Philadelphia</td>
<td>x</td>
<td>1,800</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>550,041</td>
</tr>
<tr>
<td>8</td>
<td>Oakland/San Francisco/San Jose</td>
<td>x</td>
<td>2,700</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>694,376</td>
</tr>
<tr>
<td>9</td>
<td>New York</td>
<td>x</td>
<td>2,800</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>1,007,162</td>
</tr>
<tr>
<td>10</td>
<td>Seattle</td>
<td>x</td>
<td>2,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>163,846</td>
</tr>
<tr>
<td>11</td>
<td>Dallas</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>348,456</td>
</tr>
<tr>
<td>12</td>
<td>Washington D.C.</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>514,836</td>
</tr>
<tr>
<td>13</td>
<td>St. Louis</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>603,433</td>
</tr>
<tr>
<td>14</td>
<td>Phoenix</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>323,613</td>
</tr>
<tr>
<td>15</td>
<td>Cleveland</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>141,545</td>
</tr>
<tr>
<td>16</td>
<td>Baltimore</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>284,703</td>
</tr>
<tr>
<td>17</td>
<td>Kansas City</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>142,962</td>
</tr>
<tr>
<td>18</td>
<td>Indianapolis</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>152,812</td>
</tr>
<tr>
<td>19</td>
<td>San Diego</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>280,845</td>
</tr>
<tr>
<td>20</td>
<td>Cincinnati</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>163,311</td>
</tr>
<tr>
<td>21</td>
<td>Denver</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>232,919</td>
</tr>
<tr>
<td>22</td>
<td>Pittsburgh</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>150,491</td>
</tr>
<tr>
<td>23</td>
<td>Charlotte</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>129,858</td>
</tr>
<tr>
<td>24</td>
<td>Miami</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>469,233</td>
</tr>
<tr>
<td>25</td>
<td>Tampa Bay</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>181,838</td>
</tr>
<tr>
<td>27</td>
<td>Nashville</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>193,445</td>
</tr>
<tr>
<td>28</td>
<td>Jacksonville</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>96,941</td>
</tr>
<tr>
<td>29</td>
<td>Buffalo</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>62,509</td>
</tr>
<tr>
<td>30</td>
<td>New Orleans</td>
<td>x</td>
<td>2,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
<td>0.60</td>
<td>70,449</td>
</tr>
</tbody>
</table>

Ranks by corporations per club seat.

1 Includes corporations with at least 25 employees and $25 million in annual sales.
2 Includes households with annual household income greater than $100,000
3 Comparable markets are defined as having more than 4,000 companies.
4 Comparable markets are defined as having more than 40,000 high-income households.

Source: CSL & JMI Sports Study (2010).
Naming rights and other sponsorship revenue

Naming rights are the largest single sponsorship revenue source for a sport facility. To estimate the naming rights values for specific facilities, many sport marketing firms have developed naming rights models that use existing naming rights deals as comparables. Some academic publications, such as DeSchriver and Jensen (2003), also provide models. Post-2010 naming rights deals have generated $10 million per year or more; however, back in 2010, when the Raiders feasibility study was conducted, the big deals for the 49ers, Cowboys, and MetLife Stadium had not yet been consummated. The Raiders study estimated $6 million per year, but that figure would likely be larger now.

Event Activity

Another element in determining market demand or penetration for a feasibility study is a competitive analysis regarding the supply of facilities, incorporating primary research on potential events. This is different from a comparables analysis, where we are trying to find similar situations from which to learn. In a competitive analysis, we directly investigate existing facilities (stadiums, arenas, and amphitheaters) that might compete with the subject facility for hosting events. A sport facility essentially has two types of clients: attendees who show up for events and event property owners (or team owners) who decide where to hold their events or games. A particular market may have high incomes, a large population, and a lot of corporate depth, but it also may already have a lot of competition for shows or events, in the form of other arenas, stadiums, or concert halls. For instance, a composite of markets with stadiums similar in size to the proposed stadium in Oakland shows that those stadiums typically host ten NFL games (including two pre-season games) and seven other events.
other events (concerts, soccer matches, motor/action sports, and other sporting events, including college football). Competition in Oakland primarily comes from the San Francisco 49ers’ stadium, which, like most new facilities, is trying to fill open dates with non-49ers events.

Additionally, to estimate facility usage and number of expected events, we conduct primary research in the form of discussions with event owners, including Clear Channel, AEG, and IMG. These discussions should result in an estimate of the number and type of events that might be held at a new sport facility. Exhibit 11.9 gives an estimate for the proposed new football stadium in Oakland. This estimate is meant to be conservative. As with all feasibility analyses, it is important that the analysis be somewhat conservative, providing room for error without jeopardizing the facility’s future financial health.

EXHIBIT 11.9 Estimate of the number and types of events for the proposed new football stadium in Oakland.

<table>
<thead>
<tr>
<th>ANNUAL EVENTS</th>
<th>AVERAGE TURNSTILE ATTENDANCE</th>
<th>TOTAL ANNUAL ATTENDANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenant Events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raiders – Pre-Season</td>
<td>2</td>
<td>52,000</td>
</tr>
<tr>
<td>Raiders – Regular Season</td>
<td>8</td>
<td>61,000</td>
</tr>
<tr>
<td>Total, Tenant Events</td>
<td>10</td>
<td>Average → 59,200</td>
</tr>
<tr>
<td>Non-Tenant Events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concerts</td>
<td>2</td>
<td>69,000</td>
</tr>
<tr>
<td>Soccer Matches</td>
<td>2</td>
<td>56,000</td>
</tr>
<tr>
<td>Motor/Action Sports</td>
<td>1</td>
<td>44,000</td>
</tr>
<tr>
<td>Other Sporting Events</td>
<td>2</td>
<td>44,000</td>
</tr>
<tr>
<td>Total, Non-Tenant Events</td>
<td>7</td>
<td>Average → 54,571</td>
</tr>
<tr>
<td>Total, All Events</td>
<td>17</td>
<td>974,000</td>
</tr>
</tbody>
</table>

SIDEBAR 11.B

Kansas City… BBQ, jazz, and basketball?

A statistical approach to feasibility

One limitation of the use of information like that given in Exhibits 11.3 through 11.7 is that we do not know the relative importance of each piece of information. The composite indices in these exhibits are straight averages of the data for each factor. This implies, for instance, that the age of a population is exactly equally important to the population number. What if the local market has a relatively high population but a relatively low income or age? Does that bode well for the market, or not? Rascher & Rascher (2004) attempted to answer this question by analyzing markets for their viability as hosts for an NBA team. By using regression analysis, the researchers created weights for some of the variables discussed thus far, along with many more. The measures of success used in the study were attendance, ticket revenues, and total team revenues. In other words, markets with high attendance and revenues were deemed to be successful, and the statistical analysis combined the variables into a single estimate of what attendance or revenues could be expected if a team were to move into a market that did not already have an NBA team.
Exhibit 11.10 shows the study’s results. The cities were ranked by estimated gate receipts. Boldfaced cities did not have NBA teams during the period of the study, 1997–1999.

This type of research provides another method for measuring the feasibility of bringing a team to a particular city. It incorporates the type of information given in Exhibits 11.3 through 11.7 into a single financial estimate of team success. The researchers predicted that a team in Memphis would fare well in terms of gate receipts but only passably in terms of total revenues (as it has), and that a team in New Orleans would struggle financially—as it has. The analysis was conducted concurrently with a feasibility study done for the Sacramento Kings in the early 2000s. The analysis’s estimate of attendance for Sacramento, 17,138, is close to the Kings’ historical average.

For another example of using this research to determine the feasibility of a facility project, consider the events in Kansas City surrounding the construction of the Sprint Center. In July 2004, the city was in the midst of a debate about the feasibility of building a new downtown sport arena. A referendum was placed on the ballot for a special election in August 2004. Without the benefit of results of a feasibility study, and without a major tenant in place, the public was being asked to vote to spend about $143 million in public money to build the arena. The hope seemed to be that “if you build it, they will come.” However, we can conduct a quick assessment of the market by using results from Rascher and Rascher’s research.

Kansas City was lower down the list than 11 other markets that do not have an NBA franchise. Expansions and relocations in the NBA are rare, but if an owner were to move or the league were to expand, one of many other markets would likely be chosen instead of Kansas City. Also, a simple measure of the ability to host a new team—population divided by the current number of major professional sports teams—put Kansas City second to last, just ahead of Milwaukee, out of 48 cities. It already has an NFL and an MLB team—getting an NBA team would spread its population and corporate support thin. Support for the Kansas City Chiefs is slightly above the NFL average in terms of locally generated revenues (according to data from 1999–2000). At the time, support for the Kansas City Royals was substantially below average for MLB. In fact, the Royals were estimated to be fourth from the bottom in terms of gate receipts and sixth from the bottom in terms of attendance. Of course, the Royals’ on-field success in 2014 and 2015 (along with recent facility upgrades) has increased demand and revenues.

When a city is trying to lure a team to town, projected facility costs rise, because the team has the leverage of competition among multiple cities. Moreover, if the team is not included in the construction design process, then once an owner does decide to move into the arena, millions of dollars’ worth of upgrades and changes will have to be made and paid for by the public. For example, in 1990 the Suncoast Dome was opened in St. Petersburg, Florida, at a cost of $138 million, with the hopes of luring an MLB team. In 1998 the Tampa Bay Rays finally began play in the facility. The upgrades required cost $70 million, 50% of the arena’s original cost. Not only were there significant public costs above and beyond the original construction costs, but also the public paid for many years for a facility that did not have a major tenant. We can find similar examples in New Orleans and San Antonio, where the NBA owners required publicly financed upgrades of approximately 20% of each arena’s original cost.

In summary, an assessment of Kansas City as a viable market for a third major sport franchise shows that the franchise would likely struggle.

When the NBA’s Grizzlies left Vancouver, British Columbia, for Memphis, the league shopped around and seriously considered moving the team to San Diego, Las Vegas, St. Louis, Louisville, Memphis, or New Orleans, but not Kansas City. When the Charlotte Hornets moved in 2002, Louisville and Norfolk were considered before the league finally settled on New Orleans. When the NHL expanded in 1998–2000, the four expansion cities were chosen from a pared-down list of six cities. Oklahoma City and Houston were the final cities eliminated prior to the league’s choosing Nashville, Atlanta, Minneapolis-St. Paul, and Columbus. Again, Kansas City was not even considered.

---

EXHIBIT 11.10 Results of study analyzing markets for hosting an NBA team.

<table>
<thead>
<tr>
<th>CITY/TEAM (RANKED BY GATE RECEIPTS)</th>
<th>FORECASTED ATTENDANCE</th>
<th>FORECASTED GATE RECEIPTS</th>
<th>FORECASTED TOTAL REVENUES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago Bulls</td>
<td>20,108</td>
<td>$45,283,019</td>
<td>$103,944,723</td>
</tr>
<tr>
<td>New Jersey Nets</td>
<td>19,667</td>
<td>$44,609,289</td>
<td>$103,666,295</td>
</tr>
</tbody>
</table>

*When the NBA’s Grizzlies left Vancouver, British Columbia, for Memphis, the league shopped around and seriously considered moving the team to San Diego, Las Vegas, St. Louis, Louisville, Memphis, or New Orleans, but not Kansas City. When the Charlotte Hornets moved in 2002, Louisville and Norfolk were considered before the league finally settled on New Orleans. When the NHL expanded in 1998–2000, the four expansion cities were chosen from a pared-down list of six cities. Oklahoma City and Houston were the final cities eliminated prior to the league’s choosing Nashville, Atlanta, Minneapolis-St. Paul, and Columbus. Again, Kansas City was not even considered.*
<table>
<thead>
<tr>
<th>Team</th>
<th>Attendance</th>
<th>Revenue</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York Knicks</td>
<td>18,717</td>
<td>$41,543,980</td>
<td>$96,906,295</td>
</tr>
<tr>
<td>Washington Wizards</td>
<td>19,704</td>
<td>$41,358,306</td>
<td>$83,281,956</td>
</tr>
<tr>
<td>Los Angeles Clippers</td>
<td>17,899</td>
<td>$38,422,655</td>
<td>$97,575,067</td>
</tr>
<tr>
<td>Los Angeles Lakers</td>
<td>17,899</td>
<td>$38,422,655</td>
<td>$97,575,067</td>
</tr>
<tr>
<td>Seattle SuperSonics</td>
<td>19,757</td>
<td>$38,312,641</td>
<td>$71,904,303</td>
</tr>
<tr>
<td>Detroit Pistons</td>
<td>18,249</td>
<td>$34,583,135</td>
<td>$77,497,291</td>
</tr>
<tr>
<td>Houston Rockets</td>
<td>18,325</td>
<td>$34,298,557</td>
<td>$69,692,269</td>
</tr>
<tr>
<td>Boston Celtics</td>
<td>18,218</td>
<td>$33,924,509</td>
<td>$68,763,022</td>
</tr>
<tr>
<td>Indiana Pacers</td>
<td>19,235</td>
<td>$32,993,512</td>
<td>$66,299,117</td>
</tr>
<tr>
<td>Philadelphia 76ers</td>
<td>17,729</td>
<td>$32,781,592</td>
<td>$75,895,337</td>
</tr>
<tr>
<td>Portland Trail Blazers</td>
<td>18,715</td>
<td>$32,330,039</td>
<td>$64,190,119</td>
</tr>
<tr>
<td>Memphis</td>
<td>18,796</td>
<td>$31,596,200</td>
<td>$59,847,117</td>
</tr>
<tr>
<td>Utah Jazz</td>
<td>18,622</td>
<td>$31,209,019</td>
<td>$62,109,120</td>
</tr>
<tr>
<td>Hartford</td>
<td>18,134</td>
<td>$30,943,166</td>
<td>$56,251,917</td>
</tr>
<tr>
<td>Phoenix Suns</td>
<td>18,286</td>
<td>$30,498,141</td>
<td>$72,479,118</td>
</tr>
<tr>
<td>Minnesota Timberwolves</td>
<td>17,526</td>
<td>$30,384,199</td>
<td>$67,701,633</td>
</tr>
<tr>
<td>Miami Heat</td>
<td>18,315</td>
<td>$29,977,964</td>
<td>$67,583,986</td>
</tr>
<tr>
<td>Baltimore</td>
<td>17,560</td>
<td>$29,429,689</td>
<td>$64,518,291</td>
</tr>
<tr>
<td>Louisville</td>
<td>18,311</td>
<td>$28,911,371</td>
<td>$59,396,878</td>
</tr>
<tr>
<td>San Diego</td>
<td>17,372</td>
<td>$28,460,087</td>
<td>$66,524,446</td>
</tr>
<tr>
<td>Las Vegas</td>
<td>17,545</td>
<td>$27,242,661</td>
<td>$59,699,671</td>
</tr>
<tr>
<td>Nashville</td>
<td>17,528</td>
<td>$26,882,101</td>
<td>$58,132,275</td>
</tr>
<tr>
<td>Milwaukee Bucks</td>
<td>16,978</td>
<td>$26,290,903</td>
<td>$58,624,142</td>
</tr>
<tr>
<td>Sacramento Kings</td>
<td>17,138</td>
<td>$26,101,881</td>
<td>$52,459,725</td>
</tr>
<tr>
<td>Golden State Warriors</td>
<td>15,762</td>
<td>$26,011,957</td>
<td>$63,966,882</td>
</tr>
<tr>
<td>Honolulu</td>
<td>16,467</td>
<td>$25,830,914</td>
<td>$50,552,504</td>
</tr>
<tr>
<td>San Antonio Spurs</td>
<td>17,354</td>
<td>$25,604,283</td>
<td>$54,161,323</td>
</tr>
<tr>
<td>Norfolk, Virginia Beach, Newport News</td>
<td>17,058</td>
<td>$24,720,174</td>
<td>$59,816,386</td>
</tr>
<tr>
<td>Dallas Mavericks</td>
<td>15,907</td>
<td>$24,685,943</td>
<td>$60,500,450</td>
</tr>
<tr>
<td>Charlotte Hornets</td>
<td>16,516</td>
<td>$23,644,230</td>
<td>$51,580,247</td>
</tr>
<tr>
<td>St. Louis</td>
<td>16,074</td>
<td>$23,606,227</td>
<td>$62,257,248</td>
</tr>
<tr>
<td>Atlanta Hawks</td>
<td>15,625</td>
<td>$23,464,312</td>
<td>$62,783,478</td>
</tr>
<tr>
<td>Orlando Magic</td>
<td>16,506</td>
<td>$23,263,533</td>
<td>$55,287,320</td>
</tr>
<tr>
<td>New Orleans</td>
<td>16,314</td>
<td>$22,026,250</td>
<td>$59,897,920</td>
</tr>
<tr>
<td>Jacksonville</td>
<td>16,085</td>
<td>$21,331,308</td>
<td>$54,111,519</td>
</tr>
<tr>
<td>Cincinnati</td>
<td>15,644</td>
<td>$20,361,607</td>
<td>$53,771,644</td>
</tr>
<tr>
<td>Cleveland Cavaliers</td>
<td>15,119</td>
<td>$20,272,483</td>
<td>$56,035,523</td>
</tr>
<tr>
<td>City</td>
<td>Population</td>
<td>Revenues 1999</td>
<td>Operating Income 1999</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------------</td>
<td>---------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Austin-San Marcos</td>
<td>15,931</td>
<td>$19,766,609</td>
<td>$49,390,583</td>
</tr>
<tr>
<td>Denver Nuggets</td>
<td>14,939</td>
<td>$19,541,896</td>
<td>$51,326,220</td>
</tr>
<tr>
<td>Kansas City</td>
<td>15,280</td>
<td>$19,503,955</td>
<td>$54,329,534</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>15,394</td>
<td>$17,362,572</td>
<td>$45,547,891</td>
</tr>
<tr>
<td>Columbus</td>
<td>13,879</td>
<td>$13,684,159</td>
<td>$45,976,470</td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>13,357</td>
<td>$12,543,029</td>
<td>$48,788,601</td>
</tr>
<tr>
<td>Omaha</td>
<td>13,553</td>
<td>$12,345,181</td>
<td>$39,255,986</td>
</tr>
<tr>
<td>Buffalo-Niagara Falls</td>
<td>13,659</td>
<td>$11,974,656</td>
<td>$46,414,481</td>
</tr>
<tr>
<td>Oklahoma City</td>
<td>11,432</td>
<td>$11,114,854</td>
<td>$33,726,430</td>
</tr>
<tr>
<td>Tucson</td>
<td>11,071</td>
<td>$10,608,078</td>
<td>$31,618,100</td>
</tr>
<tr>
<td>El Paso</td>
<td>9,311</td>
<td>$10,178,875</td>
<td>$19,502,822</td>
</tr>
</tbody>
</table>

Note: Boldface cities are those without an NBA team in 1999.

Source: Rascher & Rascher (2004), as appeared in Journal of Sport Management. Reprinted with permission of Human Kinetics, via CCC.

Facility Specifications and Operating Estimates

The previous discussion focused on the analysis of market demand and likely attendance. Market demand analysis forms the basis for estimates of facility revenues. Exhibit 11.11 gives an example of a revenue and expense estimate for the Oakland Raiders. It does not include media revenues or Raiders ticket revenues. Many of the numbers are based on the then-current operations at the Oakland Coliseum and operations in new venues, as determined by the feasibility study authors. The projected financials show a high net operating income, and the major tenant (the Raiders) would negotiate to keep a large portion of those revenues. Typically, a new stadium would operate at break even as opposed to seeing large losses or profits. This presumption is simply based on the leverage that the franchise has to negotiate for these revenues.

As mentioned, facility revenues are typically split between the facility and the major tenant or tenants. (There may be more than one major tenant, especially in the case of a facility that hosts both an NHL and an NBA team or an NFL and MLB team.) An estimate of facility revenue is necessary to determine whether market demand is sufficient to generate revenues for the major tenant(s) and to pay facility financing costs (both construction and operation costs). Negotiations for how the facility owner and major tenant will split revenues and construction/operation expenses often take place after the feasibility study is complete.

EXHIBIT 11.11 Estimate of facility revenues and expenses for the Oakland Raiders.

<table>
<thead>
<tr>
<th>OPERATING REVENUES</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent – Other Events</td>
<td>$2,550,000</td>
</tr>
<tr>
<td>Concessions (net) – All Events</td>
<td>$5,956,000</td>
</tr>
<tr>
<td>Merchandise (net) – All Events</td>
<td>$1,010,000</td>
</tr>
<tr>
<td>Parking (net) – All Events</td>
<td>$2,498,000</td>
</tr>
<tr>
<td>Convenience Charge Rebate – Other Events</td>
<td>$450,000</td>
</tr>
<tr>
<td>Box Office Fee – Other Events</td>
<td>$213,000</td>
</tr>
<tr>
<td>Facility Fee (5%) – All Events</td>
<td>$3,517,000</td>
</tr>
<tr>
<td>Suite Leases (gross)</td>
<td>$22,220,000</td>
</tr>
<tr>
<td>Club Seat Leases (gross, less VTS)</td>
<td>$6,683,000</td>
</tr>
<tr>
<td>Advertising/Sponsorships</td>
<td>$15,000,000</td>
</tr>
</tbody>
</table>
### Operating Expenses

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naming Rights</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Total Operating Revenues:</td>
<td>$66,097,000</td>
</tr>
<tr>
<td>Salaries &amp; Wages</td>
<td>$3,856,000</td>
</tr>
<tr>
<td>Utilities</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>Materials &amp; Supplies</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Professional Services</td>
<td>$500,000</td>
</tr>
<tr>
<td>Rentals</td>
<td>$200,000</td>
</tr>
<tr>
<td>Repairs &amp; Maintenance</td>
<td>$500,000</td>
</tr>
<tr>
<td>Taxes &amp; Licenses</td>
<td>$200,000</td>
</tr>
<tr>
<td>Travel &amp; Entertainment</td>
<td>$100,000</td>
</tr>
<tr>
<td>Event Day Expenses - Raiders</td>
<td>$6,000,000</td>
</tr>
<tr>
<td>Security</td>
<td>$750,000</td>
</tr>
<tr>
<td>Other Expenses &amp; Operating Fees</td>
<td>$2,250,000</td>
</tr>
<tr>
<td>Total Operating Expenses:</td>
<td>$20,356,000</td>
</tr>
</tbody>
</table>

**Income from Operations (EBITDA)**: $45,741,000

*Source: CSL and JMI Sports (2010).*

Switching to a discussion of basketball, an NBA franchise might begin with information on market demand from a feasibility study and add its non-arena revenues (e.g., revenues from the league and from local TV and radio) to obtain total estimated franchise revenues, which it could compare to its estimated expenses. If the net profits are high enough, then the team could feasibly contribute to financing the facility construction. Similarly, if facility revenues will be high enough, then the facility owner could contribute to the construction. Often, the total revenues generated by the facility do not appear to be adequate to cover the operating costs of the facility, the major tenant’s portion of revenues, and construction costs. In these cases, proponents will argue that the facility will benefit the local community economically by attracting visitors and tourism to the region. If it can be shown that the extra spending in the community will be sufficient to cover the facility’s construction, then the local government may help to finance the construction.

The following sections present the steps in determining a feasible NBA arena size, including the number of seats, club seats, and luxury suites and their respective prices and revenues, based on the above-mentioned feasibility study for the Sacramento Kings. It also discusses the method for determining the expected ongoing revenues and expenses for the facility. Bear in mind that the study for the Kings was conducted in the early 2000s, and current figures could be quite different. Most of the information upon which a facility study is based is not publicly available, because sport teams and arena operating companies are private businesses. Obtaining access to this type of information is one of the challenges of conducting a feasibility study.

### Facility Size and Ticket Return

One method for estimating the optimal size of an arena is, once again, to look at comparable markets. As Exhibit 11.12 shows, we first divide the average population within 30 miles of the comparable markets (1,543,771) by the total number of seats available in those comparable markets (760,130) to obtain the ratio of population to capacity (2.03). The number of seats is based on 41 home games at the average capacity of the comparable markets. Second, we divide Sacramento’s population (1,733,765) by that ratio (2.03) and then by the number of home games (41). This results in a seating capacity of 20,821. This figure assumes 100% sellout. To be conservative, we use a 90% sellout rate, which gives a seating capacity of 18,739. This is closer to the feasible capacity of a new arena based on historical NBA averages.
EXHIBIT 11.12 Estimating the optimal size of an arena based on comparable markets.

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 30-mile population of the comparable markets</td>
<td>1,543,771</td>
</tr>
<tr>
<td>Average capacity of the comparable markets for 41 home games</td>
<td>760,130</td>
</tr>
<tr>
<td>Ratio of population to capacity</td>
<td>2.03</td>
</tr>
<tr>
<td>Sacramento’s 30-mile population</td>
<td>1,733,765</td>
</tr>
<tr>
<td>Sacramento’s capacity based on the population-to-capacity ratio</td>
<td>853,680</td>
</tr>
<tr>
<td>Estimated capacity at 100% sold out (41 home games)</td>
<td>20,821</td>
</tr>
<tr>
<td>Estimated capacity at 90% sold out (41 home games)</td>
<td>18,739</td>
</tr>
</tbody>
</table>

Using research similar to that discussed earlier for the Raiders, we find that about $7.85 million in club seat revenues can be generated from a new arena. The estimates in Exhibit 11.13 suggest that 5,960 club seats should be built and that they should have an average price of $1,315, not including event tickets. Event tickets, based on comparables, would cost about $5,400 per year, generating over $32 million in club seat event ticket revenue. Luxury suite revenue was estimated at about $9 million per year, with prices, including event tickets, at approximately $140,600. This suggests that the arena should have about 64 luxury suites, with an average of 19 seats per luxury suite.

The ticket price for general seating is typically based on prices in comparable markets, which average around $50. To calculate the number of general seats, we subtract the number of club seats (5,960) and luxury suite seats (1,216) from total capacity (18,739). This works out to general seating of about 11,560. A sell rate of 90% would lead to 10,400 general seat tickets sold per game, netting over $21 million in general seating revenue. For other events in the arena, the facility owner will receive rent and/or a share of ticket revenues, depending on negotiations with the event owner. Based on comparables (not given here) the arena can be expected to receive approximately $3.8 million in rent and other event ticket revenue.

**Other facility revenues**

The primary revenue sources for a facility other than ticket revenues and rent are concessions, merchandise, and parking. We base an estimate of concessions revenue on average per capita concessions sales for events in comparable markets. Typically this figure was $7.50 per person at the time of the Kings study. If we use this number and assume that 1.8 million people attend arena events each year and that the facility earns a 45% gross profit (55% of retail price being cost of goods sold and staffing costs), concessions net revenue would total approximately $6 million.

EXHIBIT 11.13 Estimates of facility revenues resulting from the market demand analysis for Sacramento.

<table>
<thead>
<tr>
<th>REVENUE SOURCE</th>
<th>AMOUNT</th>
<th>SEATING CAPACITY</th>
<th>AVERAGE PRICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General tickets (Kings events only)</td>
<td>$21,320,000</td>
<td>10,400</td>
<td>$50 per game</td>
</tr>
<tr>
<td>Luxury suites (including all arena events)</td>
<td>$9,000,000</td>
<td>1,224</td>
<td>$140,600 per suite</td>
</tr>
<tr>
<td>Club seat fees (all arena events)</td>
<td>$7,840,000</td>
<td>5,960</td>
<td>$1,315 for seat rights</td>
</tr>
<tr>
<td>Club seat tickets (all arena events)</td>
<td>$32,184,000</td>
<td>—</td>
<td>$5,400 for event tickets</td>
</tr>
<tr>
<td>Other arena events net tickets and rent</td>
<td>$3,800,000</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>
### Results of Market Demand Analyses

The end result of a market demand analysis is an estimate of expected quantities sold and prices for tickets, luxury suites, concessions, merchandise, sponsorships, and any other revenue streams, and the revenues generated from each one. This information will be used in the economic impact analysis, the analysis of financing, and the engineering analysis. For example, the calculation of economic impact depends partly on the number of people attending events at a facility. In the analysis of financing, concessions revenues and naming rights (a form of sponsorship) are often capitalized, and their value helps pay for the cost of construction (see Chapter 9). This affects the overall assessment of financing sources. The size of the facility is, of course, a significant factor in engineering and land use decisions. If a larger facility is built, not only might location be affected, but the overall cost will be higher and financing will be affected. The type and quality of the facility also affect demand, especially with respect to luxury suite sales and sponsorships. Higher-quality suites, which are more expensive to build, might elicit higher demand. Once again, the feasibility study is an iterative process, with many layers of adjustment and readjustment.

<table>
<thead>
<tr>
<th>Revenue Source</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsorship (all arena events)</td>
<td>$13,000,000</td>
<td></td>
</tr>
<tr>
<td>Naming rights (all arena events)</td>
<td>$2,000,000</td>
<td></td>
</tr>
<tr>
<td>Merchandise (all arena events)</td>
<td>$1,125,000</td>
<td>$2.50 average per capita spending</td>
</tr>
<tr>
<td>Concessions (all arena events)</td>
<td>$6,075,000</td>
<td>$7.50 average per capita spending</td>
</tr>
<tr>
<td>Parking (all arena events)</td>
<td>$2,700,000</td>
<td>$9.00 average per auto spending</td>
</tr>
<tr>
<td>Total arena-related revenues</td>
<td>$99,044,000</td>
<td></td>
</tr>
</tbody>
</table>

Merchandise net revenue would be smaller, at about $1.125 million annually. We calculate this figure by assuming that each attendee spends $2.50 (the typical amount at the time of the study), with 1.8 million attendees and a profit margin of 25%.

Parking revenue estimates are based on a long history of data on the number of cars per event attendee. Generally we expect that one parking space is utilized for every 4.5 attendees. (This does not mean that each car contains 4.5 passengers on average, because some attendees will take other forms of transportation.) Gross profit margins for parking are quite high, around 75%. Thus, the 1.8 million attendees will purchase about 400,000 parking spaces; at approximately $9 per space (again, an early 2000s figure), this yields about $2.7 million in parking net revenue.
Another crucial analysis in a feasibility study is an assessment of the cost of financing the facility and the potential sources of that financing (see Chapter 9). To determine what sources of financing are available, we ask questions such as, is it possible to institute or raise a car rental tax and use the proceeds to help fund the construction?

This analysis is another iterative process (look back to Exhibit 11.1). The money that is available for construction affects the type of facility that can be built, and vice versa. The initial driver for money decisions is the number and types of expected events and the expected market demand. This basic information helps determine the appropriate number of seats and suites, which in turn allows us to calculate initial project cost estimates.

The economic and fiscal impact estimates provide information about the amount of incremental money that will flow into the local economy, including sales taxes (see Chapter 12). For instance, if the economic impact analysis shows that a facility will generate $2 million per year in incremental hotel taxes, then those $2 million might be earmarked to help finance the facility. Chapter 9 discusses sport facility financing in full detail.
LOCATION, CONSTRUCTION COSTS, AND ENGINEERING

A discussion of the location, construction costs, and engineering sections of a feasibility study is beyond the scope of this text. Briefly, these analyses focus on the hard costs (construction costs, improvements to the actual building) and soft costs (fees, engineering, consulting, movable items such as furniture) of facility construction, architectural and engineering renderings, infrastructure issues (such as roadway or exit ramp construction, widening of streets, and traffic flow), environmental impacts, water and sewage needs, and so forth. This section of a feasibility study provides a project cost estimate, which is needed to determine the economic and fiscal impacts of construction and is the most important input in the financing section.
Most of the feasibility analyses conducted in North America pertain to local recreational facilities such as swimming pools, baseball fields, soccer complexes, and so forth. The principles are the same as with spectator-driven facilities—we generate an estimate of the size and finances of the facility. Typically, the analyst uses comparable facilities in other markets as benchmarks. For instance, a study for a new ice center in Pennsylvania determined the number of people who were not served by other ice skating centers in the region and who would be closer geographically to the proposed new facility (Pashek Associates, 2006). This provided the basis for estimates of the potential market and demand for the building. Analyses and tables comparing age, income, population, and entry price, similar to those found in this chapter, were used to determine the likely number of patrons and revenues. The number of events, besides general usage, was also determined based on other facilities. Finally, a very detailed financial projection was created that showed total revenues and expenses. After a few years of ramping up, the facility was projected to show a net profit.
CONCLUSION

The feasibility study is a very important component of any major facility construction project, because it specifies the size and cost of the facility, the expected revenues to be generated, the types and sources of financing, and the facility’s likely economic impact. The feasibility study involves a complex analysis that includes surveying people and businesses, gathering data from other facility projects, and synthesizing the results into a report that decision makers can use to develop the facility. It requires the application of many of the sport finance tools described in this book.

**concept CHECK**

1. What factor or variable is the most important in forecasting market demand for a new MLB stadium? Provide evidence for your answer.
2. What factor or variable is the most important in forecasting market demand for a new minor league baseball stadium? Provide evidence for your answer.
3. Is a comparables analysis a type of secondary research or primary research? Explain your answer.
4. Suppose a community is considering constructing a large pool facility for use by community residents. How might it go about conducting a feasibility study for the pool?
   a. Describe possible methods for determining annual usage at the pool.
   b. Describe possible methods for determining prices to be charged (if any) for entry, concessions, and any other services or items to be sold.
   c. Describe possible methods for determining costs of construction, operations, and maintenance.
5. Why do analysts sometimes use retail spending as a factor in measuring market demand for a sport facility? What are the pros and cons of using it?

**Preliminary Feasibility Questions**

As discussed in this chapter, a feasibility study for a sport stadium requires forecasting annual attendance and total revenues at the facility. Consider the following hypothetical situation: A small group of men and women in Ventura, California, are interested in building a minor league baseball stadium and moving an existing Single A franchise to the stadium. They plan to locate the stadium on the edge of Ventura’s central business district. They would like you to answer a few key questions, given your expertise in sport management. For each response, give the reasons for your answer and the methods you used to arrive at it.

**case questions**

1. Assuming that the club is average in terms of performance on the field, what would be the expected attendance per season during a typical year (once the “honeymoon effect” has worn away)?
2. What revenue would you expect to be generated from tickets, concessions, parking, and merchandise?
3. What revenues would you expect from naming rights and sponsorship?

**REFERENCES**

Notes

* A club seat is an individual seat that is usually closer to the action than most seats in the facility and also often comes with exclusive amenities, such as special parking privileges and access to a club eatery. Typically, only season ticket holders may purchase club seats.

* A metropolitan statistical area “comprises the central county or counties containing the core, plus adjacent outlying counties having a high degree of social and economic integration with the central county as measured through commuting” (Office of Management and Budget, 2010).
KEY CONCEPTS

capture rate
casual visitor
construction impact
direct impact
displaced spending
economic impact
incremental spending
incremental visitor
indirect economic impact
induced economic impact
leakage
multiplier
multiplier effect
operations impact
reverse time-switcher
time-switcher
Introduction

Economic impact is the net economic change in a host community resulting from spending attributed to an event or facility. An economic impact analysis is a type of cost-benefit analysis (an analysis or study of the cost of a project in relation to its potential benefits). It is based on the theory that a dollar flowing into a local economy from outside is a benefit to the locality. An economic impact analysis may be part of a feasibility study, or it may be a stand-alone source of information. Often, an economic impact analysis provides the public with important information regarding the return on an investment in a development project. Such an analysis makes it possible to compare a project to other possible public investment projects. An economic impact analysis may be performed for proposed events or projects (such as facility construction) or for events that have already occurred.

The most important principle in evaluating economic impact is to measure new economic benefits that accrue to the region that would not occur, or would not have occurred, without the project or event. This may sound simple, but once a facility has been constructed or a game has been played, the difficulty lies in measuring what would have happened in the region without the event’s having taken place.

Economic impact analyses are conducted for sporting events, teams, and sport facilities, among other things. An event, such as the Super Bowl, can have an impact on a community. A team may be thought of as a series of events (e.g., 41 regular season home games for NBA basketball teams); impacts may also result from the location of team headquarters in a local community. A sport facility can have an impact in the construction phase, during which millions of dollars change hands. It can also have an impact after it is opened, as hundreds of events may take place in the facility each year.

The financial return for residents in a community comes in the form of new jobs, new earnings or income, and new tax revenues. Some of the new earnings go to local residents who work for the event, team, or facility. However, most of the earnings are generated for residents who are not directly associated with the sporting event, team, or facility, but who benefit from positive externalities. As stated previously, positive externalities, or overflow benefits, are those benefits that are produced by an event or facility but that are not captured by the event owners or sport facility. For instance, when visitors go to New Orleans to attend the Sugar Bowl college football game, they will probably spend money at local food establishments, gas stations, retail stores, and hotels. This spending benefits the owners and employees of those establishments, as a positive direct economic impact.

In this chapter, we first discuss setting the parameters for the analysis. The next section discusses the methodologies we can use in conducting an economic impact analysis. The extension of these techniques to team and facility impacts is described next, and this is followed by a discussion of common mistakes made in economic impact analyses.
SETTING THE PARAMETERS

Two important parameters of events must be determined in the beginning stages of an analysis: the geographic area of impact and the type of spending.

Geographic Area of Impact

The geographic area of impact is an important characteristic of the analysis and should be determined early in the study. Generally, the geographic region selected is the region that is considering funding the event or facility. This definition of the impact region allows for a proper cost-benefit analysis. If a county government contributes funding for a sport facility, then the residents and businesses of that county are paying for the investment, and it is appropriate to determine the benefits that the county receives—not some other county or area—and compare the benefits to the costs. In reality, any major sporting event has an area of impact that is a continuous region, not divided by city or county boundaries, and the impacts decrease with distance from the event location. Additionally, there may be more than one public funding source (e.g., a city, a county, and a state); thus, the economic impact analysis might measure the impact on each of these three areas.

Different definitions of the geographic area of impact will affect the amount of economic impact that is measured. For example, imagine a resident of Oakland, California, who would typically spend his entertainment dollars attending a movie near home, but who decides to attend a baseball game in San Francisco, 15 miles away. If he spends money at the event and in a restaurant next to the stadium, this spending may not be new spending in the San Francisco/Oakland/San Jose Consolidated Metropolitan Statistical Area (CMSA), because he would have spent the money in Oakland anyway. Instead, it is considered substituted, displaced, or redirected spending.

In a conservative estimate, most local spending is considered to be displaced spending—spending by local residents on an event that would have been spent elsewhere in the local economy if the event had not occurred. For this reason it is not counted as part of economic impact. In general, it is improper to count this spending in the economic impact totals, because while more spending is occurring in San Francisco because of the baseball game, less spending is taking place in Oakland. If, however, the chosen geographic area of impact is just the city of San Francisco, then an Oakland resident who attends the game provides a positive direct economic impact on San Francisco. In contrast, a resident of Fresno, California (almost 200 miles away), who attends a baseball game in San Francisco would provide a positive economic impact regardless of whether the geographic area of impact was the entire CMSA or just the city of San Francisco.

Spending

Because spending by local residents typically should not be counted in an economic impact study, it is very important that the analyst differentiate between event attendees who are visitors (those who live outside the geographic impact area) and those who are local residents (those who live inside the area). We can also describe visitors as

* Casual visitors—visitors who were already in town for another reason and decided to attend the event.
* Time-switchers—visitors who would have come to town at another time, but opted to come to town during this time instead, in order to attend the event.
* Incremental visitors—visitors who came to town because of the event and would not have come to town otherwise. The direct spending of this group is fully counted in economic impact.

Exhibit 12.1 is a sample breakdown of attendees at an event. The spending of casual visitors and time-switchers should not be fully counted as new spending; only their incremental spending—the spending above and beyond what they would have spent if the event had not occurred—should be counted. For example, suppose a person on a business trip spends $200 per day on a hotel room, food, and local transportation, and decides to attend the local NBA game, spending an additional $50 for a ticket. The incremental spending is $50, and only this amount should be counted toward the economic impact of the NBA team. The other $200 is economic impact coming from the business portion of the trip.

It is typically not practical to measure the incremental spending of time-switchers and casual visitors. It is difficult to know how much these individuals spent because of the event, beyond what they would have spent on their visit had the event not taken place. Since we usually cannot measure the incremental spending of casual visitors and time-switchers, we might use an estimate from some other source or simply state that this spending was not measured and the final estimate should be considered a lower bound for the economic impact.
A first step in measuring the economic benefit is to analyze direct spending, which has two components. The first component is incremental visitor spending. As opposed to the spending of time-switchers and casual visitors, direct spending by incremental visitors is fully counted in economic impact. The goal is to measure the amount of spending in the geographic area of impact that goes to local businesses. For example, how much are incremental visitors spending at sporting events? How much are they spending at restaurants and for retail purchases, transportation, and so forth? Whether to count the spending that takes place inside the sport facility is debatable. It is in the geographic area of impact, but how much of it goes to local businesses? To answer this question we might look at how much money from the event is spent locally, or we might find out what happens to the revenue spent inside the facility. Where does it go? Does the local government (often the owner of the facility) receive a percentage of it?

The second component of direct spending is organizational spending. How much do the event host committee, the event management company, corporate sponsors, media, and other related entities spend in the geographic area?

EXHIBIT 12.1 Sample breakdown of attendees at an event.
METHODOLOGIES FOR MEASURING EVENT ECONOMIC BENEFITS

This discussion focuses on spending methodologies and fiscal or tax impact methodology.

Spending Methodologies

Economic impacts are often subdivided into direct, indirect, and induced impacts—the three stages of economic impact. Each of these stages is further subdivided into effects on total output, earnings or income, employment, and public finances. We use different methodologies for studying the spending at each of the stages.

Direct spending methodology

The analysis of direct impact—expenditures on a project or event that contribute to economic impact, also called direct spending—may involve secondary or primary research.

Secondary research. The market demand analysis discussed in Chapter 11 provides an estimate of the number of events that will take place at a facility and the expected attendance at those events. An economic impact study that uses secondary research begins with attendance estimates from the market demand analysis and adds other information about the expected patrons, such as what percentage are visitors and how much money they will spend. Often, this information is gathered from comparable events in other locations, as described in the previous chapter. For a feasibility study, secondary research methods are employed that are similar to the techniques for determining market demand. One method is to evaluate primary studies that have been conducted in other cities for similar projects, with adjustments to account for the differences in circumstances between the primary studies and the subject study.

Primary research: spectator surveys. To determine direct spending, we often create a survey instrument (a questionnaire) to guide interviews with event patrons in order to determine whether they are local residents or visitors, how much money they are spending because of the event, and other information that may be helpful. Exhibit 12.2 is a simple survey for measuring direct spending for an event. The data provide an estimate of the amount of spending per capita per day for incremental visitors for the different spending categories. It allows the researcher to identify casual visitors and time-switchers (see questions 9, 10, and 11) and to account for the number of days a visitor is in town and for the size of groups.

When enough spectators are surveyed, the analyst can estimate how much the typical visitor spends and how long he or she stays.* Given the percentage of survey respondents who are local residents versus visitors and an estimate of total attendance, we can estimate the total population of visitors at the event. Similarly, we can extrapolate the findings for the sample related to spending to represent the spending of the entire population of spectators. Exhibit 12.3 shows some intermediate calculations that were initial steps in measuring the economic impact of NBA All-Star 2012 (the NBA’s annual all-star game and related activities) in Orange County, Florida. The total number of spectators at the event (available from the facility managers) was multiplied by the percentage of survey respondents who were visitors, in this case approximately 67%,* to obtain the estimate of total visitors (40,253). An analysis of ticket sales and ZIP codes can also provide this type of information. Based on survey questions such as 9, 10, and 11 in Exhibit 12.2, we can make similar adjustments to account for casual visitors and time-switchers, to obtain the number of relevant (“incremental”) visitors. In Exhibit 12.3, we first subtract people who are only time-switchers or casual visitors from the number of visitors and then subtract the visitors who are both casual visitors and time-switchers to calculate the number of incremental visitors.

EXHIBIT 12.2 Example survey for measuring direct spending at an event.
In addition, the surveys can help us develop a typical visitor profile. In Exhibit 12.3, the typical visitor spent $351 per day outside of the official events (mostly in the Amway Center) and stayed 2.9 days, resulting in an average of $1,019 spent outside of the official events for the entire trip. Multiplying the number of incremental visitors by the amount that the typical incremental visitor spent provides an estimate of the spectator portion of direct spending.

EXHIBIT 12.3 Visitor profile created from the results of a visitor survey.
Number of “Incremental” Visitors Counting Towards Economic Impact

<table>
<thead>
<tr>
<th>Average Expenditure Estimates</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Daily Expenditure Per “Incremental” Visitor Outside of official Events</td>
<td>$351</td>
</tr>
<tr>
<td>Average Number of Days Stayed Per “Incremental” Visitor</td>
<td>2.90</td>
</tr>
<tr>
<td>Average Expenditure for Entire Trip Per “Incremental” Visitor Outside of official Events</td>
<td>$1,019</td>
</tr>
<tr>
<td>Average Expenditure for Entire Trip Per “Incremental” Visitor Inside of official Events</td>
<td>$79</td>
</tr>
</tbody>
</table>

Total Direct Spending of “Incremental” Visitors Outside of official Events $37,577,076
Total Direct Spending of “Incremental” Visitors Inside of Amway Center $2,895,865

1 A number of people (typically children and spouses) came to Orlando because of the event, but did not attend any of the official events.
2 Spending by “time-switchers” and “casual” visitors was not used in the impact analysis.
3 Spending is only within Orange County, FL.
4 Spending includes concessions and merchandise, but not tickets.

Typically, direct spending by visitors attending an event occurs in several geographic categories simultaneously. The NBA All-Star 2012 has taken place in Orange County, Florida, a number of times. Direct spending occurs in the city of Orlando, in Orange County, in the Orange County MSA, and in the state of Florida. The area of impact defined for an economic impact study will depend on how the results are to be used. If the county is investing in hosting the event, then county decision makers need to know the economic benefits and costs of the event for the county. If the state is going to help fund the event, then state decision makers need to know the impact on the entire state. It is possible, but complicated, to measure the economic impact on more than one area. The direct spending measurement will be derived from the spending of visiting spectators and participants on entertainment, food and beverage, transportation, retail, lodging, and other miscellaneous items, plus event-related spending by non-local businesses.

Primary research: corporate spending surveys. In addition to the visitor survey, the researcher might survey or interview the event management group, host committee, sponsors, and so forth to determine local corporate spending that is related to the event that would not have occurred otherwise. As with visitor spending, it is important to distinguish between corporate spending that would have taken place anyway and corporate spending that would not have occurred otherwise. A local restaurant chain may spend money to sponsor a local college football bowl game. It may also spend money with local advertising agencies and printers to promote or activate its sponsorship with a television commercial or billboard advertising. The money spent locally is counted toward the economic impact of the bowl game if the restaurant chain would not have made those purchases otherwise. If the bowl game had not taken place, and the restaurant chain would have advertised on television with a more typical restaurant ad, then the bowl game did not provide an economic impact to the local community in this case. It simply affected exactly how and why the money was being spent. The same amount would have been spent locally with or without the game; hence, there was no net economic impact.

When a non-local business sponsors a bowl game, this is considered to be net new spending (unless the company would have spent the same money locally without the game). For practical reasons, and to develop a conservative estimate of economic impact, we do not consider spending by local companies to be new spending unless it can be specifically identified as new spending. Thus, spending by local companies is not typically counted toward economic impact. In other words, the researcher starts with the assumption that local spending is displaced spending and is not new incremental spending. If a company specifically states that its spending is new and would not have occurred otherwise, then that spending may be considered part of economic impact.

Indirect and induced spending methodology

The economic output that results from direct spending during an event subsequently affects many other
industries and workers. For instance, when visitors attend the Men’s Final Four, they may eat in a local restaurant before the event. With the money the visitors spend, the restaurant will pay employees, purchase food, pay for utilities, and so on. The food wholesaler will pay the farmer, who (if it is a small, local farm) will purchase clothing at the local retail store. These expenditures continue through successive rounds until the money ceases to circulate locally, when either it leaks out of the local economy or a resident or local company saves it for a significant period of time.

The spending described in the previous paragraph illustrates indirect economic impacts: impacts that occur in the area of impact that represent the circulation of initial visitor expenditures (direct impacts). The total of the successive rounds of spending constitutes the indirect impact estimate, which will be explained below.

The induced economic impact is the effect of direct and indirect economic impacts on earnings and employment. As the initial spending and subsequent spending occur, a portion goes to local residents and to the local government in the form of taxes. Increases in demand resulting from the economic impact lead to increases in employment, which will affect earnings. When we report these impacts, we describe employment impacts in terms of full-time equivalent (FTE) jobs and earnings impacts in terms of dollars of personal income. A more detailed discussion of induced economic impact occurs later in this chapter.

Multiplier effect to measure indirect and induced impacts. A multiplier is a number that helps researchers quantify indirect and induced economic impacts, by measuring the change in output for each and every industry as a result of the injection of one dollar of direct impact into any of those industries.

To derive a multiplier, we begin by categorizing the spending that represents indirect and induced economic impacts. The recipients of initial direct spending generally re-spend it in five ways:

1. With other private-sector businesses in the same local economy—on inventory, maintenance, and so forth.
2. With employees who reside in the same local economy—as wages, tips, and so on.
3. With local government—as sales taxes or property taxes.
4. With non-local governments—as sales taxes or taxes on profits.
5. With employees, business, or organizations who reside outside the local economy.

The first three types of spending recirculate money through the local economy. The last two categories of spending are considered leakages—movement of money out of the geographic region. They reflect the degree to which a region is not economically isolated but engages in commerce with other regions. The larger and more diverse the geographic region, the less leakage, all else being equal, because a large region is usually relatively self-sufficient.

For the above five scenarios, we create input/output tables that disaggregate the economy into industries and quantify the flow of goods and services among them. We then mathematically derive multipliers that describe changes in output that result from changes in input. We apply a separate multiplier to each of the 432 industry groups (as defined by the U.S. Bureau of Economic Analysis [BEA]).

Typically, the researcher does not actually create the multipliers for the 432 industry groups but instead purchases a regional multiplier model based on the USDA Forest Service IMPLAN (IMpact Analysis for PLANning) and data from the U.S. Bureau of Economic Analysis. Many vendors supply these multiplier tables, including MIG, Inc. and Regional Economic Models, Inc. The researcher either purchases the multiplier information for a county, city, MSA, or state from one of these vendors or, in some cases, gathers information from the BEA and derives the multipliers him- or herself.

For an example of the multiplier in action, consider a group of spectators from outside Orange County who visit the county to attend NBA All-Star 2012 and spend $1,000 total in the community. This initial direct expenditure stimulates economic activity and creates additional business spending, employment, household income, and government revenue in Orange County. The initial spending (the direct impact) results in a ripple effect, termed the multiplier effect. The multiplier effect consists of indirect and induced impacts.

The local hotels, restaurants, retail stores, transportation providers, and others who receive portions of the initial $1,000 will spend the money in the five ways listed previously. The recipients of those expenditures will again spend the money in one of the five ways, and the chain of purchases continues. Exhibit 12.4 charts the direct and indirect effects of the original $1,000 of spending.

The manner in which the local economy is defined—especially its size—affects the values of the multipliers. In a small local geographic region, many game attendees will probably be visitors. This is an advantage to the local economy. However, small geographic areas suffer from a high degree of leakage, because a small geographic region is less self-sufficient than a large region.

EXHIBIT 12.4 Direct and indirect effects of initial spending.
There are a number of different types of multipliers, and each has a specific purpose. The first type of multiplier is an output multiplier (also called a sales or transaction multiplier). It measures the indirect and induced effects of an extra unit of direct spending on economic activity within the local economy. This multiplier relates direct expenditures to the increase in economic activity that results from the spending and re-spending of the initial direct spending.

An income multiplier, the second type, measures the indirect and induced effects of an extra unit of spending on the level of household income in the local economy. It is the ratio of change in income to the initial change in expenditure. It is the clearest indicator of the effect of economic impact on the residents of the host community.

The third type of multiplier is an employment multiplier, which measures the direct, indirect, and induced effects of an extra unit of spending on employment in the local economy. It measures the number of full-time equivalent jobs supported in the local economy as a result of visitor expenditures.

Exhibit 12.5 is a multiplier table listing the output, earnings, and employment multipliers for industrial categories in Orange County, Florida, whose main city is Orlando.

Example of indirect and induced event spending analysis. To illustrate the analysis of indirect and induced spending, we refer to Exhibit 12.5. If a visitor to Orange County spends $100 on lodging, this will create an extra $69 in indirect spending (for total spending of $169). Of that $100, $64 will be retained as income or earnings to residents of Orange County. Given the employment multiplier for the lodging industry, 15.75, we can expect that for every $1 million spent in Orange County on lodging, approximately 16 FTE jobs will be created. Another way to think about this is as follows: in order to create or support one job, the lodging
industry has to take in a certain amount of money. We can calculate this amount by dividing the basis change in output ($1 million) by the employment multiplier:

\[
\text{money necessary to support one job} = \frac{\text{basis change in output}}{\text{employment multiplier}} = \frac{\$1,000,000}{15.75} = \$63,492.06
\]

This is the average total cost of employing a worker in the lodging industry, including benefits (e.g., health or retirement benefits), payroll costs (e.g., social security taxes), and assorted overhead.

**EXHIBIT 12.5 Example output, income, and employment multipliers**

<p>| ORANGE COUNTY (ORLANDO) MULTIPLIERS |</p>
<table>
<thead>
<tr>
<th>Output</th>
<th>Earnings</th>
<th>Employment*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>1.63</td>
<td>0.77</td>
</tr>
<tr>
<td>Retail</td>
<td>1.63</td>
<td>0.70</td>
</tr>
<tr>
<td>Lodging</td>
<td>1.69</td>
<td>0.64</td>
</tr>
<tr>
<td>Entertainment</td>
<td>1.75</td>
<td>0.73</td>
</tr>
<tr>
<td>Food and Beverage</td>
<td>1.62</td>
<td>0.70</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>1.50</td>
<td>0.64</td>
</tr>
<tr>
<td>Business Spending</td>
<td>1.80</td>
<td>0.96</td>
</tr>
</tbody>
</table>

*The employment multiplier is measured on the basis of a $1 million change in output.

Source: Data from MIG, Inc., 2011

The results from a survey like the one shown in Exhibit 12.2 allow us to calculate total spending for NBA All-Star 2012 by category.* The results, given in Exhibit 12.6, show that Lodging, Food & Beverage, and Retail were the three categories with the highest spending for visiting spectators at the All-Star Game and related activities, which included multiple events within the Amway Center and outside the facility. Further, included in the Transportation category was about $1.07 million spent on rental cars. The survey showed that the average incremental visitor spent about $219 on lodging. Given that there were 36,890 incremental visitors (see Exhibit 12.3), the direct economic impact for lodging is $8.1 million.

To calculate the total economic impact of NBA All-Star 2012, we multiply each of the direct spending categories in Exhibit 12.6 by the appropriate multiplier given in Exhibit 12.5 and then total these eight amounts. In this example, spending inside the Amway Center is not included in the economic impact measurement. The measurement does include, under corporate spending, expenditures by the NBA, the Orlando Magic, non-local media, visiting athletes, and corporate sponsors that hosted parties and event-related activities (approximately 80 such events took place during the multi-day event). We can easily calculate the indirect economic impact by subtracting the direct economic impact from the total economic impact.

\[
\text{total economic impact} = \text{direct economic impact} + \text{indirect economic impact}
\]

\[
\text{Exhibit 12.7 gives the induced impacts from NBA All-Star 2012. These portions of direct spending are retained as income or earnings for local residents. The multiplier pertaining to income for each of the spending categories is shown in Exhibit 12.5 in the Earnings column. The indirect spending resulting from the events also contributes to increases in income. However, as discussed above, it is practically impossible to track indirect spending. For this reason, we use a general aggregate multiplier to estimate induced earnings impacts from indirect spending. We can determine this aggregate multiplier by calculating the weighted average multiplier for the city across all 432 industry categories. The employment impact from indirect}
\]

382
spending is calculated in the same fashion.

**EXHIBIT 12.6 Calculating total economic impact.**

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DIRECT SPENDING*</th>
<th>MULTIPLIER</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation</td>
<td>$3,880,213</td>
<td>1.63</td>
<td>$6,321,486</td>
</tr>
<tr>
<td>Retail</td>
<td>$8,720,386</td>
<td>1.63</td>
<td>$14,175,483</td>
</tr>
<tr>
<td>Lodging</td>
<td>$8,088,792</td>
<td>1.69</td>
<td>$13,652,028</td>
</tr>
<tr>
<td>Entertainment</td>
<td>$6,526,582</td>
<td>1.75</td>
<td>$11,403,457</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>$7,174,157</td>
<td>1.62</td>
<td>$11,621,262</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>$2,737,954</td>
<td>1.50</td>
<td>$4,095,234</td>
</tr>
<tr>
<td>Inside Amway Center</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Corporate/Team/Media</td>
<td>$18,710,820</td>
<td>1.80</td>
<td>$33,770,898</td>
</tr>
<tr>
<td>Total Direct Spending</td>
<td>$55,838,904</td>
<td>Total economic impact</td>
<td>$95,039,848</td>
</tr>
</tbody>
</table>

*Does not include spending within the Amway Center.

**EXHIBIT 12.7 Induced economic impacts from NBA All-Star 2012.**

<table>
<thead>
<tr>
<th>TYPE OF IMPACT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Earnings</td>
<td>$60,507,750</td>
</tr>
<tr>
<td>Employment</td>
<td>2,250</td>
</tr>
</tbody>
</table>

*Note: Figures do not include spending within Amway Center.*

**Fiscal (or Tax) Impact Methodology**

An analysis of the fiscal or tax implications of economic impact is often complex. First, the analyst must understand the tax code for the city, county, or state—a daunting requirement. Second, the task of separating tax revenue according to recipient, such as city, county, or state government, can be difficult. Third, accounting for tax-exempt spending by visitors and relevant local organizations can be time consuming, and it often results only in estimates of those exemptions. Fourth, accounting for the tax effects of indirect and induced impacts requires information that is not always readily available.

Continuing with NBA All-Star 2012 as an example, let’s look at the fiscal impact of a sport event. During the event, sales and use, hotel occupancy, and rental car taxes are collected from direct spending. In 2012 in Orange County, these taxes were:

* **Sales and use:** The State of Florida levied a tax of 6.0% on the sale of most consumer goods and services. Orange County levied an additional tax of 0.5%.
* **Hotel occupancy:** Orange County levied a 6.0% hotel occupancy tax on the total payment received for accommodations in hotel, motel, rooming house, or any other sleeping accommodations that are rented for a period of six months or less.
* **Rental car:** Orange County levied a rental car tax of 5.0% of gross rental receipts.

We calculate direct fiscal impacts by multiplying the tax rates for each category by the direct spending for each category. (See Exhibit 12.8.) For example,
Additionally, a significant portion of the $18 million in corporate spending consisted of spending on lodging.

EXHIBIT 12.8 Calculation of fiscal impacts for NBA All-Star 2012 (Orange County only).

<table>
<thead>
<tr>
<th>TAX CATEGORY</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales and Use</td>
<td>$235,911</td>
</tr>
<tr>
<td>Hotel Occupancy</td>
<td>$819,536</td>
</tr>
<tr>
<td>Rental Car</td>
<td>$53,635</td>
</tr>
<tr>
<td>Events Related Impacts</td>
<td>$14,000</td>
</tr>
<tr>
<td>Sub-total</td>
<td>$1,123,082</td>
</tr>
<tr>
<td>Indirect Taxation</td>
<td>$1,263,057</td>
</tr>
<tr>
<td>Total Fiscal Impact</td>
<td>$2,386,139</td>
</tr>
</tbody>
</table>

*Note: Figures do not include spending within Amway Center. Events Related Impacts are payments made to local government to rent the facilities.*

The calculation of fiscal impacts is complicated by tax exemptions. Not every item in a grocery store is subject to sales tax; in some states, sales taxes must be paid for food at a restaurant if a customer eats in, but not for takeout; and, often, a different tax rate is imposed on cigarettes than other grocery store items. To sort out these issues, we gather information from a variety of sources. For instance, the National Restaurant Association estimates that 10% of a typical restaurant bill is for alcohol. Thus, if we were measuring the alcohol or mixed beverage taxes collected, we could use this estimate to help calculate these taxes (or adjust our survey to ask specific questions about expenditures on alcoholic beverages).

We measure *indirect* fiscal impacts by applying recent historical aggregate average tax rates to the indirect spending estimate. Given that indirect spending is disbursed throughout many sectors of the local and state economies—some of those sectors being subject to certain taxes and others not—one way to estimate the fiscal impact of indirect spending is to analyze the total spending that takes place in a county relative to total taxes collected. In some states, the gross state product (GSP), an estimate of total spending in the state, is disaggregated by city and county. By combining that information with the total taxes collected in the city or county, we can obtain an estimate of the indirect spending tax rate. For instance, if total spending in a town during one year is $100 million, and the total of taxes collected in that town from all relevant sources for that year is $5 million, then, on average, for every dollar spent, five cents is collected in local taxes. This type of calculation provides an estimate of the fiscal impact of indirect spending. From Exhibit 12.6, indirect spending at NBA All-Star 2012 can be calculated as the difference between total economic impact and direct spending ($95,039,848 − 55,838,904 = $39,200,944). From historical information, we know that the average tax collected in Orange County was about 3.2 cents per dollar (3.222, to be exact). We can now calculate the fiscal impact of indirect spending pertaining to NBA All-Star 2012.

\[
\text{fiscal impact of indirect spending} = \text{indirect spending} \times \text{average tax rate}
\]

\[
= \$39,200,944 \times 3.222\%
\]

\[
= \$1,263,057
\]
MEASURING EVENT COSTS

We have explained techniques for measuring the economic benefits of an event. Now we turn to the costs of hosting the event. Many economic impact studies do not provide estimates of the costs of generating economic impacts. It can sometimes be difficult to determine the full costs of hosting an event and the entities responsible for paying these costs. For instance, if a host committee spent $4 million to bid for and host an event, and 75% of that money was spent locally, the analyst might be tempted to count the $3 million as positive economic impact. However, if the source of the money is the local government, then the impact does not count. If the event had not taken place, the money would likely have been spent in town on something else. If the source of funds was outside the community—perhaps the state government or non-local corporate sponsors, then the spending could be considered an economic benefit and counted as part of economic impact.

Although many economic impact studies do not address costs, a complete study does include an analysis of event costs. In addition to local government funding, these often include costs of security, ticket sales, printing, advertising, transportation, communication, travel, and lodging.
ECONOMIC IMPACT OF A LOCAL TEAM

Measuring the economic impact of an event is a formidable task, but measuring the economic impact of a team is even more complex. A team may be thought of as a series of events—for example, 81 home games for an MLB team. Typically, the analyst will gather data on one or two games and extrapolate the results to an entire season. Based on discussions with team officials, the researcher might choose to study a weekday game and a weekend game, because the mix of patrons probably varies the most across those two types of games. Additionally, the analyst must measure the impact of the team as a local business, including organizational spending in the area and direct employment of the franchise. NFL teams often employ more than 200 people, including players.

Similarly, an NFL team may spend more than $200 million annually. The percentage that is spent locally is called the capture rate. Typically, a significant portion of organizational spending takes place outside the local city. In fact, a conservative estimate may be that only 10% is spent locally.* The largest single expense item is player salaries. For a proper estimate of organizational spending, the researcher must account for where players reside and—for an even more conservative estimate—must assume that players do not spend all their money but rather save a significant portion of it. To estimate the capture rate of franchise spending, we can audit a team’s spending patterns. This is not often done because of the high labor costs required to do so. Aside from organizational spending and employment, measuring the economic impact of a team is similar to measuring that of an event.

A feasibility study is often conducted prior to a team’s moving to town. In this case, the analysts employ secondary research methods similar to the techniques used in determining market demand. One method is to evaluate primary studies that have been conducted in other cities for similar projects, making adjustments to account for the differences in circumstances between the primary studies and the subject study. An assessment of common denominators, such as both cities having an NBA team, can also be helpful. For example, a feasibility study for Orange County to host an NFL team might include the analysis of a primary economic impact study of the Indianapolis Colts. In adjusting the findings to fit Orange County, the analyst might look at existing primary economic impact studies for the two relevant NBA teams, the Indiana Pacers and Orlando Magic.

*
Where do visitors spend their money?

In order for an event to generate substantial economic impacts, it needs visitors to stay overnight, causing them to spend money on lodging and a number of meals. Those are the big-ticket items when it comes to economic impact. Many events, however, are single-day events. Yet, some event owners, such as Elite Racing (now owned by the Competitor Group) have managed to turn a one-day event into a three-day event. The Rock ‘n’ Roll Marathon series, which is expanding into more and more cities around the world every year, stages an expo the day before the marathon and requires runners to register at the expo—that’s two days. Then, after the marathon is a musical event that continues late into the evening, making it hard for participants to board a plane and leave the city until the next day. That’s three days.

SportsEconomics, a firm that provides financial and marketing research analysis to clients in a wide variety of sport-related fields, has measured the economic impact of three Rock ‘n’ Roll Marathons in two locations, and the economic impact is quite large.* Not only do marathon runners spend a lot per day when they travel to an event (they generally have relatively high incomes), but they make a mini-vacation out of it and often bring along a friend or two.

Where do they spend their money? Exhibit 12.9 shows where visitors spend their money for a variety of events in the City of San Jose. Three of the events are mostly spectator driven (San Jose Grand Prix, San Jose Sharks game, and NCAA Men’s Basketball Regionals), and two of them are more participant driven (the Rock ‘n’ Roll Marathon and the CAHA Youth Hockey Tournament). Lodging and food and beverage account for over 50% of the spending by visitors to these events. Transportation, retail, and entertainment account for just over 10% each.

*Two of the studies were conducted in conjunction with Richard Irwin.

EXHIBIT 12.9 Disaggregation of visitor spending outside events in San Jose, California.
ECONOMIC IMPACT OF A SPORT FACILITY

The measurement of a sport facility’s economic impact can be controversial because the results are often cited as evidence in debates over how much public funding the facility should receive (see Chapter 9 for more on this topic). A sport facility can provide economic impact both during the construction phase and during the operational phase, when it hosts hundreds of events. As already described, a facility will provide operations impact (impact generated through daily operation) from games and other events. A facility will also provide direct spending impacts, like those of a team. The methodology for measuring a facility’s operational economic impacts is similar to that for events and teams.

The measurement of construction impact—the amount of money that comes into the community during the construction phase that would not otherwise have entered the community—has been perhaps the most controversial aspect of sport economic impact analysis. In general, if a city government spends money to construct a building, the net economic impact must be measured in terms of the forgone alternative uses of the same funding, i.e., the opportunity cost. Would other uses have had a greater or lesser economic impact? Typically, government spending is not considered to generate economic impact for a specific project, because that money could have been spent on another project. This is similar to the reason why spending by local residents is not generally considered to add to operational economic impact, as discussed previously. If a resident spends money at a football game, then he or she will not spend that money at the movies or for other local entertainment.

In terms of a facility, if a local government uses $20 million of its annual budget to build a sport arena instead of upgrading the facilities of the local school district, then the arena construction provides a construction impact only to the extent that it results in more private money being spent locally. If a team owner spends $300 million in conjunction with the local government to build a $500 million arena, then the $300 million in private funding would be a construction impact, but the $200 million in public funding would not. See also Sidebar 12.C.

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As with all business research, economic impact analysis provides an estimate of the true impact. Analysts cannot avoid making assumptions, and they are well advised to minimize the number of assumptions and to test the validity of the assumptions. Controversy surrounds sport economic impact analyses, partly because, frankly, many researchers do not do a very good job of avoiding common mistakes. Such mistakes will cause the estimate to either over- or underestimate the true economic impact.

Causes of Underestimating

One of the main causes of estimates being too low is the fact that it is impossible to account for all local corporate spending that relates to an event. For instance, for events that are televised, expenditures by the media (e.g., ESPN) with local businesses to produce coverage of the event are not likely to be accounted for in the economic impact study. Most media organizations do not release the relevant information. Of course, we can make estimates, but this step is often skipped.
Smaller teams, smaller communities = greater economic impact

Academic research conducted by economists to measure the economic impact of sport facilities often shows that these facilities have little or no economic impact on the community, primarily because of the high construction costs that the public usually pays. Certainly, the facilities do generate new revenues, because they draw people from out of town for events, but those incremental revenues do not cover the public’s portion of the construction cost. Also, research into sales taxes collected in a county hosting a professional sport facility shows that often the impact from the facility is too small to measure. Robert Baade, Victor Matheson, Brad Humphreys, and Dennis Coates, among others, have conducted numerous studies of this type (see Baade & Matheson, 2006, and Coates & Humphreys, 2003). Researchers have hypothesized that smaller teams in smaller communities may have a greater possibility of producing positive economic impacts (Matheson, 2006; Seaman, 2004).

It may be difficult to discern the impact of a single business such as a sport facility on a county or metropolitan area over a period of time as long as a year or even a month, but the general belief is that events at these facilities crowd out regular visitors to a community if the events are large, or cause visitors to substitute event attendance for another visit to the community, so the net effect is zero or small. However, the findings from surveys of visitors are contrary, in that even after accounting for time-switchers and casual visitors, these studies find there were incremental visitors who spent money in the community that they would not have spent otherwise. Reconciliation of these two opposed findings is fodder for future research.

Nola Agha (2013) conducted a comprehensive study of all 238 metropolitan areas hosting minor league baseball teams from 1985 through 2006 and found that communities hosting AAA and A+ teams, and AA and rookie stadiums, have statistically significantly positive gains in local per capita income, when other possible reasons for the growth are controlled for. Why the difference between major and minor professional teams? Agha and Rascher (in press) scanned the evidence and found nine reasons, taken as a whole, why minor league baseball teams might be more likely to provide net positive economic impacts than major league teams: (1) relatively more new visitors attend, (2) geographic isolation means fewer substitutes, (3) local residents alter spending patterns, (4) more vacationing at home occurs, (5) leakages, (6) government spending, (7) new stadiums, (8) venue utilization, and (9) crowding out.

Some events produce economic impact from visitors who come to town because of the event but do not attend the event itself. For the NCAA Men’s Final Four basketball tournament held in San Antonio in 2004, approximately 7,000 visitors came to town for the event, but, for a variety of reasons, did not attend any of the games. Many studies will fail to measure impacts like this.

How the researchers treat blank survey responses can affect the final results. Counting a blank response as zero lowers the overall estimate of economic impact. Counting it as the average of other responses on the same question can result in a more accurate estimate, unless the respondent meant for the answer to be zero. Sometimes looking at the raw surveys will suggest the best way to treat the response. If the respondent answered some of the spending categories but left others blank, he or she probably intended the blank responses to mean zero.

As described above, to produce a conservative estimate, we do not count spending by local residents and by casual visitors and time-switchers toward economic impact, because we assume that the spending would have occurred even if the event had not taken place. However, research shows that this may not always be the case. For example, after the 2004 MasterCard Alamo Bowl, local residents indicated that they spent, on average, just under $40 per person more in town than they would have if the event had not been held in San Antonio. Perhaps even more important is the notion of “vacationing at home,” when a local resident stays in town because of an event instead of leaving and spending money outside town (see Sidebar 12.C).
Vacationing at home

It is typical in economic impact studies that the spending by local residents is not counted toward economic impact. This is done to be conservative—to have a measurement of economic impact that is likely to be lower than the true amount (not higher than the true amount and, thus, subject to legitimate scrutiny). However, this concept often feels at odds with the instincts of event owners, who note that many local residents “vacation at home” and spend their money locally instead of leaving town to spend it on some other external vacation.

This concept of “vacationing at home” was analyzed in depth by Cobb and Olberding (2007). In a study of the Cincinnati Flying Pig Marathon, they found that many local runners—who account for a significant percentage of race participants in many marathons—actually use their home-city marathon as a substitute for a race out of town. They found that economic impact was actually more than 20% higher than previous estimates when spending by these local residents was included.

A key element of this type of analysis is that the researcher should count the amount of money the local resident would have spent had he or she traveled to another location and run a marathon, not how much the person actually did spend locally related to the hometown marathon. The reason for this is that the amount the individual would have spent abroad was not spent and is available for to be spent locally, whether it be during that same few days or within a reasonable time period. In other words, the money stayed home and likely will eventually be spent at various local businesses. Using the same methodology, Irwin and Rascher (Irwin & Rascher, 2005, 2007a, 2007b; Rascher & Irwin, 2004) have found that many events seem to draw a substantial number of local residents who vacation at home, and the numbers may be greater for participatory events (more so than spectator events).

Exhibit 12.10 lists the percentages of local residents attending selected events who would have attended the event if held outside the area, according to surveys. For example, an economic impact study for the 2007 Dr Pepper Big 12 Championship (a college football game) found that “[a]pproximately 5 percent of San Antonio residents, 27 percent of Bexar County residents, and 44 percent of in-state respondents indicated they would have attended the event if it were hosted outside of the State of Texas. This is highly correlated with those fans who said that they were a fan of one of the two teams playing.” Almost half of the spectators from within the state of Texas (but outside of Bexar County, where the game was played) indicated that they would have traveled to a nearby state to watch the championship if it had not been held in Texas. The money stayed home: the football game helped keep residents of the state from taking their money outside the state. Thus, that money is incremental in that it would not be in the state to be spent at some point had the football game not occurred. That money should be counted toward economic impact.

EXHIBIT 12.10 Percentages of local residents attending selected events who would have attended the event if held outside the area.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>RESIDENTS OF…</th>
<th>% THAT WOULD HAVE ATTENDED THE EVENT…</th>
<th>HAD IT BEEN HELD OUTSIDE OF…</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Figure Skating Championships (San Jose, 2012)</td>
<td>city</td>
<td>12%</td>
<td>county</td>
</tr>
<tr>
<td>USA Gymnastics Championships (San Jose, 2012)</td>
<td>city</td>
<td>17%</td>
<td>county</td>
</tr>
<tr>
<td>Nike Women’s Marathon (San Francisco, 2011)</td>
<td>city, city, state</td>
<td>39%, 19%, 22%</td>
<td>city, state, state</td>
</tr>
<tr>
<td>AAU Junior Olympic Games (Houston, 2012)</td>
<td>county</td>
<td>79%</td>
<td>state</td>
</tr>
<tr>
<td>Dr Pepper Big 12 Championship (San Antonio, 2007)</td>
<td>county, state</td>
<td>27%, 44%</td>
<td>state, state</td>
</tr>
</tbody>
</table>
Often, fiscal impacts are not fully accounted for. This is especially true of business or personal income taxes collected on the earnings or income type of economic impact. User fees related to energy usage and airport taxes levied per person using the local airport are examples of other fiscal impacts that are often not accounted for.

Another shortcoming of standard economic impact analysis is that most measurements account only for current new spending, ignoring the possibility that an event might cause an increase in the number of future visitors to the community. For instance, the economic impact analysis for the 2004 NCAA Men’s Final Four basketball tournament reported that approximately 20% of visitors said that after coming to San Antonio for the Final Four, they are likely to visit again. These future visits should be attributed at least partially to a particular event, yet they are often ignored. Media coverage of an event can also inspire viewers to visit the host city in the future; this is termed the media impact. For example, 6 million spectators viewed the 2004 MasterCard Alamo Bowl, held in San Antonio, Texas, on the ESPN national coverage of the game. During the game, the announcers often mentioned the name of the city, increasing viewers’ awareness of it. Other media outlets, such as newspapers, radio stations, and websites, provided free coverage of San Antonio during the game. It is extremely difficult to measure the way media coverage translates into actual new visitor expenditures. Findings from studies suggest that San Antonio received nearly $1.8 million in media coverage from the telecast itself, not including other forms of media coverage. This area is ripe for future economic impact research.

Further, most economic impact analyses do not account for psychic impact, even though it could be an important factor in some cases (see Sidebar 12.D).

Researchers have estimated that the Pittsburgh Penguins of the NHL are worth approximately $16 million per year to the residents of Pittsburgh solely in terms of emotional or psychic impact. This works out to an average of about $7.27 per person in the Pittsburgh MSA (Johnson, Groothuis, & Whitehead, 2001). The Indiana Pacers have an annual psychic impact on the Indianapolis community worth about $35 million per year (Alexander, Kern, & Neill, 2000). The Minnesota Vikings are worth approximately $10 per resident of the state in psychic impact (Fenn & Crooker, 2004).

How does one quantify happiness? Researchers using the contingent valuation method (CVM) ask respondents how much they would be willing to pay for hypothetical projects. Researchers studying environmental impact often use CVM to measure the public’s valuation of new parks, species preservation, pollution cleanup, and so forth. In sports, we might ask respondents to name the highest amount that they would be willing to pay, out of their own household budget, each year to make a new arena possible or host a major sport event in town. For example, if asked to contribute to a fund for a new arena or a major sport event, would you contribute $0, $5, $10, $15, $20, or greater than $20? How much would you pay to bring a professional sport team to your town or to help sponsor a national sport event?

The sport industry, more than most other industries, is about fanaticism, emotion, and community; to leave these impacts out of an analysis is to miss an important part of the picture. The reason the public funds museums, zoos, and orchestras is that these institutions enhance the community. Similarly, sport teams, events, and facilities are also public goods, enhancing the quality of life of the areas in which they locate. Analysts should measure these positive externalities in order to assess fully the impact that a sport team or facility brings to a locality. As Exhibit 12.11 illustrates, it may cost $100 million to build a local baseball park, but the private financial gain by the facility operator or team might be approximately $22 million. In this situation, private investors will not build the facility. If businesses located around the facility, such as restaurants and retail stores, receive economic impact worth about $25 million, this still is not enough to justify expending private and public funds to build the facility. However, if the psychic impact is worth enough to push the total impact over $100 million, then construction financed through a public/private partnership may be worthwhile.
**Psychic impact**

One role of government is to provide cultural, civic, and entertainment goods and services that residents enjoy but that no private firm is willing to provide. These goods, whose consumption is non-excludable and non-rival, are termed public goods, discussed in Chapter 9. In general, public goods are funded by governments in the appropriate jurisdiction (e.g., state parks, national defense) because private industry is not willing to offer them.

Major professional sport teams, entertainment districts, and sport and cultural events enhance the quality of life in a region, as do zoos, museums, aquariums, parks, the arts, and other public goods. Sporting events provide an entertainment option, especially for individuals who value attending or viewing spectator sports or attending related events, such as fan festivals. They also provide benefits that are public goods, including psychic impact.

Psychic impact is the emotional impact on a community that results when the community hosts prestigious events or major sport teams. Cultural events often are part of the fabric of a community, increasing civic pride and community spirit. Psychic impact includes emotional benefits received by members of a community who are not directly involved with managing an event but who still strongly identify with the event. Sport’s psychic impact includes the pleasure and camaraderie that individuals feel when they attend or discuss games or teams. Most other industries do not provide the same degree of emotional impact.

For example, when Atlanta was awarded the 1996 Summer Olympics, local residents were moved by the announcement. Many people cried with joy. They felt that Atlanta had now proved itself as a “real” international city. Newspaper reports described the city as a sea of honking horns and cheers as people were swept up in jubilation. Is it possible to quantify in financial terms the collective emotional upswing of Atlantans? Another example comes from Minnesota, where a former governor, Arne Carlson, said that “If you were to make a list of 10 or 15 of the most prized possessions of the state, [the Twins] would probably be one of them, and you never want to lose one of your prized possessions. Never” (Meryhew, 1997).

Psychic impact techniques focus on measuring the value of psychic impact. Event owners capture part of the value of psychic impact through ticket sales, merchandise sales, and so forth. However, much psychic impact is provided free to local residents simply through their knowledge of the event. This is one of the reasons for the public/private partnerships that build sport venues. Proper decisions about the spending of public dollars require knowledge of both economic impact and psychic impact.

* Economist Bruce Johnson pioneered the application of research in psychic impact, also called psychic income or public consumption benefit, in sport. See Johnson and Whitehead (2000); Johnson, Groothuis, and Whitehead (2001); and Groothuis, Johnson, and Whitehead (2004).

**EXHIBIT 12.11 Example of an economic impact analysis where psychic impact matters.**
Causes of Overestimating

Overestimations of economic impact occur because most analyses do not account for reverse time-switchers, those local residents who leave town during an event period because of the event. Expenditures that reverse time-switchers would have spent in town are instead spent outside the local area. Only mega-events, when local residents expect traffic congestion or anticipate the possibility of renting their home out to visitors for a profit, typically have reverse time-switchers.

Economic impact analyses often neglect to account for important opportunity costs. For instance, if the Amway Center had to turn down a major event because of a time conflict with NBA All-Star 2012, then calculation of the net incremental gain from hosting the event must account for the lost economic impact of the other event.

Another potentially important opportunity cost is the lost impact from visitors who would have come to town under normal circumstances but were unable to because the event filled all of the hotels to capacity. If these would-be visitors came at some time anyway and lodged within the geographic area, then there is no loss in revenue. However, if any individuals did not come to town at all because of the event, then the economic impact analysis for the event should account for that loss.

In the parlance of economic impact analysis, what is often called economic impact is really gross economic benefit, because it includes all spending, even by local residents, and it does not account for the costs of hosting the event. When the analyst properly accounts for spending, costs, and other similar items, then economic benefit becomes economic impact, although it is sometimes called incremental economic impact. When we account for opportunity costs, such as those arising from capacity constraints at the sport facility or at local hotels, then we have what is often called the net incremental economic impact. A true economic impact analysis accounts for all of these adjustments; it nets out all effects to measure the true incremental impacts. When we read economic impact studies, we must know how these terms are being defined and used.

Perhaps the most egregious cause of overestimating economic impact is that the analyst has some incentive to find a very large impact. Often, these studies are paid for by advocates (such as franchise owners or politicians) for building the facility or bringing the event to town, especially if part of the funding will come from public sources. When we read these studies it may be difficult to follow the methodological details given (if any), but “reverse engineering” the study (e.g., looking for logical missteps or interim calculations and results that aren’t believable) can show if the analyst missed or misused steps discussed in this chapter.

For an unethical analyst, the easiest way to obtain a large economic impact estimate is to count all attendees at an event toward economic impact, not just relevant or incremental visitors. Sometimes an analyst will even count a person who attends three days of an event as three individual people (simply adding up the stated attendance for each day of the three-day event, rather than determining the number of individual attendees). Another method is to count total spending by organizations, corporations, and local government related to the event as benefit rather than cost. Of course, all of these methods result in bogus estimates. If local government spends $1 million to help bring an event to town, that is a cost, not a benefit. If visitors attending a game spend $10 million buying tickets, merchandise, and concessions inside the game, and the owner spends $9 million of those revenues to produce it, the real economic impact would be $9 million (or $10 million, perhaps, if the owner’s business is a local business)—not $19 million. When you read economic impact studies, consider the source and carefully review the methodology. See Exhibit 12.13 for guidelines for analyzing the methodology of an economic impact study.
The further they travel, the more they spend

In 2007, Brown, Rascher, McEvoy, and Nagel published an article in the *International journal of Sport Finance* that examined whether the distance golfers traveled to play golf affected how much they spent once they arrived. In economics, the Alchian-Allen Theorem (sometimes referred to as the Third Law of Demand) posits that as a fixed cost is added to the price of two products, the more expensive product becomes relatively cheaper compared to the less expensive product, and consumers will then be more likely to purchase the more expensive product. This raises the question, with respect to tourism, will consumers ignore the sunk costs of travel when making their choices about dining, hotels, and so forth? Sports tourism is an excellent setting for a study of this phenomenon. The researchers concluded:

> The analysis of spending by golf tourists in Ohio is not just about the support for the Alchian-Allen theorem. It is also about whether golf consumers bundle decisions together or separate them out sequentially. Here, the customer has a choice regarding whether to bundle costs or not. The data from this study indicates that most golfers, especially golf tourists, do bundle the quality costs with the intermediate costs of transportation, lodging, and food.

An online survey of 376 golfers traveling within or to the state of Ohio showed very high correlations between distance traveled and greens fees, total golf spending, and total spending on a trip (see Exhibit 12.12).

These findings are consistent across other events, whether participatory (as with the golfers in Ohio) or spectator events. The 2007 Valero Alamo Bowl pitted Penn State University against Texas A&M University. An examination of the data from the economic impact study reveals a positive and statistically significant correlation between miles traveled and the amount of money spent on concessions and merchandise at the event. Without further analysis, it is not possible to know whether the fans who traveled farther to attend the Valero Alamo Bowl are more fanatical about the event or the teams and, therefore, willing to spend more on concessions and merchandise at the event. In other words, do these fans simply have higher demand for better or more concessions and merchandise than fans who live closer to San Antonio?

A study of fans at the 2006 Busch Series motorsports event at O’Reilly Raceway Park also showed a positive correlation between spending on food and whether the fan was from out of state (conducted by SportsEconomics, LLC). Similarly, data from the 2008 Rock ‘n’ Roll Marathon in San Antonio exhibited statistically significant and positive correlations between whether participants came from out of state and how much they spent on food, beverages, and entertainment while in San Antonio.

Event marketers would be wise to address where their patrons are coming from when they develop marketing tactics. Packages can be designed and marketed to appeal specifically to potential customers who have traveled a long distance and, therefore, might be willing to spend more than local fans.

### EXHIBIT 12.12 Correlations between distance traveled and spending.

<table>
<thead>
<tr>
<th>SPENDING CATEGORY</th>
<th>ALL GOLFERS (N=376)</th>
<th>GOLF TOURISTS (N=35)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greens Fee</td>
<td>0.549**</td>
<td>0.983**</td>
</tr>
<tr>
<td>Cart Fee</td>
<td>0.026</td>
<td>0.360*</td>
</tr>
<tr>
<td>Greens and Cart Fee</td>
<td>0.669**</td>
<td>0.983**</td>
</tr>
<tr>
<td>Total Course Spending</td>
<td>0.590**</td>
<td>0.986*</td>
</tr>
<tr>
<td>Non-golf Trip Spending</td>
<td>0.062</td>
<td>0.334</td>
</tr>
<tr>
<td>Total Spending</td>
<td>0.226**</td>
<td>0.951**</td>
</tr>
</tbody>
</table>

*implies statistically significant at the 5% level; ** implies statistically significant at the 1% level.

Economic impact analysis is a widely used decision-making tool for private businesses and governments. Essentially, it is a form of cost-benefit analysis, where the analyst measures true costs and benefits to assess net effect or impact. The fundamental principle in economic impact analysis is to measure the spending that resulted (or can be expected to result) from the event, versus the spending that would have occurred otherwise. The analyst must ask, But for the event, what would spending in the community have been? This “but for” analysis is similar to economic damages calculations in litigation, where analysts try to determine what financial harm occurred, for example, from patent infringement or malfunctioning equipment, by estimating what would have happened without (“but for”) the infringement or malfunction. Analysts conducting economic impact studies should continually ask themselves whether a specific set of spending measurements is truly new or is incremental compared to what would have happened otherwise.

EXHIBIT 12.13 Factors in analyzing the methodology of an economic impact study.

<table>
<thead>
<tr>
<th>CONSIDER WHETHER:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local spending is not counted.</td>
</tr>
<tr>
<td>Only incremental spending by casual visitors and time-switchers is counted.</td>
</tr>
<tr>
<td>Incremental visitor spending is fully counted.</td>
</tr>
<tr>
<td>Spending within a facility is not counted.</td>
</tr>
<tr>
<td>Spending that comes out of the event, team, or facility is counted.</td>
</tr>
<tr>
<td>Only the organizational spending by the event host committee, event management company, and corporate sponsors in the geographic area of impact is counted.</td>
</tr>
<tr>
<td>Only corporate spending in the geographic area of impact that would not have occurred otherwise is counted.</td>
</tr>
<tr>
<td>Spending by organizations, corporations, and local governments related to bringing the event to town is counted as a cost rather than a benefit.</td>
</tr>
<tr>
<td>Leakages outside the geographic area of impact (sales and income taxes of non-local governments and spending with non-local employees, businesses, and organizations) are not counted.</td>
</tr>
<tr>
<td>Only the capture rate portion of franchise spending is counted.</td>
</tr>
<tr>
<td>Opportunity costs are accounted for.</td>
</tr>
</tbody>
</table>

Concept CHECK

1. What is the difference between induced and indirect economic impact?
2. Can a person be both a casual visitor and a time-switcher for the same event?
3. Under what conditions should spending by local residents be counted in a calculation of economic impact?
4. In measuring the economic impact of a sport team, is it correct to count both the spending by fans inside the stadium and the spending by the team (in running its operations) in the community?
5. All else being equal, does increasing the size of the geographic area of impact raise, lower, or have no effect on the capture rate?
6. How would one determine the extent to which locals are reverse time-switchers for a particular event?
7. What are some of the causes of overestimating the economic impact of a sport event? Of underestimating?

Economic Impact Study Simulation

Review the following description of an economic impact study and answer the questions that follow.
When you have finished, you will have measured the economic impact of a large sport event.

You have been commissioned to analyze the economic impact on the city of Cincinnati of the MLB All-Star Game. Specifically, the community wants to know the direct spending impact, the indirect spending impact, and the fiscal/tax impact. Cincinnati officials want to know whether it would be profitable to fund and bid for similar future events for the city. This event cost the City about $8 million to host.

You created a survey (Exhibit 12.14) and administered it to 342 people around Great American Ball Park during the game, making an effort to obtain a random sample. Only 325 of the surveys were usable because of various errors by the respondents. You entered the data into a spreadsheet and are now ready to analyze the economic impact. To allow you to do this analysis, your instructor will provide you with an Excel file containing two spreadsheets: Survey 1 and Key. Survey 1 is the spreadsheet in which the data have been entered, and the Key spreadsheet describes and explains each column of data. Be sure to measure economic impact for all visitors, not just those who responded to the survey. (A survey is a sample of the target population.)

Based on discussions with the local organizing committee and Cincinnati government officials, you determine that:

- Great American Ball Park seats 42,059.
- The game was sold out.
- The city sales tax is 6.5% and is collected on all goods and services except hotels.
- The city hotel occupancy tax is 10.5%.
- Hotel capacity in the city is 35,000 rooms. The typical occupancy rate is 83%.
- The average number of persons per room for large events such as this is 2.4.
- Total spending by the local organizing committee was $4.5 million, with 60% of that amount coming from organizations outside of the city. This is in addition to the amount the City itself spent. Sponsors spent $1 million in town activating their sponsorships.
- The spending multiplier for the city of Cincinnati is 1.6 (based on information from MIG, Inc.).
- Of spending inside Great American Ball Park (including tickets) for this event, 20% went to the city government (fiscal impact).

**Case Questions**

*Note: A few data entry or survey respondent errors have been included in the spreadsheet.*

1. How many people attended the All-Star Game in total?
2. How many visitors (people who are not local residents) attended the All-Star Game?
3. How many visitors who attended the game were time-switchers?
4. How many visitors who attended the game were casual visitors?
5. How many visitors should be used in the calculation of the economic impact estimates?
6. What is the per-person spending per day by the “incremental” visitors for everything but lodging? (Use your result from Question 5.) What is that number for lodging per night stayed?
7. What is the average length of stay for incremental visitors in terms of days and nights?
8. What is the per-person spending per stay by the incremental visitors?
9. What direct economic impact, not accounting for any hotel capacity constraints, may exist? (Be sure to account for the new/incremental spending by the event organizer and the costs of hosting the event.) Those capacity constraints are addressed in Question 11.
10. What is the total economic impact?
11. Based on hotel capacity information, how many typical visitors did the event visitors crowd out?
12. What is the new direct and total economic impact, accounting for the crowding out?
13. What is the fiscal or tax impact of the event on the city?
Notes

* Additionally, local major sporting events enhance community and civic pride. This effect, known as *psychic impact*, is discussed later.

* Calculation of the necessary sample size is beyond the scope of this text. Consult a business research or marketing research methods text.

* Best efforts are made to survey a random sample of people attending the event.

* A more expanded survey similar to that in Exhibit 12.2 was used by Dr. Richard Irwin (University of Memphis and Strategic Marketing Services) and Dr. Daniel Rascher (one of the co-authors of this text, University of San Francisco) to measure the economic impact of NBA All-Star 2012 on Orange County, Florida.

* A recent self-audit by a major professional sport team found a capture rate of 21% of the team’s total budget.
PART IV
Financial Attributes of Select Sport Industry Segments

13 Public Sector Sport
14 College Athletics
15 Professional Sport
KEY CONCEPTS

assessed value  
assessment ratio  
competitive issue  
excise tax  
grant  
joint use agreement  
local option sales tax  
mill  
millage  
millage rate  
municipal bond  
negotiated issue  
net assessed value  
pay-as-you-go approach  
property tax  
public facility authority (PFA) bond  
public sector sport  
public/private partnership  
sales tax  
serial bond  
sponsorship  
tax rate  
tax receipts  
tax subsidy  
term bond  
term bond
Introduction

Public sector sport is offered to serve societal need rather than profit potential (Brayley & McLean, 2008). Hence, indicators of social benefits, not solely financial indicators, are commonly used to determine success in public sector sport. For the public sector, we measure success by comparing achievement to goals. Here, goals are based not solely on financial measures but on social outcomes, as well. We measure success by comparing the social benefits derived from the programs to the expenses of achieving those outcomes. For example, numerous studies have shown that participation in high school sport is good not only for students’ health but also for improving students’ academic performance (Cook, 2012). For reasons such as this, we measure health and academic performance outcomes against the expenses of participatory sports.

When we think of the public sector in sport, our first thought is probably of state university athletic programs. However, in this chapter we focus on less often considered segments: park and recreation agencies and public high school sports. In general, these agencies provide sport that benefits a broad segment of the local community rather than the more elite set of athletes participating in collegiate sport. This sport sector meets the social needs of the community, and, because sport is being provided for members of the community, the agencies responsible for it generally have the power to levy taxes to fund their operations and facility construction. Because public funds are being used, managers in this sector are accountable to taxpayers, and they operate based on the perceived needs of the electorate (Brayley & McLean). The 2012 Census of Governments: Finance—State and Local shows that a considerable number of taxpayer dollars are spent on parks and recreation. The U.S. Census Bureau report for 2012 indicates that state and local governments spent $37.4 billion in 2012 (Barnett, Sheckells, Peterson, & Tydings, 2014). High school sport spending is big, too. For example, in Allen, Texas, voters approved spending 60 million taxpayer dollars to build an 18,000-seat high school football stadium. Naming rights deals, television broadcasting revenues, and multimillion-dollar venues being built for high school athletics are becoming commonplace (Koba, 2012). Hence, an understanding of this sector is important for a complete grasp of financial principles in the sport industry.
Several trends over the past 10 years have affected the financial operation of public sector sport facilities (Attwood, 2012). Budget tightening and cuts that began during the Great Recession, coupled with a change in culture to focus on competition and elite performance, have caused park and recreation agencies to depend on innovative programming. The types of facilities and varieties of programming have increased to meet consumer desire. Parks used to be fields of grass and woods; now they include interactive playgrounds, sporting courts, game fields, and advanced trail systems. Community centers, once offering little more than gym space and meeting rooms, have evolved into large multipurpose facilities. These venues frequently offer aquatics facilities, climbing walls, open gym space, running tracks, fitness centers, multipurpose rooms, and child care areas.

With recent budget cuts, park and recreation agencies have returned to partnerships between cities and local school districts to provide programming and optimal facilities. For example, in 2001 the high school and community in Mason, Ohio, built a $72 million recreation center that features weight rooms, fitness rooms, a leisure pool, a competition pool, an auditorium, and a gym (Huddleston, 2001). In Anne Arundel County, Maryland, a partnership of the public high schools and county officials has led to shared usage of athletic fields, reducing the cost per field for the county and schools. Similar joint use agreements exist in San Marcos, California; Broomfield, Colorado; and other cities across the United States (Brown, 2008b). The Kansas City Missouri Parks and Recreation Department has established some of the most extensive partnerships in the nation. These partnerships exist to allow the district to leverage its resources while generating city-wide interest in its programming, facilities, and events. In total, the district participates in more than 50 partnerships with school districts, non-profit organizations, neighborhoods, and businesses (Kansas City Parks and Recreation, 2015).

High school athletic facilities provide a place for physical education curricula, but they are primarily built to benefit those athletes participating in interscholastic sport. On the other hand, community parks and recreation centers are intended for the use of all. Park and recreation agencies have a mandate to provide services that benefit the public health and welfare of the local community; therefore, the agencies have developed facilities and programs that appeal to a broad demographic. However, this approach can result in controversies over pricing. For example, in one community an annual membership in the publicly owned and operated recreation center was $760. In addition to the annual fee, members were charged for fitness classes. A private health club in the same community required a $540 annual fee, which included fitness classes. The public recreation center’s vast array of programming and amenities, designed to appeal to a broad population base, resulted in a pricing structure that was higher than that of the single-purpose private health club (Bynum, 2006). Community members might question the use of public finances, when membership in a private health club is more affordable than joining a recreation facility funded in part by taxpayer dollars.

Trends over the past 40 years have resulted in this pricing paradox. During the 1970s, discussions of pricing centered on keeping public recreation activities affordable for the broadest possible segment of the population. Activities and memberships were nominally priced, and some residents paid nothing at all. The philosophy was that every member of the community should be able to afford the programs and services offered. Since then, the size and scope of recreational complexes have grown and changed, while the demand for public dollars from other agencies for a variety of local purposes has increased. Meanwhile, communities have reduced state and local taxes. As a result, community sport and recreation departments are now expected (1) to provide a multitude of sport and recreation services to the community, while keeping them affordable, and (2) to provide programs and facilities that are financially self-sufficient or that generate enough revenue to offset any expenses not covered by an established subsidy. These conflicting expectations have led to the pricing situation described earlier.

The Boulder, Colorado, Parks and Recreation Department proposed to meet these challenges by implementing service-based pricing, in which fees are set based on the cost of the program being offered. Programs would be divided into four classifications. At the most basic programming level, for introductory or general programming offered to all age levels, program costs would be offset by the department’s tax subsidy. At the highest level, including competitive adult sports and advanced classes, fees would be set to cover administrative overhead, instructor pay, and facility time (Popke, 2010).
Frisco, Texas: School district, community, and professional sport partnerships

Toyota Stadium and the Toyota Soccer Center opened in Frisco, Texas, on August 6, 2005. Built on 145 acres, the multipurpose sport and entertainment facility includes the home stadium for MLS’s FC Dallas. In addition to the 25,000-seat stadium, the complex—used by adult and youth soccer leagues and for high school sports—includes 17 tournament-sized soccer fields. It has become one of the top complexes for professional and amateur soccer in the United States, attracting more than one million visitors per year. The $105 million complex is owned by the City of Frisco in a partnership with FC Dallas owner Hunt Sports Group (HSG), the Frisco Independent School District (ISD), and Collin County (“About Toyota Stadium,” 2015). The City of Frisco and Collin County each paid $20 million, backed through municipal bonds. The Frisco ISD paid $15 million, with the money raised as a part of a school bond referendum backed by a property tax increase. The remainder of the cost was paid for by the HSG.

Because of the success of this partnership with HSG and FC Dallas, the City of Frisco and the Frisco ISD once again entered into a public/private partnership to construct new athletic facilities. This time, the two partnered with the Dallas Cowboys to build a 91-acre mixed-use development to include the team’s new headquarters. The centerpiece of the development is a 12,000-seat indoor stadium and two outdoor football fields that will be used by the Cowboys, the City of Frisco, and Frisco ISD. The school district is contributing $30 million to the project, with the money coming from revenue generated through a TIF district. The City of Frisco will contribute another $30 million, and two economic development corporations will contribute a combined total of $55 million. The Cowboys are responsible for any cost overruns (Frisco Independent School District, 2013). The Frisco ISD will use the complex for football and soccer games, as well as for entertainment events and other competitions. The district needed to build another football stadium (its third) because of its growth. It opened its seventh and eighth high schools in 2014 and 2015. The cost of a stand-alone stadium was estimated to be between $27 million and $30 million; however, through the partnership, the district estimated that it will obtain a much better facility at the same cost. When the facility is completed, the Frisco ISD will be the only school district in Texas with an indoor stadium. The city and economic development corporations will reap long-term benefits, as the economic impact of the development is expected to be $23.4 billion over the next 30 years.

As with park and recreation agencies, the public funding available for high school sports has also decreased. According to the National Federation of State High School Associations (NFHS), in 2014 the number of participants in high school sports increased for the 25th consecutive year, with more than 7.8 million students participating. The number of participants continues to grow as increasing numbers of school districts turn to—and increase—pay-for-play fees (Cook, 2012). In Ohio, public schools saw a $1.8 billion cut in state education funding in 2011 and 2012. As a result, schools sought to reduce the numbers of teachers and programs while raising money from fees, including pay-for-play athletic fees. A May 2012 survey showed that 82% of schools in southwest Ohio had instituted these fees. In one district the fee was $550 per child per sport; in another, cross country cost $521 per athlete and tennis $933. Despite numbers from the NFHS that suggest record participation in high school sports, pay-for-play is impacting the number of participants negatively in Ohio. One district, after implementing pay-for-play, saw its sports participation decrease 14%. Another district dropped its freshman football team because of decreased numbers of participants. Nationwide, it is estimated that 61% of high school athletes have to pay a fee to participate; the average fee in 2012 was $93 (Cook).
SOURCES OF FUNDS

Park and recreation agencies, and to a great extent high school sport, exist to meet the social needs of the communities they serve (Brayley & McLean; Cook). For this reason, they receive funding from the public sector for both facility construction and facility/program operations. Their goal is to provide sport facilities and programs that enhance quality of life for members of the community while serving the common good. To achieve this goal, the programs and services have traditionally been subsidized through tax revenues, because fees charged do not fully cover operational costs. Tax subsidies—in which tax receipts are used to fund programs or businesses—enable the agencies and school districts to offer programs for free or at a reduced cost. Typically, municipalities have funded public sport facility construction through the sale of tax-supported municipal bonds, and local tax receipts have provided a majority of operational funds. Tax receipts are tax revenues from all sources received by a municipality.

However, with shrinking local and state revenues, public sector sport has increasingly turned to new sources of revenue to fund programming. Municipal bonds and tax receipts are still commonly used to fund construction costs and provide operational revenues (Wall, 2015), but public sport agencies are increasingly relying on other revenue sources, including revenues from advertising and corporate sponsorships (Cook).

Public Sources of Funds

In an older study, but one of the most thorough studies on park and recreation center and program finance, Sherman (1998) detailed how these facilities were funded. Sherman found that 69% of construction funding came from taxes. For operations, 52% of funding came from tax revenues. Although no similar study on high school sport exists, it is known that taxes do pay for much of the cost of facility construction and programming. Although the percentage of public funding today is likely lower than it was in 1998, tax revenue and municipal bonds remain important sources of revenue. For example, in Cayce, South Carolina, the Cayce Tennis and Fitness Center was funded through tax-supported bonds. The Lexington County Recreation Commission (LCRC) and the City of Cayce each paid for half of the $4.7 million project. The LCRC used a portion of a $17 million county property tax-supported bond to pay its half of the costs. Residents of Cayce saw their city property taxes increase, as well, as the city’s half was paid through general obligation bonds issued specifically for the tennis project (LeBlanc, 2008). In another example, the operational budget of the Texas state parks system is partially funded by revenues from an excise tax on sporting goods sales. In 2015, $70 million of the system’s $380 million budget was from this source.

For high school sport, tax revenue comes from a variety of state and local sources. In Saline, Michigan, about 56% of the $1.1 million high school athletic budget comes from the district’s general fund (Biolchini, 2014). Within the general fund, 23% of revenues comes from property taxes, 49% are allocated to the district from the state, 18% comes from operating grants and contributions, and 10% comes from charges for services and other sources. The rest of the athletic department’s revenue comes from participant fees (32%) and gate receipts (12%). Saline is just one example of school sport funding. There is considerable variability in the ways districts fund sports.

Below we discuss the major sources of public funding, including property taxes, sales taxes, excise taxes, pay-as-you-go financing, and bonds.

Property tax

The tax source most often used to fund the construction or operation of public sector sport facilities is the property tax, a government levy based on the value of property (Brayley & McLean; Sherman). Property taxes generated 31% of all state and county tax revenue in 2008 and 72% of all local tax revenue (U.S. Census Bureau, 2012). Sherman reported that 73% of recreation construction and operation funding involved property taxes. Although this percentage is likely lower today for recreation projects, we can assume that property taxes still provide a majority of funding here. For high school sport construction, property tax revenues are still likely to fund almost all of a project’s cost. For example, in the Richland 2 School District in Columbia, South Carolina, a bond referendum was passed in 2008 to build new district facilities, including three elementary schools, one middle school, and one high school, over a ten-year period. The bonds were backed by voter-approved increases in property tax. As part of this 2008 referendum, athletic facilities were improved at several high schools. The improvements included a new football stadium at an existing high school, a renovated gymnasium at another, and all-new athletic facilities, including a new football stadium, at a high school that opened in 2013 (Richland 2 School District, 2011).

In many states, two types of property are taxed: real property and personal property. Real property includes
land and all structures built on or improvements made to the land. Personal property includes everything else that has value. Typically, automobiles, watercraft, motorcycles, trucks, and airplanes are taxed as personal property. Businesses often pay personal property taxes on furniture, fixtures, and equipment.

A wide variety of public entities establish a municipality’s property tax rates. In general, city or town councils, school boards, and special purpose districts (such as park and recreation departments) determine their budgetary needs and the percentage of revenues they require from property tax sources. In essence, these public bodies determine the rate of tax, or millage, necessary to meet their budgets. The specific millage rate for a particular resident in a tax district is the total of the levies by the city, county, school district, and any special districts in which that resident lives. One mill is equal to 1/1000 of a dollar (or 1/10 of a penny). Therefore, if a resident’s tax rate (millage rate) is 315 mills, that resident would multiply the assessed value of his or her property by 0.315 to determine the amount of tax owed. Returning to the example of Cayce, South Carolina, the city is divided into three tax districts. The tax rates of these districts vary based on school district and whether the property is within a tax increment financing district. As a result, Cayce residents pay three different property tax rates.

Assessing property value and tax due. The determination of the assessed value of a property is a complex operation usually undertaken by a city or county auditor or assessor. The taxes are collected by city and county treasurers or tax collectors. The city or county auditor will prepare a list of the owners of all taxable real and personal property. The city or county assessor then appraises the value of this property and determines each property’s assessed value, the product of its fair market value and its assessment ratio.

\[
\text{assessed value} = \text{fair market value} \times \text{assessment ratio}
\]

The fair market value of a property is the value for which the property can reasonably be expected to sell on the open market with a willing buyer and a willing seller. The assessment ratio is the percentage of the property that is subject to taxation. Assessment ratios are set by elected officials. Exhibit 13.1 lists the assessment ratios for residents of Lexington County, South Carolina. We can determine the assessed value of an individual’s primary residence by multiplying the assessment ratio for residential property by the fair market value of the residence. Let’s assume the fair market value of a primary residence is $250,000. Then,

\[
\begin{align*}
\text{assessed value} &= \text{fair market value} \times \text{assessment ratio for primary residence} \\
&= \$250,000 \times 0.04 \\
&= \$10,000
\end{align*}
\]

EXHIBIT 13.1 Assessment ratios by property type for Lexington County, South Carolina.

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Assessment Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary residence</td>
<td>4.0%</td>
</tr>
<tr>
<td>Second residence</td>
<td>6.0%</td>
</tr>
<tr>
<td>Other real property</td>
<td>6.0%</td>
</tr>
<tr>
<td>Commercial real property</td>
<td>6.0%</td>
</tr>
<tr>
<td>Agricultural real property—privately owned</td>
<td>4.0%</td>
</tr>
<tr>
<td>Agricultural real property—corporate owned</td>
<td>6.0%</td>
</tr>
<tr>
<td>Aircraft</td>
<td>10.5%</td>
</tr>
<tr>
<td>Business personal property</td>
<td>10.5%</td>
</tr>
<tr>
<td>Camper (^a)</td>
<td>10.5%</td>
</tr>
<tr>
<td>Manufacturing, real and personal</td>
<td>10.5%</td>
</tr>
<tr>
<td>Motor home (^a)</td>
<td>10.5%</td>
</tr>
<tr>
<td>Railroads, airlines, pipelines, real and personal</td>
<td>9.5%</td>
</tr>
<tr>
<td>Utility, real and personal</td>
<td>10.5%</td>
</tr>
<tr>
<td>Vehicle, real and personal</td>
<td>6.0%</td>
</tr>
<tr>
<td>Vehicle, personal (^b)</td>
<td>10.5%</td>
</tr>
</tbody>
</table>
For this piece of property, $10,000 of its value would be subject to taxation. To find the amount of tax due, we multiply the assessed value by the millage rate.

\[
\text{property tax due} = \text{assessed value} \times \text{millage rate}
\]

Recall that the millage rate is the tax rate approved by the city council, school board, special purpose district, and county council to meet the budgetary needs of each entity. In Lexington County, the total county operating millage in 2014 was 77.178 (County of Lexington, 2014). For a $250,000 property with an assessed value of $10,000, the property tax owed to Lexington County would be calculated as follows:

\[
\begin{align*}
\text{property tax due} &= \text{assessed value} \times \text{millage rate} \\
&= $10,000 \times 0.077178 \\
&= $771.78
\end{align*}
\]

Calculating new property tax needs. As property taxes are one of the main sources of revenue for building and operating public recreation facilities, it is important to understand the impact of increased funding needs on the tax rate of residents of a community. Returning to Lexington County, South Carolina, let’s assume that the board of the LCRC has proposed a new multipurpose recreational facility with a cost of $12.5 million and an annual operating budget of $1.8 million.

A municipal bond will be issued to pay for the construction cost. Because Lexington County has a credit rating from Moody’s of Aa1 and Standard & Poor’s of AA, the LCRC can issue a $12.5 million, 30-year municipal bond at a rate of 4.00%. Assuming that the county will annually set aside the principal portion of the bond while making interest payments to bondholders, the county would need to budget roughly 30 equal payments of $916,667.* Regarding the financing of operational costs, the LCRC assumes that 52% of the $1.8 million annual budget ($936,000 per year) will be paid from an increase in the current millage rate for the district, with annual operating cost increases based on changes in the consumer price index. Therefore, the millage rate for those living within the LCRC district will need to increase to provide funds for the operating costs and the cost of construction.

To calculate the new millage required for the operating costs, we must know the net assessed value of property in the LCRC district, that is, the total assessed value of property in the district, less tax-exempt property.

\[
\text{net assessed value} = \text{total assessed value} - \text{tax-exempt property}
\]

Typically, property owned by non-profit and governmental entities is exempt from taxes. In 2014, the net assessed value of property in the LCRC district was $807,772,000, according to Lexington County records. Next, we divide the required tax revenues by the net assessed value of property to obtain the tax rate.

\[
\text{tax rate} = \frac{\text{required tax revenues}}{\text{net assessed value}}
\]

The required tax revenue amount is the annual operating cost of $936,000. So,

\[
\begin{align*}
\text{tax rate} &= \frac{\$936,000}{\$807,772,000} \\
&= 0.001159
\end{align*}
\]

The tax rate of 0.001159 is the same as the millage rate; therefore, the millage rate must be increased by 1.159 mills.

To calculate the rate increase needed for the project’s debt service, we will use the same process. However, the rate increase will be in effect only for the 30-year life of the project. To service the debt, $916,667 is needed annually. Hence,
For the next 30 years, the millage rate must be increased by 1.134 mills. The combined annual increase for the next 30 years is 2.293 mills. In 2014, the LCRC millage rate was 12.315. With the new project, the overall rate would increase to 14.608. This is an 18.6% increase over the current rate. The LCRC, now that it knows the overall millage required for the project, may need voter approval through a tax referendum to increase the millage rate.

A property owner can calculate the impact of the proposed tax as follows. If the total assessed value of the property is $10,000,

\[
\text{property tax increase} = \text{assessed value of property} \times \text{millage rate increase}
\]

\[
= \$10,000 \times 0.002293
= \$22.93
\]

**Sales tax**

To fund the construction or operation of recreational sport facilities, the second most common tax source after property tax is the sales tax (Brayley & McLean; Sherman), a tax on the sale of certain goods and services. Sales taxes generated 16% of all local tax revenues in 2008 and 46% of all state tax revenues, according to the U.S. Census Bureau (2012). Sherman reported that only 26% of all recreational sport construction or operational funding involved sales taxes. This is quite low compared to the 73% funded through property taxes.

The rules and regulations regarding sales tax vary by state. These regulations can directly affect the sources of funds available at the local level for recreational programming and services. For example, South Carolina collects a 6% state sales and use tax. Nearly all retail sales are subject to a sales tax. A use tax is a levy imposed on certain goods and services that are purchased outside the state and brought into the state. A use tax may also be imposed on certain goods and services for which no sales tax is paid. Under South Carolina law, counties may collect only an additional 1% in a local sales tax, and only if the county’s voters approve the tax. This tax may be used for county-defined purposes. Lexington County, South Carolina, collects an additional 1% school district sales tax that supplements K–12 funding within the county. Hence, sales tax revenue is not an option to fund recreational sport facilities or programs in the county, as the residents chose to fund K–12 education instead. However, residents of neighboring Richland County chose to impose a 1% local option sales tax. Local option sales taxes may be used for a wide variety of purposes. The Richland County Council could choose to use funds generated through this tax to fund recreation programs and facilities.

As an example of the differences among states, in Missouri, sales taxes are used at three levels of government to fund park and recreation programs and projects. A resident of Fenton, for example, will pay a sales tax of 7.613% for non-food sales. The sales tax in Fenton is the total of the state sales tax (4.225%), St. Louis County sales tax (2.888%), and the city’s 0.5% sales tax (used to fund parks and storm water projects). When a Fenton resident makes a non-food purchase in either of two transportation development districts (TDDs) located within the city limits, the sales tax is 8.613%, as an additional 1% sales tax is levied in these districts. Whether a consumer in Fenton pays 7.613% or 8.613% on a purchase, a portion of the sales tax will support parks and recreation. At the state level, 0.1% of the 4.225% state sales tax is designated for state parks and soil conservation. In St. Louis County, 0.288% of the 2.888% county sales tax is designated for the county’s park and recreation programs. As stated above, at the city level, all of the tax (0.5%) is designated for parks, recreation, and storm water removal. Overall, an individual who makes a non-food purchase in Fenton pays 0.888% in sales tax to fund state, county, and city parks and recreation services (“Welcome to Fenton,” 2014).

The City of Fenton combines storm water removal and parks and recreation in one fund. For these services, total operating revenues in FY 2015 were expected to be $5.5 million (City of Fenton, 2015). Sales tax revenue was expected to contribute $3.6 million during 2015, or approximately 67% of overall revenue. Additionally, 28% of revenue was to come from the operation of the city’s recreation center, and 6% of revenue was to come from park and recreation programs (see Exhibit 13.2). The city will be using sales tax revenue to pay debt issued for the purchase of park property; to pay debt issued for the construction of the city’s recreation center, RiverChase, and storm water improvements; and to meet a portion of the operational
needs of the parks and storm water systems (see Exhibit 13.3). When the debt service obligations end in 2016, the city plans to use the monies previously dedicated to retiring the debt to help meet the operational needs of the services. Exhibit 13.4 provides an overview of the 2015 budget for the city’s storm water/parks fund.

EXHIBIT 13.2 Proposed FY 2015 revenue for the City of Fenton storm water/parks fund.

<table>
<thead>
<tr>
<th>REVENUE SOURCE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales tax</td>
<td>$3,642,000</td>
</tr>
<tr>
<td>RiverChase</td>
<td>1,516,509</td>
</tr>
<tr>
<td>Parks and recreation</td>
<td>315,583</td>
</tr>
<tr>
<td>All other revenue</td>
<td>1,400</td>
</tr>
<tr>
<td><strong>Total revenues</strong></td>
<td><strong>$5,475,492</strong></td>
</tr>
</tbody>
</table>

Source: www.fentonmo.org/DocumentCenter/View/4146.

EXHIBIT 13.3 Storm water/parks fund sales tax use by the City of Fenton.

<table>
<thead>
<tr>
<th>REVENUE SOURCE</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt service</td>
<td>$1,549,350</td>
</tr>
<tr>
<td>Parks/RiverChase operations</td>
<td>2,092,650</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,642,000</strong></td>
</tr>
</tbody>
</table>

Source: www.fentonmo.org/DocumentCenter/View/4146.

**Excise taxes**

Whereas sales taxes are levied on items we purchase every day, including goods and services, excise taxes are sales taxes that apply to particular products. Excise taxes may benefit park and recreation services and facilities, too. For example, Orange County, Florida, used an excise tax to fund a variety of sport, entertainment, and recreation venues (Brown, 2008a). The county imposed a 6% hotel tax to generate revenue for a $1.1 billion project, including funding for renovation of the Citrus Bowl ($175 million), construction of a new performing arts center ($375 million), construction of a new sport and entertainment arena ($480 million)—which became the home of the Orlando Magic—and construction of five new recreation centers ($25 million) to be run by the county.

In Orlando the excise tax on hotel rooms was used to fund a wide array of projects, but excise taxes are often designed to impose the costs of specific services on those who actually use the services (Crompton, 2009). In Texas, for example, the excise tax on sporting goods sales is designed to tax those who use the state parks system (Bynum, 2007a). Former governor Rick Perry remarked in a State of the State address, “Let’s spend the sporting goods tax on what it was collected for: to create first-class parks that give our people open spaces and fresh air for needed recreation” (Bynum, 2007a, p. 2).

EXHIBIT 13.4 Budget for the Fenton storm water/parks fund, FY 2015.

<table>
<thead>
<tr>
<th></th>
<th>AMOUNT</th>
<th>PERCENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operating revenues</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Parks operations

- **Parks operations**
  - $315,583.00
  - 5.8%

### RiverChase operations

- **RiverChase operations**
  - 1,516,509.00
  - 27.7%

### Sales tax revenues

- **Sales tax revenues**
  - 3,642,000.00
  - 66.5%

### Other operating revenues

- **Other operating revenues**
  - 1,400.00
  - 0.0%

### Total revenues

- **Total revenues**
  - $5,475,492.00
  - 100.0%

**Expenditures**

### Operating expenditures

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks and recreation operations</td>
<td>$639,910.00</td>
<td>15.9%</td>
</tr>
<tr>
<td>RiverChase operations</td>
<td>1,822,611.00</td>
<td>45.4%</td>
</tr>
<tr>
<td>Storm water maintenance</td>
<td>1,000.00</td>
<td>0.0%</td>
</tr>
<tr>
<td><strong>Subtotal—operating revenues</strong></td>
<td><strong>$2,463,521.00</strong></td>
<td><strong>61.4%</strong></td>
</tr>
</tbody>
</table>

### Debt service

<table>
<thead>
<tr>
<th>Expenditure</th>
<th>Amount</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>RiverChase construction</td>
<td>$1,549,350.00</td>
<td>38.6%</td>
</tr>
<tr>
<td><strong>Subtotal—debt service</strong></td>
<td><strong>$1,549,350.00</strong></td>
<td><strong>38.6%</strong></td>
</tr>
</tbody>
</table>

### Total expenditures

- **Total expenditures**
  - $4,012,871.00
  - 100.0%

### Profit (Loss)

- **Profit (Loss)**
  - $1,462,621.00

**Source:** City of Fenton (2015).

**Pay-as-you-go financing**

Rarely do municipalities adopt a pay-as-you-go approach—that is, an approach of paying for costs as they arise, without incurring debt—when constructing new facilities (Crompton). One of the few examples is the City of San Antonio, Texas. For construction of the Alamodome, the city raised almost all of the $174 million needed through a voter-approved sales tax increase of a half cent on every dollar spent for five years. It was estimated that if a long-term bond had been used to build the facility, the total cost of the debt service would have been $435 million, or $17 million per year for 25 years.

For several reasons, municipalities typically choose not to use the pay-as-you-go approach. For one, there is a delay between the decision to build a new facility and the collection of all the monies needed to construct that facility. In rapidly growing communities, this delay could lead to the overcrowding of existing facilities (see **Sidebar 13.B**). Another reason this approach is seldom used is that, from an equity perspective, the method is inequitable and inefficient (Crompton). Given the frequency with which people move in and out of communities, some residents may pay the full cost of a facility and never get to use it, because they have moved from the community. Others may benefit fully without making any financial contribution at all, if they move into the community after others have paid for the facility.

**SIDEBAR 13.B**
Pay-as-you-go financing for the Blythewood Baseball and Softball League fields

In Blythewood, South Carolina, the 550 members of the Blythewood Baseball and Softball League currently use three fields. The league has difficulty scheduling games and practices due to the large number of participants and teams. In many cases, games must be rescheduled because of rain, and, in turn, teams lose their practice times. T-ball teams must practice in nearby open spaces and can use the league’s fields only for games on Saturdays between 9:00 and 11:00 a.m.

Further, the league is located in one of the fastest-growing communities in South Carolina. It is expected that the number of participants will soon increase to more than 600. The league has been unable to arrange financing to build two new fields. As a result, the league has had to adopt a pay-as-you-go approach to building the fields and, meanwhile, limit the number of league participants to 550. The league is currently raising funds for construction of new fields and has also been working with the City of Blythewood to arrange financing for immediate construction.

Bonds

Most public capital projects are funded through either short-term or long-term debt rather than a pay-as-you-go arrangement because this debt places less of an immediate financial burden on taxpayers. Bonds are the traditional source of capital improvement revenue for governmental entities. As discussed in earlier chapters, simply stated, a bond is a promise by a borrower to pay back one or more lenders a certain amount of money plus interest over a certain period of time. Here, the borrower is the city, county, state, school district, or recreation district. The lenders are the bondholders—the individuals and institutions that have purchased the bonds. A municipal bond is simply a bond for which the borrower is a municipality. Bonds are classified by their method of retirement. A term bond is paid in a single payment at the end of the loan period. A serial bond requires regular payments on principal and interest over the life of the bond.

In order to issue bonds, a municipality or district has to receive approval to borrow money, from either the voters or the appropriate legislative entity. The process will vary in each jurisdiction depending on state and local laws. Once the borrower obtains legal authority to issue bonds, usually an underwriter issues the bonds on the municipality’s behalf. The underwriter is typically a national or regional investment bank. The bank then sells the bonds on the municipality’s behalf through either a competitive or negotiated sale.

Competitive versus negotiated issue. In a competitive issue, the municipality publishes a notice of sale, seeking bids from underwriters. The underwriter that submits the lowest bid, or lowest interest rate, will be selected to underwrite the bonds. For a negotiated issue, the municipality selects one underwriter, and the parties negotiate the terms of the sale. In either case, the parties will prepare the bond issue’s official statement and obtain the bond’s rating.

Typically, municipal bonds are negotiated issues, as this type of issue provides more flexible interest-rate schedules and is sold by the underwriter on the open market. Approximately 70% of all bond issues are negotiated sales. Once the underwriter issues and sells the bonds, revenue is available to the borrower. Exhibit 13.5 illustrates this process.

Revenue versus general obligation bonds. To fund capital projects for public sector sport, one of two types of municipal bonds will typically be issued: either revenue bonds or general obligation bonds. Recall that revenue bonds are secured by future revenues generated by the project being funded, whereas general obligation bonds are secured by tax revenues and the issuing entity’s ability to impose new taxes. General obligation bonds must have voter approval prior to their issue.

EXHIBIT 13.5 Negotiated issue of municipal bonds.
To select the type of bond, the municipality or recreation agency must first determine whether the project will generate enough revenue both to retire debt and to operate and maintain the facility. If not, the municipality must determine whether supplemental revenue from an existing general fund or another revenue source could pay for the project. If either of these options is available, then the agency may elect to use a revenue bond. If none of these options exists, a general obligation bond backed by a tax source will have to be used. In this case, the municipality must determine the tax source that will secure the bond. Frequently, this source is an increase in real property taxes. However, increases in sales tax are also common.

In 1997, the City of Fenton purchased a piece of land called the Fabick property and later turned it into a nature preserve. To purchase the land, the City of Fenton initially issued public facility authority (PFA) bonds. PFA bonds are similar to revenue bonds, discussed previously, but PFA bonds are issued by a public facility authority, a non-profit corporation established by the borrower according to Internal Revenue Service ruling 63–20. The PFA can hold title to a project, secure financing for the project, and later hand over the project to the city. For the Fabick property, the Fenton PFA issued bonds to finance the purchase of the land, and it is holding title to the land and receiving payments from the City of Fenton for use of the land through a long-term lease agreement. Eventually, once the project’s debt obligations have been discharged, the Fenton PFA will give the land to the city. The city is paying for the project with the operating revenues of the storm water/parks fund (refer back to Exhibit 13.4). Payments are made directly to the trustee of the Fenton PFA. In turn, the trustee makes the principal and interest payments on the bond.

In 2011, the city refinanced the PFA bonds, using certificates of participation to finance the remaining $2.23 million owed for the property (the project’s initial cost was $5.99 million). The debt was refinanced to reduce the cost of borrowing, as annual interest rates had declined since the bonds were originally issued. From 2012 to 2015, the city would have paid rates ranging from 3.75% to 4.35%, but under the refinancing, the city was able to lock in an annual interest rate of 2.00% (see Exhibit 13.6).

PFAs are often used to fund parks and recreation projects in Missouri because, under state statute, no public referendum is needed to issue bonds via a PFA. The PFA has no taxing authority, and the municipality is under no obligation to levy any form of tax to pay for the bonds.

For its RiverChase recreation center, the City of Fenton issued certificates of participation. The certificates of participation were issued by a lending institution to a trustee overseeing the recreation center. The city pays lease fees to the trustee, who then makes payments on the bond. As Crompton (2009) notes, the use of certificates of participation is growing. This is true especially in states that place strict limits on borrowing. For example, Missouri’s Hancock Amendment sets tax and expenditure limitations in the state. According to this amendment to the state’s constitution, state and local budgets cannot grow faster than residents’ ability to pay for the growth. In essence, the amendment prevents state and local governments from increasing taxes for state and local revenues without voter approval. Twenty-three additional states have some form of tax and expenditure limitation similar to Missouri’s Hancock Amendment.

The city formed a corporation to handle the financing of the RiverChase project. In situations such as these, the corporation acts as a public trustee and issues certificates of participation to finance the project. Through the certificates of participation, a lending institution provides funds to the corporation/trustee for the project’s
construction. The trustee holds the title to the project for the benefit of the investors (certificate holders). The city then pays lease fees to the trustee, who in turn pays back to the financial institution the principal plus interest (Crompton). Exhibit 13.7 provides the debt service schedule for the RiverChase certificates of participation. Note that these bonds were refinanced, too.

EXHIBIT 13.6 Debt service schedule for the Fabick Property.

<table>
<thead>
<tr>
<th>Date</th>
<th>Interest Rate</th>
<th>Principal</th>
<th>Interest</th>
<th>Net Payment</th>
<th>Annual Debt Service</th>
<th>Outstanding Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/1/12</td>
<td>2.00%</td>
<td>$540,000.00</td>
<td>$30,408.33</td>
<td>$570,408.33</td>
<td>$570,408.33</td>
<td>1,685,000</td>
</tr>
<tr>
<td>7/1/12</td>
<td>2.00%</td>
<td>16,850.00</td>
<td>16,850.00</td>
<td>16,850.00</td>
<td>1,685,000</td>
<td></td>
</tr>
<tr>
<td>1/1/13</td>
<td>2.00%</td>
<td>565,000.00</td>
<td>16,850.00</td>
<td>581,850.00</td>
<td>588,700.00</td>
<td>1,120,000</td>
</tr>
<tr>
<td>7/1/13</td>
<td></td>
<td>11,200.00</td>
<td>11,200.00</td>
<td>11,200.00</td>
<td>1,120,000</td>
<td></td>
</tr>
<tr>
<td>1/1/14</td>
<td>2.00%</td>
<td>585,000.00</td>
<td>11,200.00</td>
<td>596,200.00</td>
<td>607,400.00</td>
<td>535,000</td>
</tr>
<tr>
<td>7/1/14</td>
<td>2.00%</td>
<td>5,350.00</td>
<td>5,350.00</td>
<td>5,350.00</td>
<td>535,000</td>
<td></td>
</tr>
<tr>
<td>1/1/15</td>
<td>2.00%</td>
<td>535,000.00</td>
<td>5,350.00</td>
<td>540,350.00</td>
<td>545,700.00</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
<td></td>
<td>$2,225,000</td>
<td>$97,220.33</td>
<td>$2,322,220.33</td>
</tr>
</tbody>
</table>

January 1st payments considered part of the preceding year, actually made in December.

Source: City of Fenton (2015)

EXHIBIT 13.7 Debt service schedule for RiverChase.

<table>
<thead>
<tr>
<th>Date</th>
<th>Interest Rate</th>
<th>Interest</th>
<th>Principal</th>
<th>Total Payment</th>
<th>Annual Debt Service</th>
<th>Outstanding Bonds</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/1/13</td>
<td>2.00%</td>
<td>$70,573.33</td>
<td>1,425,000.00</td>
<td>1,495,573.33</td>
<td>$4,240,000</td>
<td></td>
</tr>
<tr>
<td>4/1/14</td>
<td>2.00%</td>
<td>48,950.00</td>
<td>48,950.00</td>
<td>1,544,523.33</td>
<td>2,815,000</td>
<td></td>
</tr>
<tr>
<td>10/1/14</td>
<td>3.00%</td>
<td>48,950.00</td>
<td>1,470,000.00</td>
<td>1,518,850.00</td>
<td>1,345,000</td>
<td></td>
</tr>
<tr>
<td>4/1/15</td>
<td>4.00%</td>
<td>26,900.00</td>
<td>26,900.00</td>
<td>1,545,850.00</td>
<td>1,345,000</td>
<td></td>
</tr>
<tr>
<td>10/1/15</td>
<td></td>
<td></td>
<td></td>
<td>1,371,900.00</td>
<td>1,371,900.00</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>4.00%</td>
<td>26,900.00</td>
<td>1,345,000.00</td>
<td>1,345,000.00</td>
<td>$4,462,273.33</td>
<td></td>
</tr>
</tbody>
</table>

Source: City of Fenton (2015).

Both the initial PFA bonds and the certificates of participation that the City of Fenton used to fund the Fabick property and RiverChase projects were non-guaranteed. They were backed not by the full faith and credit of the city but by operating revenues generated from the storm water/parks fund.
The City of Fenton, Missouri, used two types of bonds to finance two capital projects (see Exhibit 13.8 for debt payments by project). The first capital project, Fabick Property, consisted of land purchased for future park and recreation use. The total payment for the project in 2014 was $325,766. This was the project’s final bond payment. The second capital project was for the city’s RiverChase recreation center. For the recreation center, the projected payment in 2015 was $1.5 million.

Private Sources of Funds

The City of Fenton was fortunate that it had sufficient operating revenues to fund two major capital projects (see Sidebar 13.C). Without those revenues and the funding mechanisms used, the city would have had to turn to the voters to raise taxes to fund the projects or turn to private sources for the funds to purchase park property and build the new recreation facility. A growing number of sport programs in the public sector have to seek funding from private sources of revenue to meet budget shortfalls (Sherman). In fact, the City of Fenton received $604,400, or 10.5% of its storm water/parks fund revenues, from a private grant in 2009 (City of Fenton). Other municipalities have turned to fundraising, advertising, and sponsorships to supplement construction and operating revenues for agencies in this sector.

EXHIBIT 13.8 Annual debt service for the Fenton storm water/parks fund by project.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfer to RiverChase Debt Fund</td>
<td>1,494,445</td>
<td>1,507,879</td>
<td>1,550,868</td>
<td>1,549,023</td>
<td>1,549,350</td>
<td>1,327</td>
</tr>
<tr>
<td>Transfer to Fabick Debt Fund</td>
<td>612,239</td>
<td>601,259</td>
<td>611,236</td>
<td>325,766</td>
<td>-</td>
<td>325,766</td>
</tr>
<tr>
<td>Total Expenditures</td>
<td>$2,106,684</td>
<td>$2,109,138</td>
<td>$2,162,104</td>
<td>$1,873,789</td>
<td>$1,549,350</td>
<td>$324,439</td>
</tr>
</tbody>
</table>

Source: City of Fenton (2015).

Fundraising and grants

As stated, facilities and programs typically rely on tax revenues and user fees to fund their operations; however, public construction projects have begun to rely more on funding from private sources. These sources include gifts, grants, and other private sources of income. For example, the $750,000 Shorewood Community...
Fitness Center in Milwaukee, Wisconsin, was built with funds generated in a decade-long fundraising
campaign. In contrast, the Stacy Multi-Purpose Center in Princeton, Missouri, was funded through a single
gift from Festus Stacy, a multimillionaire who had been born in the community. The center includes a
swimming pool, a gym, a weight room, and offices. Both the Shorewood Community Fitness Center and the
Stacy Center are reserved for use by their respective local school districts during the school day and are open
to the community after school hours and on non-school days.

These two facilities may be exceptions, because few facilities—mostly those in smaller rural communities
—rely on fundraising to generate revenue for construction. More frequently, communities seek grant revenue.
A grant is a financial award typically given by a governmental entity (federal, state or local) or a nonprofit
foundation or organization. In California, the City of Thousand Oaks has a Sports Facilities Endowment Fund,
which provide grants for the construction, expansion, or upgrading of area recreation facilities. The
endowment, one of three held by the city, annually generates approximately $300,000 in interest from $6
million in investments (Cohen, 2008).

One of the most aggressive grant-seeking recreation departments is the Sapulpa Parks and Recreation
Department in Oklahoma. Since it began its grant-seeking efforts in 1991, the department has received more
than 50 grants from federal, state, and private funding sources to repair, renovate, and expand the city’s
recreation facilities and to construct new parks and recreation facilities. For example, the department received
grant revenues in 2003 from the Oklahoma Tourism and Recreation Department and the Fishing Access
Development Grant for work at a lake in one of its larger parks. The department has also received significant
funding from the National Park Service’s Land and Water Conservation Fund (Land and Water Conservation
Fund, 2010). Grants from the fund helped construct a new swimming complex, which opened in 2010. In
total, 34,000 people used the public swimming facilities during the summer the pool opened. Since 1970, five
of Sapulpa’s nine parks have been constructed or improved with support from the Land and Water
Conservation Fund. These funds have been used for sports fields, trails, park restrooms, and even golf course
improvements.

Advertising and sponsorships
To fill gaps in appropriations from governmental entities, public sector sport organizations have increasingly
turned to advertising and sponsorship revenues. In fact, as mentioned previously, municipal recreation
facilities nationwide are increasingly expected to be self-sufficient. Revenue from sponsorships, for example,
has helped the Buncombe County Parks and Recreation Department in North Carolina maintain operations
and build new facilities. Facing a 15% budget reduction over a three-year period coupled with a 49% increase
in facility usage, the department obtained sponsorship revenue from corporate partners such as Pepsi and
McDonald’s that supported the development and maintenance of a county sports park and the construction of
two new swimming pools. In a sponsorship a corporation pays for all or some of the costs associated with a
program/project in exchange for some form of recognition of its financial support. In Buncombe County, the
sponsorship revenues from its corporate partners supplemented the department’s annual budget and enabled
the expansion of services to the county’s residents (Bynum, 2003).

The State of Michigan’s Parks and Recreation Division (PRD) of the Department of Natural Resources is
required under state law (Section 706 of 2007 PA 122) to report on its plan to generate sponsorship revenues
to support state park and recreation operations. Its report to the state shows that the PRD has gone beyond
pure sponsorship in an effort to obtain funds from private sources: it takes a blended advertising/sponsorship
and fundraising/grants approach. The PRD has received funds through a variety of funding methods,
including gifts, grants, and donations. For example, the W.K. Kellogg Foundation provided $3 million in
funding to construct universally accessible features in state parks and recreation areas. The Friends of the
White Pine Trail donated $242,000 to match a Michigan Department of Transportation Grant to extend paving
on that trail. The department also received donations to pay for two new playgrounds and sponsorship funding
for new events held in the state’s parks (Schafer, 2008).

The PRD also developed a naming rights policy and a sponsorship/partnership policy, each of which
received approval from the state’s National Resources Commission. In addition, the PRD pursued the
development of new events to be held in state parks (e.g., car shows), the development of a gift (donation)
guide, and the redevelopment of the non-profit Michigan State Parks Foundation. Further, the PRD is working
with the Citizens Committee for Michigan State Parks, whose charge includes studying options for long-term,
sustainable funding (Schafer).

For the Pleasant Prairie Parks and Recreation Department in Wisconsin, advertising revenue is one of its
main sources of non-membership revenue. Companies can advertise inside two facilities with signage,
sponsor a team, and purchase commercial time on the facilities’ television monitors (Bynum, 2005). The
department operates without tax proceeds and employs three staff members to operate the advertising program.

School districts are likely to turn to naming rights, in addition to sponsorship and advertising revenues, to help fund construction of athletic complexes and provide revenues for operational expenses. Fourteen football stadiums in northeast Ohio have naming rights deals, as well as extensive corporate sponsorship presences in the venues (Zurick, 2014). Naming rights deals for these schools range from a $150,000, five-year deal to a $750,000, ten-year naming rights contract for a stadium.

Some school districts have also received grants. In Chicago, Riverside Brookfield High School received an $8.9 million grant from the State of Illinois to renovate its football stadium. The school district is hoping to sell naming rights to offset some of the renovation costs, which might allow them to use leftover grant money to pay for roof repairs at the school (Ruzich, 2015).
COLLABORATIVE FINANCING

Collaboration among organizations for the financing of new sport facilities has become an economic necessity. As mentioned briefly in the chapter introduction, this is true in the public sector, as well. Whether the collaboration is a joint use agreement between two public entities, such as a recreation district and a school system, or a public/private partnership between, for example, a non-profit organization and a municipal recreation department or school district, cooperation—usually in the form of joint use agreements and public/private partnerships—is becoming increasingly common.

Joint Use Agreements

We can find many examples of joint use agreements—formal agreements outlining how facilities will be shared—between public school districts and municipal park and recreation programs. In addition to field and/or facility usage, these agreements may cover the responsibility for construction costs, operational costs, maintenance, and management. For example, a joint use agreement allows a high school in San Marcos, California, to use a public park as a private facility. The 32-acre park includes a skate park, softball fields, and a soccer field. In Broomfield, Colorado, city revenues from new construction impact fees have been funneled from the city to the school district for construction of gymnasiums and athletic fields, which are shared by the school district and community members (Brown, 2008b).

A joint use agreement must be clear in specifying

* who has access to each facility or field,
* who maintains each facility or field, and
* when each party will have access to facilities and fields.

The parties must ensure that the term of the joint use agreement is sufficient to offset the costs of the capital investments. The joint use agreement between county and school officials in Anne Arundel County, Maryland, provides an ideal example (Brown, 2008b). The project involved the installation of three new synthetic turf fields each year at county high school stadiums for four years, at a total cost of $10.7 million. The county’s recreation department provided 75% of the funding for the new fields. The department was able to secure a portion of this funding through a grant from Program Open Space, a Maryland Department of Natural Resources initiative. Program Open Space provides funds for the development of parks, conservation areas, and recreation areas. The county provided the funding to the schools because it would not have been able to construct new fields on its own. Through the partnership with the school district and a long-term use agreement, the recreation department was able develop new fields at less than $1 million per field. The joint use agreement grants school programs exclusive use of the fields on weekdays until 7:00 p.m. (later on football Fridays) and until noon on Saturdays. The recreation department uses the fields for three to four hours during the week, ten hours on Saturday, and all day Sunday. This access alleviates overcrowding at existing recreation district facilities. In lacrosse alone, county recreation leagues fielded more than 400 teams. Field maintenance is the responsibility of the school district, as is operation of the concessions stands (Brown).

Public/Private Partnerships

Joint use agreements work well in some instances, and public/private partnerships work well in others. These partnerships are simply collaborations between the public and private sectors.

Altamonte Springs, Florida, has successfully used public/private partnerships over the past ten years (Bynum, 2007b). In 2007, the State of Florida reformed its property tax system, resulting in a tax freeze. The changes in tax law forced cities and counties to reduce their 2007 expenses by $2 billion. For fiscal year 2008, they were required to reduce expenses by another 3% to 9%. Park and recreation programs were targeted for cuts and had to develop alternative sources of revenue to save programs and facilities.

Park departments have often entered into partnerships with private entities to manage publicly owned stadiums, golf courses, and skating rinks, but Altamonte Springs was one of the first departments to outsource the operation of its recreation leagues and events, in an effort to cut expenses and generate additional revenue (Bynum, 2007a). Through a bid process, the Altamonte Springs leisure services department contracts with private companies for sport instruction and league and tournament play. The leisure services department provides facilities and marketing for recreation events and tournaments. For municipal sport programs, the city receives a percentage of registration fees. For events, the city receives 15% of registration fees and ticket sales. Sporting events are held on an average of 45 weekends each year, and the department bids for Amateur Athletic Union (AAU) tournaments, American Softball Association (ASA) regional and national tournaments,
and the like. In addition to the previously mentioned revenue sources, the city may also receive a percentage of merchandise sold at events.

The YMCA often partners with school districts in building facilities and operating programs. According to the YMCA, 33% of all of its facilities are built in partnership with local school districts. Further, over half of YMCAs share facilities, field space, and/or programs with local school districts. In total, there are nearly 2,700 YMCAs nationwide, so the public/private partnerships are numerous. For example, in St. Paul, Minnesota, the YMCA raised money to build a facility and then donated that facility to the local school district. A joint use agreement was then drawn up to manage the use of the venue (Northfield Area Family YMCA Partnership, 2009).
CONCLUSION

As in other sectors of the sport industry, the financial management of public sector sport is challenging. Although annual government spending on parks and recreation exceeds $37.4 billion (U.S. Census Bureau) and spending on high school sport is growing rapidly (with the total amount of spending unknown), managers face many financial challenges. Crompton (2009) notes that competition from non-profits and the private sector creates pricing pressures for public sector agencies charged with providing services across a diverse demographic. Further, these public agencies are seeing the erosion of their traditional tax-based sources of operating and construction revenue. As a result, the agencies are developing new revenue models to meet the demand for sport in the public sector.

Property and sales taxes still provide the majority of revenues for the construction and operation of facilities in this sector, but many states and municipalities restrict the use of tax revenue to fund new projects and programs. Therefore, public agencies are now less likely to rely on general obligation bonds to finance new capital projects. Today, revenue bonds and certificates of participation are common means to circumvent the voter approval needed to finance a project through a general obligation bond. Further, public agencies are adopting some of the funding approaches that we associate with other sectors of the sport industry. Agency heads now focus on fundraising, grant seeking, sponsorships, and advertising as means to generate revenues. They are also increasingly entering into joint use agreements or public/private partnerships in their efforts to reduce expenses and generate revenue.

Concept CHECK

1. What factors will affect the type of bond that a city will choose to issue for construction of a new recreation facility?
2. What factors will affect the type of bond that a school district will choose to issue for construction of new athletic facilities?
3. What differences, if any, are there when selecting a bond to construct a community recreation facility versus a high school athletics facility?
4. In your hometown, how have local recreation facilities and high school athletic facilities been financed?
5. What are the main sources of revenue for your hometown’s recreation center?
6. What pricing paradox do the managers of public recreation centers face?
7. How should the manager of a public recreation center measure financial success?
8. Over the past 30 years, how has the funding of park and recreation agencies and high school athletic programs changed?
9. Explain the process of calculating the millage needed to fund a new recreation center or high school facility.
10. The debt service schedules for Fenton, Missouri, are found in Exhibits 13.6 and 13.7. In Exhibit 13.7, why does the rate of interest that the city pays increase over time? Why does the city make two interest payments and one principal payment, in most years?
11. How does state tax law affect the financing of parks and recreation facilities and programs?
12. For the funding of projects, why are municipalities moving from the use of general obligation bonds to revenue bonds, PFA bonds, and certificates of participation?
13. How can an individual’s experiences working in professional sport finance benefit a park and recreation agency?
14. What problems might arise in the negotiation of a joint use agreement?

PRACTICE problems

You are tasked with calculating the property tax needed to fund construction and operation of a $22.5 million complex. The facility’s annual operating budget is forecast at $3.6 million, to be covered by revenues from programs offered at the facility. A 30-year general obligation bond with a rate of 5.5% will be issued to pay for the facility’s construction costs. The net assessed value of property in the municipality is $725 million.

1. Calculate the amount that must be set aside each year to meet the bond’s principal and interest obligations over 30 years.
2. Calculate the additional millage required to cover the project’s debt service.
3. For an owner of property with a total assessed value of $15,000, by how much will his/her property tax increase?

### Economic Impact Study Simulation

Perhaps one of the most successful public/private partnerships between a municipality and a private entity is the USTA Billie Jean King National Tennis Center. The National Tennis Center, located in Flushing Meadows, New York, is the world’s largest public tennis facility. The partnership between New York City and the United States Tennis Association (USTA) is classified as a private-sector takeover. In a private-sector takeover, a private organization assumes responsibility for operation of a publicly owned facility. (See Chapter 9 for a discussion of public/private partnerships.)

### THE PROBLEM

The partnership between the USTA and New York City began in the late 1970s (Specter, 1997). Prior to its move to the National Tennis Center, the U.S. Open was played at the West Side Tennis Club. As its popularity increased, the tournament began to outgrow the site. At the same time, the relationship between the USTA and the West Side Tennis Club was deteriorating. During negotiations for a lease extension in 1976, the USTA was presented with a take-it-or-leave-it option of paying $7 million for needed renovations at the club and ceding much of its control over the tournament and its revenues. The general attitude of the membership was that the tournament’s success depended on the club. Then USTA President Slew Hester summed up their attitude thus: “The members of West Side do not need the U.S. Open as much as the U.S. Open needs the West Side Tennis Club” (p. 10).

### THE PLAN

Faced with the club’s unfavorable offer, Hester began to look for new sites in the New York area. While flying over New York City, he noticed the Singer Bowl, sitting vacant on the grounds of Flushing Meadows Park (the site of two World’s Fairs). Thinking that the site would be perfect for the U.S. Open, he began to talk to city officials. Fortunately for the USTA, the city had been trying to sell the Singer Bowl for five years (Specter).

### THE OFFER

In exchange for taking over the Singer Bowl and the land surrounding the stadium, the USTA offered to spend a minimum of $5 million to renovate the site and facility. The USTA sought a 15-year lease agreement giving them exclusive use of the facility for 60 days each year. Further, the USTA offered to maintain the site and operate it as a public municipal tennis facility. As rent, the USTA offered to pay the city 10% of court rental fees or an annual minimum of $125,000, whichever was higher. The city agreed, and the partnership between New York City and the USTA began in 1977 (Specter).

### THE RESULTS

The USTA spent $10 million renovating the Singer Bowl and developing the land into a world-class tennis facility. Out of the shell of the Singer Bowl, the USTA created Louis Armstrong Stadium and the Grandstand Court for tournament use. Outdoor courts were built for tournament and public use, as well as an indoor tennis complex with nine courts. Within ten months of renovations beginning, the first U.S. Open was played at the site. New York City had a new public tennis facility, and the USTA had created a facility to promote the game of tennis. The U.S. Open soon was generating over $10 million per year for the USTA (Specter).

### TODAY

The USTA and New York City extended their initial 15-year agreement, as the partnership has been beneficial to both parties. In 1995, the USTA began a four-year, $285 million construction project to build Arthur Ashe Stadium and to renovate Louis Armstrong Stadium and the grounds of the National Tennis Center (United States Tennis Association, 2015). The USTA provided all funds for the renovations, which were completed with no costs to the city or its taxpayers. Its next upgrade began in 2014 and is scheduled to be completed in 2018. A new practice area, courts, and a tournament gallery were completed in 2014. By 2016 a roof on Arthur Ashe Stadium should be complete and a new...
grandstand stadium will open. Finally, by 2018 a renovated Louis Armstrong Stadium will be complete. The total cost of the project is estimated at $550 million, including $100 million for a retractable roof on Ashe Stadium. No public funds will be used for the project.

Today, the center remains completely public and is open for use 11 months of each year. The USTA now pays $400,000 per year plus 1% of the U.S. Open’s revenue in rent. In 2014 this totaled over $2.5 million (United States Tennis Association). The current lease began in 1994 and had a term of 25 years. The USTA then has six 10-year renewal options and a final 14-year renewal option on the property.

The quality of the facility has improved since its opening. In addition to the stadium courts and grandstand court, 20 outdoor tennis courts are available for public use. The Indoor Tennis Center has 12 courts, classroom space, fitness facilities, a pro shop, and a café. For the fans of the U.S. Open, Arthur Ashe Stadium seats more than 22,000; it is the largest tennis stadium in the world (United States Tennis Association). Revenues for the USTA have increased dramatically. According to the SportsBusiness Journal, the U.S. Open is the top stand-alone sporting event in the world (Kaplan, 2008). In 2012, the tournament generated over $230 million in revenues and $130 million in profit.

**case questions**

1. What benefits did the USTA receive when it entered the partnership with the city?
2. What benefits did the city receive?
3. Do the benefits to both parties seem equal? Why or why not?

**REFERENCES**


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Notes

*$500,000 in annual interest costs plus $416,667 set aside to pay the principal amount in 30 years.
KEY CONCEPTS

80/20 rule
90/10 rule
allocated revenues
arms race
athletic support group (ASG)
campaign case statement
capital campaign
department-generated revenues
endowed gift
major gift
national Association of Intercollegiate Athletics (NAIA)
National Collegiate Athletic Association (NCAA)
National Junior College Athletic Association (NJCAA)
NCAA Division I–Football Bowl Subdivision (FBS)
NCAA Division I–Football Championship Subdivision (FCS)
NCAA Division I–Other
NCAA Division II
NCAA Division III
NIL cap
point system
prospect
rule of thirds
self-sustaining
traditional gifts table
Introduction

On June 4, 2014, the Harvard crew team beat Yale in the teams’ annual regatta. Although this annual event goes unnoticed by most fans of college athletics, it is significant for its history. Yale and Harvard held their first crew competition in 1852. This regatta is generally considered to have been the first intercollegiate sporting event in the United States (Powers, 2014). As an interesting side note, the first event was sponsored by the Boston, Concord & Montreal railroad company (Barr, 2012).

From this first race, college sport quickly grew. By 1905, the Intercollegiate Athletic Association of the United States (IAAUS) had been formed to govern college sport. In 1912, the IAAUS changed its name to the National Collegiate Athletic Association (NCAA). Today, the NCAA, National Association of Intercollegiate Athletics (NAIA), and National Junior College Athletic Association (NJCAA) are the three main governing bodies overseeing college sport in the United States. As college sport grew, so did the business of college sport. From the sponsorship of the inaugural Harvard-Yale race, college sport has grown to a $40 billion-plus business.
FINANCIAL STATUS OF INTERCOLLEGIATE ATHLETICS

Data from the U.S. Department of Education (2014) provide an inside look at the financial operation of one of the most successful college athletic programs, The Ohio State University Buckeyes. For the 2013/2014 academic year, The Ohio State University athletic department had a $143.7 million budget, 126 coaches, 36 teams, and 1,045 athletes. The department was one of only a few self-sufficient athletic departments nationwide. For example, Ohio State’s athletic department receives no subsidy from the university (one of seven such departments out of the 230 public NCAA Division I universities examined by USA Today; “NCAA finances,” 2014); its revenues were $23.7 million. The athletic department paid the university $16.8 million for scholarship costs, and the department’s generated revenues paid all building costs, capital expenditures, and debt service. Currently the athletic department is developing an Athletic District as part of the university’s overall master plan. The Athletic District will include a new multi-sport arena, a student-athlete sports performance center, a wrestling practice facility, expansion of the Schottenstein Center ticket office, a new ice rink, an indoor track, new indoor practice fields, and an indoor tennis facility. In addition, the department is still paying debt service on completed projects, including the 2001 renovation of Ohio Stadium, a $194 million project (Briggs, 2013). Renovations to existing facilities and construction of new facilities in the 2000s helped the department increase its revenues. Adopting revenue streams from professional sport, the department generated revenue from the new venues through luxury-box rentals, ticket surcharges, personal seat licenses, and club seating.

The University of Florida’s athletic department is similarly sized. With a budget of approximately $118.9 million for the 2013/2014 academic year, the department has sufficient financial strength to build new facilities and expand existing ones. In 2008, for example, the $28 million Heavener Football Complex opened. The complex, built without the use of state funds, was desired by former head football coach Urban Meyer to aid recruiting. At the time, he felt, the football facilities at Florida were below average compared to other Southeastern Conference facilities. To Meyer, quality, up-to-date facilities were an important component of the recruiting process. Jamie Newberg, a national recruiting analyst at Rivals.com, agreed with Meyer’s assessment. He stated that competing teams constantly pursue the latest and greatest facilities, which provide a recruiting edge. Florida’s Heavener Football Complex now houses the football program’s staff offices and honors past Gator greats in its Gateway of Champions. Athletic director Jeremy Foley said the number one goal of the facility was to get people to walk in and say, “Wow” (“Gators add to,” 2008).

The Florida athletic department is fortunate to have a strong development foundation. Gator Boosters, Inc. contributed $38.2 million during the 2014 fiscal year to Florida’s University Athletic Association, Inc. (UAA). Contributions came from three primary areas: football-related ($31.6 million), basketball-related ($2.2 million), and capital improvement contributions ($5.3 million; Gator Boosters, Inc., 2014). During fundraising for the Heavener Football Complex, Gator Boosters received one $7 million donation and 16 additional donations of at least $1 million each. This enabled the foundation and the athletic department to avoid borrowing funds for the complex’s completion; therefore, the department and foundation do not have to pay debt service on the facility (“Gators add to”).

The Race to Build New Athletic Facilities

The construction of new athletic facilities at schools like The Ohio State University and the University of Florida has contributed to a phenomenon commonly referred to as the arms race in college athletics: the continuous building of bigger and better facilities for the sole purpose of landing key recruits. Ohio State is able to pay the debt service on its new facilities through funds set aside in its operating budget. As the athletic department is fully self-sufficient—meaning it receives no funds from the university’s general budget or student fees—the department must generate revenue to offset the cost of the building projects over the life of the financing for those projects. Florida was fortunate in that individual gifts generated enough revenue to cover the costs of building the new football complex, so no debt financing was needed. Both athletic departments are fortunate in being able to afford these facilities. Athletic departments that are not so financially sound face difficult decisions about the construction or upgrading of facilities in order to create their own recruiting “wow” moments on campus.

An illustration of the impact of the arms race on college athletic departments can be seen at the University of South Carolina. Carolina Stadium, a $40 million baseball stadium with a capacity of 8,242, opened in 2009. In the ten years prior to its opening, the baseball team made regular trips to the NCAA Super Regionals and three trips to the College World Series. To elevate the baseball program even further and attract even better recruits, the head baseball coach and the university’s athletic director felt a new stadium was needed. Carolina Stadium houses offices for coaches, indoor batting cages, chair-back seats for fans, and other modern...
The Race to Change NCAA Divisions

The arms race affects more than facilities; it also affects an institution’s choice of NCAA division. For smaller Division I–FCS football schools, the transition to Division I–FBS from Division I–FCS can be difficult. Even more so may be the move to Division I from Division II; however, the lure of being a Division I institution was so great that the NCAA issued a four-year moratorium on new Division I applications in 2007. As of this writing, four universities are in the process of transitioning from Division I–FCS to Division I–FBS: Appalachian State, Georgia Southern, Old Dominion, and UNC–Charlotte. Another six are moving from Division II to Division I: Nebraska Omaha, Northern Kentucky, Abilene Christian, Grand Canyon, Incarnate Word, and UMASS–Lowell (NCAA, 2014).

Regardless of whether the Carolina baseball team turns a profit and generates enough revenue to cover its debt service, the athletic department is obligated to pay the Carolina Stadium’s annual $1.9 million debt obligation. Despite making “little business sense,” the new stadium arguably did in fact help the school attract better recruits and, therefore, elevate the team’s performance. From 2009 through 2014, the Carolina baseball team played in the post season each season, losing in the NCAA Regionals twice and the Super Regionals once. The team made the College World Series from 2010 to 2012. In 2010 and 2011 the team won the national championship, and it finished second in 2012. From 2010 to 2012, Carolina baseball won 22 consecutive post-season games, including 12 straight at the College World Series, both NCAA records (Gamecock Athletics, 2015).

The success of Carolina baseball after the opening of its new facility fuels the desire of others to build in order to win. This desire is not limited to Division I programs, as it has spread to Division III institutions, as well. Athletes competing at NCAA Division III institutions attend school without the benefit of athletic scholarships. In the Centennial Conference, made up of small liberal arts colleges, several schools have invested heavily in athletic facilities to recruit better athletes. Hence, even in an academic-focused league, competition for athletes is leading to heavy spending on college athletic facilities, resulting in increasing debt loads. For example, in 2008 Gettysburg College broke ground on a $25 million athletic facility, with construction completed in 2010. The facility has an eight-lane competition pool, a four-lane warm-up pool, and a modern hydrotherapy spa. Three years prior, Haverford College completed a $28 million athletic facility; in 2001, Ursinus College built a $13 million field house that includes two full-size batting cages, four basketball courts, three tennis courts, a volleyball court, and a six-lane, 200-meter track (Kelderman, 2008).

Funding sources for these new Division III facilities are similar to those used at the Division I level. The Gettysburg project was made possible by a $2 million gift from one alumnus, given because the donor felt that Gettysburg was at a competitive disadvantage without a new facility. By the time construction began, the college had raised $9 million from alumni donations. A student fee increase was used to cover operating costs, about $360,000 annually. Gettysburg’s Board of Trustees borrowed to cover the remaining costs of the construction. Ursinus College also borrowed to complete construction of its new athletic facilities, issuing approximately $4 million in bonds Kelderman).

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Presbyterian College provides one example of this challenge. The school, located in Clinton, South Carolina, has 1,200 students, and the Carnegie Foundation has classified it among the most selective liberal arts colleges in the United States. Athletics is an important part of student life at Presbyterian. The school fields 16 teams—seven men’s and nine women’s. Presbyterian decided to move from Division II to Division I in 2007, and the school was fortunate that its application was accepted prior to the NCAA’s moratorium. One reason the school gave for the move up in classification was that similar-sized schools, such as Wofford College, Elon University, and Gardner-Webb University, had recently moved to Division I, and these moves had affected recruiting at Presbyterian. Potential recruits living within a one-hour drive of Presbyterian College were deciding to go to similar schools two or three hours away, solely because those schools were Division I. Presbyterian’s head men’s basketball coach at the time felt that missing the chance to play in the NCAA Division I men’s basketball tournament was too big a recruiting obstacle (Darcy, 2007).

Presbyterian was fortunate that it was accepted into a conference, the Big South, two days after announcing its move to Division I, although the school would play without an affiliation the first year. Beginning in the 2008/2009 academic year, the school’s teams competed in the conference, although they were ineligible for conference championships and NCAA post-season play until they earned full NCAA Division I certification, which occurred prior to the start of the 2012/2013 academic year.

The financial impact of a move from Division II to Division I is staggering. Presbyterian College’s move demonstrates how both revenues and expenses are altered dramatically when a school makes this transition. During the initial transition year (2007–2008), Presbyterian had to play as an independent, meaning the school had no conference affiliation. Darcy chronicled the impact of the move during the year on one of Presbyterian’s programs, the men’s basketball team. As a result of joining the Big South conference a year later, in the 2008–2009 season, the men’s basketball team played only five home games but 25 road games. On its longest road trip, the team was away 11 nights, leaving in December on the day final exams ended. The team played in 12 states and traveled more than 13,000 miles by bus and plane. To generate revenue to pay for the trip, the team’s road games, and the greater operating expenses at the Division I level, the coach scheduled games with four Atlantic Coast Conference (ACC) teams, three SEC teams, Ohio State, and Nebraska. Playing these major conference schools generated $650,000 in guaranteed money for Presbyterian. However, the school still did not have the funds to pay for administrative support, such as a coordinator of basketball operations (a position found in almost all Division I basketball programs). Instead, an assistant basketball coach had to take on those duties in that first season along with his regular coaching responsibilities. As of 2014, seven years after its transition to Division I began, the athletic department’s budget has grown to $11 million per year. However, revenues generated by the program totaled only $2 million (Moss, 2014).

Other Races to Be Won

After U.S. District Judge Claudia Wilken ruled in O’Bannon v. NCAA (2014) that prohibiting football and men’s basketball athletes from being paid for the use of their names, images, and likenesses (NIL) violated antitrust law, changes in NCAA policy began to impact athletic departments’ budgets. New arms races began. Shortly after this ruling, the NCAA Division I Board of Directors enacted a new governance model allowing the Power 5 conferences to create their own legislation to benefit athletes. Now, coaches can compete for recruits by offering four-year scholarships (previously scholarships were restricted to one-year, renewable contracts), which cover the full cost of attending a university plus at least $5,000 in licensing revenue per season (Solomon, 2014a). The market, plus whatever NIL cap is set (no less than $5,000), will now dictate what men’s basketball and football recruits receive. The judge’s rules go into effect July 1, 2016, so those recruited during the 2015/2016 school year will be the first to be affected (Solomon, 2014b). (As of this writing, Judge Wilken’s decision is under appeal.) It is estimated that these new regulations will cost athletic departments an additional $7,500 per athlete per year (Solomon, 2015). USA Today Sports (Berkowitz & Kreighbaum, 2015) estimated the projected additional spending on athletes related to the addition of full cost-of-attendance scholarships—including tuition, travel, and personal expenses—at more than 90 schools. For example, the authors estimated that Auburn will spend an additional $2.1 million and The Ohio State University an additional $1.65 million. Visit the USA Today site (see Berkowitz & Kreighbaum, 2015 in the References) for a table summarizing additional athletic program spending by the Division I schools.
University of Alabama–Birmingham football: The cost of on-field success

In 1996, the University of Alabama–Birmingham (UAB) moved its athletic department and football program from Division I-FCS to Division I–FBS. As with many programs that have made this move recently, the hope was to use the football program to help meet the university’s mission and to create a new identity for the university. However, by 2014 UAB decided to terminate its football program—the first Division I-FBS program to drop its football team since the University of the Pacific dropped its program in 1995. The same year that UAB decided to terminate it, the UAB football program had its best on-field success in ten years, becoming bowl eligible for the first time since 2004. Despite this on-field success, the financial costs were too high for UAB, as approximately 67% of the athletic department’s budget was subsidized by the university (Strauss & Schonbrun, 2014).

A comprehensive review by UAB of its athletic program cited increases in costs due to new NCAA legislation relating to cost-of-attendance payments to players, increasing facility costs, and increasing coaching costs as reasons for the program’s termination. The review estimated that the university would have had to provide over $100 million in subsidies to the athletic department from 2015 through 2020. The review indicated that to remain competitive in Conference USA (C-USA), the football program would need another $49 million plus over $22 million in facility improvements. UAB planned to funnel its football savings into supporting its remaining “priority” sports in the hopes of competing for conference and national championships in those sports (Greer, 2014).

However, in less than a year, the administrators at UAB changed their minds. Despite acknowledged programmatic losses and heavy subsidies from the university and students through their fees, UAB President Ray Watts announced on June 1, 2015, that the school would not drop its football program. The university commissioned a second study on the football program and found that it would need only $17.2 million in additional revenues over the next five years to remain competitive, plus $12 million for a new football practice facility (Nocera, 2015). The new study stated that the first study underestimated what the school would receive in revenues from the first College Football Playoff payment. Also, the first study failed to consider that the school, without a football team, would no longer be a member of C-USA (Dufresne, 2015).

In announcing the return of the program, President Watts said that monies would need to be raised to cover the expenses required to remain competitive, as the university would not be increasing its current $20 million subsidy of athletics. Just prior to the June 1 announcement, corporate leaders in Birmingham had pledged enough money to cover the additional $17.2 million five-year costs and had also raised significant amounts of money to build the new practice facility (Nocera). The team is expected to return to the field in 2016.

The new autonomy the Power 5 conferences and their member schools have attained has led to additional changes besides allowing full cost of attendance scholarships and guaranteed four-year scholarships. One change involves dining (Myerberg, 2015). New legislation allows college athletes to receive unlimited access to food and snacks. Before this rule was enacted, athletes were limited to meal plans that provided three meals a day. Now all athletes, both those on scholarship and those who are not, are receiving significant dining upgrades on campuses across the United States.

At Wisconsin, the athletic department upgraded athletes’ breakfast options and provided an enhanced training table and refueling stations for its athletes. Oregon now has a breakfast and brunch station that is open until noon each day. Schools are adding nutritionists, too, to monitor the athletes’ food options. At Nebraska, it is estimated that the new dining regulations will cost an additional $1.2 million per year. The school’s total budget for sports nutrition is now $3.2 million, with $2.1 million for food and supplements and $1 million for payroll expenses, new kitchen equipment, and operating costs. Southern California expects new costs to be $1 million, while Wisconsin will spend an additional $1.2 million ($842,000 for its new breakfast alone).

These changes suggest that the way athletic departments feed their athletes could become a recruiting advantage. Wisconsin athletic director Barry Alvarez stated that the recruiting benefit was not the intent of the unlimited food legislation, but it might lead to an arms race in dining like the ones that exist for practice fields and weight rooms. According to Alvarez, “If we have it and someone else doesn’t have it, then we have an advantage” (Myerberg, para. 25).

Overall, the size and complexity of athletic department budgets have grown dramatically as the arms race continues through the 2010s. Whether it is construction of new athletic facilities, a move to a higher division, or the adaptation to new NCAA legislation, the impact on the athletic department’s finances can be dramatic.
FINANCIAL OPERATIONS

This section focuses on the financial operation of the NCAA—the national governing body most responsible for shaping and controlling intercollegiate athletics in the United States (Covell & Barr, 2010)—and its member conferences and schools. Discussions of financial issues in college sport focus primarily on NCAA Division I programs, usually those in the Football Bowl Subdivision (FBS). To gain a thorough understanding of the financial operations of college sport, however, we must undertake a broader examination. The NCAA has 1,119 member schools. Of its active membership, 125 are Division I–FBS members, 125 are Division I–Football Championship Subdivision (FCS) members, 95 are Division I–Other members (without a football program or with a non-scholarship football program), 324 are Division II members, and 450 are Division III members. The lower a school’s classification, the smaller and less complicated are the athletic department’s revenues and expenses.

National Collegiate Athletic Association

The NCAA has a net worth of $708 million (see Exhibit 14.1). Revenues for FY 2014 were $989 million (see Exhibit 14.1), an increase of 8.4% from 2013. (The NCAA fiscal year, September 1 to August 31, coincides with the academic year.)

The primary sources of revenue (approximately 76%) were television and marketing rights fees. Television revenue—specifically, the NCAA’s contracts with CBS, Turner Broadcasting, and ESPN—provides most of the $754 million in fees. The NCAA sold the television broadcast rights for the Division I Men’s Basketball Championship, along with other championship and marketing rights, to CBS and Turner Broadcasting for $10.8 billion in 2010. The agreement has a term of 14 years, covering the 2011 through 2024 academic years. In 2014, the NCAA received $700 million from CBS and Turner. Exhibit 14.2 lists payments the NCAA will receive for the remaining years of the contract (NCAA and Subsidiaries, 2014).

EXHIBIT 14.1 Financial statements for the NCAA.

<table>
<thead>
<tr>
<th>NCAA BALANCE SHEET</th>
<th>Consolidated Statement of Financial Position</th>
<th>Fiscal Year ended August 31, 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assets</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$ 15,137,530</td>
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<tr>
<td>Investments</td>
<td>$ 681,314,256</td>
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<tr>
<td>Prepaid expenses</td>
<td>$ 8,857,079</td>
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<tr>
<td>Receivables</td>
<td>$ 137,340,188</td>
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<tr>
<td>Irrevocable trust</td>
<td>$ 14,909,567</td>
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<tr>
<td>Goodwill</td>
<td>$ 8,630,568</td>
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<tr>
<td>Intangible assets, net</td>
<td>$ 1,979,002</td>
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<tr>
<td>Properties, net</td>
<td>$ 52,649,446</td>
<td></td>
</tr>
<tr>
<td>Other assets</td>
<td>$ 1,293,122</td>
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</tr>
<tr>
<td><strong>Total Assets</strong></td>
<td><strong>$ 922,110,758</strong></td>
<td></td>
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<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>$ 120,307,353</td>
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<tr>
<td>Distribution payable</td>
<td>$ –</td>
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<tr>
<td>Deferred revenue and deposits</td>
<td>$ 34,853,029</td>
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<td>Bonds payable, net</td>
<td>$ 49,236,277</td>
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<td>Accrued lease expense</td>
<td>$ 9,885,140</td>
<td></td>
</tr>
<tr>
<td>Description</td>
<td>Amount</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td><strong>Total Liabilities</strong></td>
<td>$ 214,281,799</td>
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<tr>
<td><strong>Net Assets</strong></td>
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<td></td>
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<tr>
<td>Unrestricted</td>
<td>$ 664,744,608</td>
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<tr>
<td>Temporary restricted</td>
<td>$ 42,934,351</td>
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<tr>
<td>Permanently restricted</td>
<td>$ 150,000</td>
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</tr>
<tr>
<td><strong>Total Net Assets</strong></td>
<td>$ 707,828,959</td>
<td></td>
</tr>
<tr>
<td><strong>Total Liabilities and Net Assets</strong></td>
<td>$ 922,110,758</td>
<td></td>
</tr>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Television and marketing rights fees</td>
<td>$ 753,595,560</td>
<td></td>
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<tr>
<td>Championships and NIT tournaments</td>
<td>$ 114,846,763</td>
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<tr>
<td>Investment income, net</td>
<td>$ 82,271,821</td>
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<tr>
<td>Sales and services</td>
<td>$ 28,324,776</td>
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<tr>
<td>Contributions — facilities, net</td>
<td>$ 6,990,592</td>
<td></td>
</tr>
<tr>
<td>Contributions — other</td>
<td>$ 3,000,000</td>
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</tr>
<tr>
<td><strong>Total Revenues</strong></td>
<td>$ 989,029,512</td>
<td></td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribution to Division I members</td>
<td>$ 547,070,052</td>
<td></td>
</tr>
<tr>
<td>Division I championships, programs, and NIT tournaments</td>
<td>$ 98,145,966</td>
<td></td>
</tr>
<tr>
<td>Division II championships, distribution, and programs</td>
<td>$ 34,747,363</td>
<td></td>
</tr>
<tr>
<td>Division III championships and programs</td>
<td>$ 28,727,905</td>
<td></td>
</tr>
<tr>
<td>Association-wide programs</td>
<td>$ 158,148,811</td>
<td></td>
</tr>
<tr>
<td>Management and general</td>
<td>$ 41,740,861</td>
<td></td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td>$ 908,580,958</td>
<td></td>
</tr>
<tr>
<td>Change in Net Assets</td>
<td>$ 80,448,554</td>
<td></td>
</tr>
<tr>
<td>Change in Net Assets Attributed to Noncontrolling Interest</td>
<td>$ 68,256</td>
<td></td>
</tr>
<tr>
<td>Change in NCAA Net Assets</td>
<td>$ 80,516,810</td>
<td></td>
</tr>
<tr>
<td>Net Assets — beginning of year</td>
<td>$ 627,325,275</td>
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<tr>
<td>Net Assets — end of year</td>
<td>$ 707,842,085</td>
<td></td>
</tr>
<tr>
<td><strong>Cash flows from operating activities:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in net assets</td>
<td>$ 80,516,810</td>
<td></td>
</tr>
<tr>
<td>Adjustments to reconcile to net cash provided by operating activities:**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>$ 5,362,705</td>
<td></td>
</tr>
<tr>
<td>Amortization of bond premium</td>
<td>$ (373,526)</td>
<td></td>
</tr>
<tr>
<td>Change in unrealized gain on investments</td>
<td>$ (70,153,709)</td>
<td></td>
</tr>
<tr>
<td>Realized gain on investments</td>
<td>$ (2,589,104)</td>
<td></td>
</tr>
<tr>
<td>Loss on disposal of properties</td>
<td>$ 80,594</td>
<td></td>
</tr>
<tr>
<td>Changes in noncontrolling interests</td>
<td>$ (68,256)</td>
<td></td>
</tr>
<tr>
<td>Changes in certain assets and liabilities:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exhibit 14.2 also lists the payments the NCAA will receive from ESPN for television rights for certain fall, winter, and spring championships; the NIT tournaments; and the international distribution of the Division I Men’s Basketball Championship. The agreement between the NCAA and ESPN, reached in 2011, guarantees the NCAA $500 million over 14 years, from 2010 to 2024 (NCAA and Subsidiaries).

The NCAA’s expenses in 2014 were $909 million, an increase of 6.6% from 2013. The main expenses are the distribution of revenues to member institutions, association-wide programs, and costs associated with conducting championships (see Exhibit 14.1). The $547 million distribution to Division I members accounted for 60% of expenses in 2014 and represents an increase of $19.6 million, or 3.7%, from 2013. Revenue is distributed to Division I and Division II members annually.

The amount of money that each school receives is determined from a formula created by the NCAA. For Division I members, funds are distributed based on seven criteria. The basketball fund distribution is based on a school’s historical performance in the Division I Men’s Basketball Championship. Schools also receive funds based on the number of sports they sponsor and scholarships they give. Funds are also granted to institutions for the academic enhancement of student-athletes and provision of student-athlete opportunities. The NCAA also provides conference grants and maintains a special assistance fund to assist student-athletes in emergency situations (see Exhibit 14.3). Division II members receive a distribution based on the school’s historic performance in the Division II Men’s and Women’s Basketball Championships and the number of sports sponsored, plus an equal amount given to all active members. The total of Division II distributions in 2014 was approximately $13.9 million (NCAA and Subsidiaries).

EXHIBIT 14.2 NCAA television broadcast payments from CBS, Turner Broadcasting, and ESPN.
### Conferences

Revenue distributed to member schools flows from the NCAA through the conferences (see Exhibit 14.3). Each conference sets policy determining the amount of revenue that an individual school receives. The Big XII, a Power 5 conference, has a fairly straightforward revenue distribution plan. Revenues received by the conference are first used to pay for conference operating expenses and fund any established reserves. Next, any NCAA subsidies received or member participation subsidies awarded for participation in post-season competition are paid directly to the member institution. All remaining revenues are then divided among members in equal portions, with the only adjustments made being related to broadcasts of games on permitted member institution outlets (e.g., Longhorn Network).

### Division I–FBS, Power 5 conferences

Exhibit 14.3 illustrates the financial strength of the major conferences. On average, in FY 2014 Power 5 conferences received $37.9 million in revenues from the NCAA, with a range of $31.7 million to $48.7 million. The five remaining Division I–FBS conferences, or the Group of 5 (American Athletic, C-USA, MAC, Sunbelt, and Mountain West), received an average of $22.4 million, with a range of $11.6 million to $44.7 million. Non-FBS conferences received an average of $8.8 million in revenue, ranging from $5.0 million to $18.7 million. Revenues from post-season bowl games and conference television networks further strengthen the financial position of major conferences.

By reviewing conference tax filings (Form 990–Return of Organization Exempt from Income Tax), we can further examine the differences among conference revenues in Division I. First, we must note the difficulty of making direct comparisons in collegiate sport between two similar organizations, as there is no standard for reporting financials. Exhibit 14.4 through Exhibit 14.6 do, however, provide a basis for comparison. Exhibit 14.4 gives revenues and expenses for 2013 for two major conferences, the SEC and Big XII. From the conferences’ tax returns, we can see that the Big XII reported its revenue in much greater detail than the SEC, although we can directly compare revenue from media rights and post-season events. The Big XII earned $70.6 million less from media rights than the SEC. It also earned $12.4 million less than the SEC from bowl game, NCAA, and ticket sales revenue (the SEC lumps these revenues under “Post-season events”). Clearly, the SEC was in the stronger financial position, as the conference’s revenue was $98.1 million more than that of the Big XII.

In the SEC, schools on average received $21.0 million in revenue from the conference in 2013. This amount doubled since 2007. The growth of revenues in the SEC has mirrored growth in the popularity of college football and the resulting creation of conference broadcast networks. Revenues from television rights fees accounted for 65% of SEC member institution revenues. In the Big XII, television contracts accounted for 61% of member institution revenues. Because of the strength of their new media property, the SEC Network, the SEC received an NCAA record of $455.8 million in revenue during the 2014/2015 fiscal year. Each member institution received $31.2 million on average, an increase of $10 million over the previous year.

The Big XII, in comparison, distributed just over $250 million during its 2014/2015 fiscal year (McMurphy, 2015).
EXHIBIT 14.3 NCAA’s 2014 Division I revenue distribution plan

Used with permission

EXHIBIT 14.4 2013 revenues and expenses of two Division I–FBS Power 5 conferences.
SOUTHEASTERN CONFERENCE

BIG XII

Revenue

Revenue
446


<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Source</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV/Radio rights fees</td>
<td>$210,390,000</td>
<td>Television contracts</td>
<td>$139,736,184</td>
</tr>
<tr>
<td>Post-season events</td>
<td>$98,594,503</td>
<td>Bowl games</td>
<td>$42,598,742</td>
</tr>
<tr>
<td>Royalties</td>
<td>$9,339,649</td>
<td>NCAA revenue</td>
<td>$37,336,270</td>
</tr>
<tr>
<td>Grants received</td>
<td>$6,929,675</td>
<td>Ticket sales</td>
<td>$6,261,912</td>
</tr>
<tr>
<td>Investment income</td>
<td>$596,477</td>
<td>Other revenue</td>
<td>$1,236,165</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gravits received</td>
<td>$266,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Royalties</td>
<td>$180,183</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Investment income</td>
<td>$90,930</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Radio</td>
<td>$8,250</td>
</tr>
<tr>
<td>Total Revenue</td>
<td>$325,850,304</td>
<td>Total Revenue</td>
<td>$227,714,636</td>
</tr>
</tbody>
</table>

| Expenses Payments to members  | Amount       | Expenses Payments to members   | Amount       |
| Mississippi State             | $21,469,381  | Oklahoma                        | $21,586,558  |
| LSU                            | $21,169,381  | Texas                           | $21,381,146  |
| South Carolina                 | $21,169,381  | Kansas                          | $21,256,046  |
| Vanderbilt                     | $21,169,381  | Baylor                          | $21,193,172  |
| Kentucky                       | $21,110,666  | Oklahoma State                  | $21,112,219  |
| Florida                        | $21,097,671  | Iowa State                      | $21,044,004  |
| Tennessee                      | $21,004,771  | Texas Tech                      | $20,985,538  |
| Auburn                         | $20,889,381  | Kansas State                    | $20,734,065  |
| Georgia                        | $20,889,381  | TCU                             | $14,347,857  |
| Alabama                        | $20,869,381  | West Virginia                   | $14,197,415  |
| Arkansas                       | $20,869,381  | Member participation subsidy    | $12,334,084  |
| Mississippi                    | $20,869,381  | Salaries                        | $4,580,650   |
| Missouri                       | $20,869,381  | Miscellaneous                   | $4,524,009   |
| Texas A&M                      | $20,869,381  | Other                           | $1,615,367   |
| Postseason events             | $9,228,952   | Employee benefits               | $1,182,781   |
| Salaries                       | $6,742,214   | Rent                            | $863,226     |
| Grants, scholarships, fellowships | $5,721,125   | Legal fees                      | $789,029     |
| Production and game management | $1,945,123   | Travel                          | $511,432     |
| Conferences, conventions, meetings | $786,157   | Advertising and promotion       | $469,175     |
| Employee benefits              | $756,240     | Office expenses                 | $377,397     |
| Marketing                      | $675,174     | Depreciation and amortization   | $262,492     |
| Travel                         | $638,086     | Payroll taxes                   | $202,308     |
| Legal fees                     | $542,189     | Information                     | $185,978     |
Prior to 1984, the NCAA controlled the television rights for college football. In that year, the University of Georgia and University of Oklahoma sued the NCAA, claiming that the NCAA’s control over broadcasting violated the Sherman Act. The U.S. Supreme Court agreed that the NCAA’s actions violated Section 1 of the Act (NCAA v. Board of Regents, 1984). After the ruling, most of the major football conferences and football independents (Penn State and Notre Dame) joined together as the College Football Association (CFA) to negotiate a collective television package for members. The Pac 10 and Big 10 negotiated their own television contracts. By 1991, Penn State and Notre Dame had left the CFA in order to negotiate on their own. The CFA was disbanded after the SEC left in 1995 to pursue an opportunity to increase its revenues through an exclusive contract with CBS. (CBS had just lost its NFL television package to Fox.) After its television contract was signed, total SEC disbursements to member schools increased from $45.5 million to $58.9 million. In 2008, the SEC considered following the Big 10 model with the launch of its own television network; however, the league opted to sign an agreement with both CBS and ESPN. Its partnership with ESPN and CBS brought the league $205 million per year in media rights revenues (Smith & Ourand, 2008).

The Big 10 created its own network in 2007 with partner News Corp. The conference’s 51% ownership stake in the network resulted in $66 million in new revenues during FY 2007. Over the lifetime of the agreement, the Big 10 could average $112 million annually, with the fees paid to the conference expected to rise over the lifetime of the deal. At the same time the Big 10 was launching its network, it signed a ten-year, $1 billion national rights contract with ABC/ESPN. The Big 10 received $83 million during the first year of the agreement (2008), with the rights fees expected to increase over the life of the contract. As a result of these television agreements, total Big 10 revenue increased 39.8% between 2006 and 2008, and distributions to member schools increased 30.9% (Broughton, 2008). Although the partnership with News Corp. for the Big Ten Network (BTN) goes through 2032, its football and basketball agreements with ABC/ESPN and CBS expire after the 2017 season (Sherman, 2015). It is expected that a new television rights deal will lead to Big 10 schools receiving over $45 million per year in revenues. League schools were expected to earn approximately $21 million each in 2014 (Fornelli, 2014).

SEC Network was created in partnership with ESPN and grew out of its 2008 media rights deal with the network. Following the Big 10’s lead and joining the Pac 12 conference in having its own branded network, the ESPN-owned SEC Network launched in 2014 and will generate revenues for the conference through 2034. At the end of the network’s first year, the SEC had generated $455.8 million in record revenues (McMurphy).

As the Big 10 and SEC illustrate, the earning power of a conference has a positive impact on its member schools. Most of a conference’s revenue is distributed to its member schools (see Exhibit 14.4). In the SEC, payments to member schools range from $20.9 million to $21.5 million. Though the Big XII earned less as a conference in overall revenues in 2013, its member schools received revenue on par with those in the SEC, with the exception of the Big XII’s two new member schools, TCU and West Virginia. As part of their agreement to join the conference, the schools accepted a reduction in distributions during their first years in the conference.

Division I–FBS, Group of 5 conferences
Exhibit 14.5 highlights the revenues and expenses of two Division I–FBS Group of 5 conferences: C-USA and the Mountain West Conference (MWC). By comparing the revenues of the conferences in Exhibit 14.4 and 14.5, we can see the importance of media rights in generating conference revenue. All four conferences compete at the same level, but not having their own networks or large media rights agreements for the broadcast of football, basketball, and other sports affects overall conference revenue and, in turn, that of member schools. Whereas C-USA received $10.4 million in television and marketing revenues and the MWC reported no media revenues, the SEC received $210.4 million and the Big XII received $139.7 million. These figures make it clear that the leveraging of games—primarily football and conference basketball games—through a media rights deal is critical to conference revenue generation.

Exhibit 14.5 also illustrates the benefits of having 12 teams in a conference. With 12 teams, a conference is able to play a football conference championship game under NCAA rules. C-USA and the MWC each have 12 football-playing members. The MWC clearly identifies revenues from its conference football championships in its federal filing, at $1.7 million in 2013. Further, we can see the importance of quality basketball programs. Without a guaranteed annual participant in a College Football Playoff game or a bowl affiliated with the College Football Playoff, conferences must rely on teams from schools like the University of Nevada–Las Vegas (UNLV) to generate revenues in the NCAA Men’s Basketball Championship tournament. C-USA, being a stronger basketball conference in 2013, generated considerably more basketball revenue than the MWC ($3.6 million). The better basketball being played in C-USA, coupled with its 12 member institutions sponsoring football, significantly improved the conference’s revenue. In 2013 C-USA received $10.4 million in television revenue, which is only $2.7 million less than the total revenues received by the MWC—although it is a small fraction of the $139.7 million in television revenue the Big XII received.

Exhibit 14.5 reveals another impact of a conference’s having a championship football game. When the ACC expanded from 9 member institutions to 12 in 2004, a shift occurred across several Division I conferences, including C-USA. In total, 23 teams changed conferences while Army became independent. These changes created additional ripples and school affiliations have continued to change as of this writing. As a result of these shifts, C-USA was making payments to several former conference members, as well as current members (see Exhibit 14.5).

Exhibit 14.6 lists the revenues and expenses of the Atlantic 10 (A10) Conference. The schools of the A10 are Division I–FCS members, and the conference’s main sources of revenue are related to basketball, as Exhibit 14.6 shows. The conference received $14.3 million from the NCAA for its men’s basketball tournament appearances, more than either C-USA or the MWC received. As the A10 receives virtually no football revenues compared to schools in Division I–FBS conferences, distributions to A10 member schools are considerably less than the distributions to Division I–FBS member schools. The A10 lists only the total distribution to its membership—$10.9 million in FY 2013. With 16 member institutions in 2013, that averages to $683,000 per institution.

Schools

The revenues that member schools receive from conference distributions are important, but they are a small percentage of overall departmental revenues, according to Fulks (2014c). On average, distributions from the NCAA and conferences account for only 19% of a Division I program’s general revenues. For schools in major conferences, the largest portion of the athletic program’s revenues comes from football (see Exhibit 14.7). However, even with large revenues coming from the NCAA and conferences, and football revenues supporting the overall athletic programs at major schools, it can still be difficult for these programs to earn a profit. For an example of the financial difficulties that athletic departments face, read Sidebar 14.B, which discusses the situation at the University of South Carolina.

Exhibit 14.5 2013 revenues and expenses of two Division I–FBS Group of 5 conferences.

<table>
<thead>
<tr>
<th></th>
<th>CONFERENCE USA</th>
<th>MOUNTAIN WEST CONFERENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>$10,439,169</td>
<td>$4,205,000</td>
</tr>
<tr>
<td>Television and marketing</td>
<td>$7,869,523</td>
<td>Conference Basketball Championship</td>
</tr>
<tr>
<td>Grants received</td>
<td>$9,156,243</td>
<td>Grants received $3,577,408</td>
</tr>
<tr>
<td>Other</td>
<td>$188,123</td>
<td>Membership dues $4,205,000</td>
</tr>
</tbody>
</table>

449
<table>
<thead>
<tr>
<th>Membership dues</th>
<th>$7,142,840</th>
<th>Conference Football Championship</th>
<th>$1,682,662</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bowl revenue</td>
<td>$4,837,138</td>
<td>Membership entry fees</td>
<td>$1,000,032</td>
</tr>
<tr>
<td>NCAA/NIT</td>
<td>$4,661,200</td>
<td>Membership entry fees</td>
<td>$120,097</td>
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<tr>
<td>tournament revenue</td>
<td>$1,682,662</td>
<td>Royalties</td>
<td>$63,430</td>
</tr>
<tr>
<td>Investment income</td>
<td>$1,071,267</td>
<td>Business partnerships</td>
<td>$56,672</td>
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<tr>
<td>Royalties</td>
<td>$196,835</td>
<td>Royalties</td>
<td>$1,000,032</td>
</tr>
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<td>Total Revenue</td>
<td>$45,374,215</td>
<td>Total Revenue</td>
<td>$13,225,615</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td>Expenses</td>
<td></td>
</tr>
<tr>
<td>Marshall</td>
<td>$3,823,894</td>
<td>Marshall</td>
<td>$683,394</td>
</tr>
<tr>
<td>Rice</td>
<td>$3,555,480</td>
<td>San Diego State</td>
<td>$546,798</td>
</tr>
<tr>
<td>East Carolina</td>
<td>$3,441,377</td>
<td>Nevada</td>
<td>$445,365</td>
</tr>
<tr>
<td>UAB</td>
<td>$3,297,660</td>
<td>New Mexico</td>
<td>$370,664</td>
</tr>
<tr>
<td>Texas El Paso</td>
<td>$3,056,286</td>
<td>Boise State</td>
<td>$296,110</td>
</tr>
<tr>
<td>Tulsa</td>
<td>$2,912,854</td>
<td>San Jose State</td>
<td>$266,133</td>
</tr>
<tr>
<td>Southern Mississippi</td>
<td>$2,901,721</td>
<td>UNLV</td>
<td>$256,121</td>
</tr>
<tr>
<td>Middle Tennessee</td>
<td>$2,520,601</td>
<td>Utah State</td>
<td>$255,407</td>
</tr>
<tr>
<td>Tulane</td>
<td>$2,403,081</td>
<td>Wyoming</td>
<td>$240,003</td>
</tr>
<tr>
<td>North Texas</td>
<td>$2,100,575</td>
<td>Colorado State</td>
<td>$211,245</td>
</tr>
<tr>
<td>Louisiana Tech</td>
<td>$1,762,549</td>
<td>Air Force</td>
<td>$126,779</td>
</tr>
<tr>
<td>Florida Atlantic</td>
<td>$1,602,143</td>
<td>Tournament distributions</td>
<td>$2,420,968</td>
</tr>
<tr>
<td>ODU</td>
<td>$1,552,762</td>
<td>Salaries</td>
<td>$2,155,795</td>
</tr>
<tr>
<td>Florida International</td>
<td>$1,512,305</td>
<td>Conference basketball tournament</td>
<td>$1,291,295</td>
</tr>
<tr>
<td>Texas San Antonio</td>
<td>$1,480,747</td>
<td>Championships</td>
<td>$1,200,859</td>
</tr>
<tr>
<td>UNC Charlotte</td>
<td>$1,397,002</td>
<td>Board directed expenses</td>
<td>$981,967</td>
</tr>
<tr>
<td>Memphis</td>
<td>$199,375</td>
<td>Other</td>
<td>$716,296</td>
</tr>
<tr>
<td>SMU</td>
<td>$132,917</td>
<td>Advertising and promotion</td>
<td>$456,024</td>
</tr>
<tr>
<td>Houston</td>
<td>$99,688</td>
<td>Employee benefits</td>
<td>$358,129</td>
</tr>
<tr>
<td>Central Florida</td>
<td>$99,688</td>
<td>Legal fees</td>
<td>$181,878</td>
</tr>
<tr>
<td>Post-season events</td>
<td>$5,769,134</td>
<td>Travel</td>
<td>$173,184</td>
</tr>
<tr>
<td>Salaries</td>
<td>$2,231,596</td>
<td>Office expenses</td>
<td>$169,982</td>
</tr>
<tr>
<td>Production and game management</td>
<td>$544,814</td>
<td>Rent</td>
<td>$157,193</td>
</tr>
<tr>
<td>Conferences, conventions, meetings</td>
<td>$278,217</td>
<td>Payroll taxes</td>
<td>$119,645</td>
</tr>
<tr>
<td>Advertising and promotions</td>
<td>$277,016</td>
<td>Conferences, conventions, and</td>
<td>$100,742</td>
</tr>
</tbody>
</table>

450
<table>
<thead>
<tr>
<th>Category</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information technology</td>
<td>$262,558</td>
</tr>
<tr>
<td>Employee benefits</td>
<td>$260,296</td>
</tr>
<tr>
<td>Rent</td>
<td>$235,419</td>
</tr>
<tr>
<td>Marketing and promotion</td>
<td>$213,663</td>
</tr>
<tr>
<td>Other</td>
<td>$170,101</td>
</tr>
<tr>
<td>Legal fees</td>
<td>$168,352</td>
</tr>
<tr>
<td>Office expenses</td>
<td>$139,303</td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>$109,449</td>
</tr>
<tr>
<td>Travel</td>
<td>$92,873</td>
</tr>
<tr>
<td>Investment management fees</td>
<td>$88,571</td>
</tr>
<tr>
<td>Grants, scholarships, fellowships</td>
<td>$60,000</td>
</tr>
<tr>
<td>Insurance</td>
<td>$56,967</td>
</tr>
<tr>
<td>Accounting expenses</td>
<td>$22,785</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>$9,505</td>
</tr>
<tr>
<td>Total Expenses</td>
<td>$50,843,324</td>
</tr>
</tbody>
</table>

**Note:** Figures based on each conference’s 2013 IRS Form 990.

---

**EXHIBIT 14.6 2013 revenues and expenses of a Division I conference, non-FBS.**

**ATLANTIC 10**

**Revenue**
- Television and marketing: $3,974,035
- Other: $356,614
- NCAA/NIT tournament revenue: $14,295,312
- Investment income: $627,047

**Total Revenue:** $19,253,008

**Expenses**
- Payments to members: $10,922,809
- Salaries: $1,404,885
- Production and game management: $922,764
- Conferences, conventions, meetings: $274,933
- Advertising and promotions: $170,785
- Information technology: $175,785
- Employee benefits: $317,712

Total Expenses: $14,329,949
<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rent</td>
<td>$148,052</td>
</tr>
<tr>
<td>Other</td>
<td>$664,794</td>
</tr>
<tr>
<td>Legal fees</td>
<td>$58,207</td>
</tr>
<tr>
<td>Office expenses</td>
<td>$97,370</td>
</tr>
<tr>
<td>Payroll taxes</td>
<td>$78,620</td>
</tr>
<tr>
<td>Travel</td>
<td>$143,061</td>
</tr>
<tr>
<td>Investment management fees</td>
<td>$48,241</td>
</tr>
<tr>
<td>Insurance</td>
<td>$31,933</td>
</tr>
<tr>
<td>Accounting expenses</td>
<td>$66,374</td>
</tr>
<tr>
<td>Depreciation and amortization</td>
<td>$21,418</td>
</tr>
<tr>
<td><strong>Total Expenses</strong></td>
<td><strong>$15,547,743</strong></td>
</tr>
</tbody>
</table>

*Note: Figures based on the conference’s 2013 IRS Form 990.*

EXHIBIT 14.7 Michigan Athletic Department budget.

<table>
<thead>
<tr>
<th>FISCAL YEAR 2015 OPERATING BUDGET (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
</tr>
<tr>
<td>Spectator admissions</td>
</tr>
<tr>
<td>Football</td>
</tr>
<tr>
<td>Basketball</td>
</tr>
<tr>
<td>Hockey</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Conference distributions</td>
</tr>
<tr>
<td>Television (football and basketball)</td>
</tr>
<tr>
<td>Football bowl games</td>
</tr>
<tr>
<td>NCAA basketball</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Priority seating</td>
</tr>
<tr>
<td>Gifts and scholarship fund</td>
</tr>
<tr>
<td>Corporate sponsorship</td>
</tr>
<tr>
<td>Licensing royalties</td>
</tr>
<tr>
<td>Radio</td>
</tr>
<tr>
<td>Facilities</td>
</tr>
<tr>
<td>Concessions/parking</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Investment income</td>
</tr>
<tr>
<td>Current Revenues</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
</tr>
<tr>
<td>Salaries</td>
</tr>
</tbody>
</table>
The financial difficulties at the University of South Carolina described in Sidebar 14.B are not uncommon. Brady, Berkowitz, and Schnaars (2015) note that more than 90% of Division I athletic programs have expenses that exceed revenues on an annual basis. Fulks (2014c), in his annual examination of NCAA revenues and expenses, added that only 20 NCAA Division I–FBS programs were self-supporting during FY 2013. He added that the median net revenue for the 20 schools was $8.4 million. For the FBS schools that were not self-supporting, the median loss was $14.9 million. Compounding the financial difficulties for schools is the fact that, although revenues are growing each year, expenses are growing faster, due to increases in scholarship costs, escalating costs for football and men’s basketball coaches, and the costs of building new or renovating old athletic facilities.
Financial turnaround for an intercollegiate athletic program

When Eric Hyman was hired as the athletic director at the University of South Carolina in 2005, he inherited a program that had lost $2.65 million in the previous year. In his first year as athletic director, the program lost another $2.46 million. Fortunately, the department had a reserve fund that covered some of the losses (Person, 2006a). However, the department eventually needed a $2.74 million subsidy from the university (Person, 2008). One reason for the department’s poor financial shape was a change to the football coaching staff. The department owed buyouts to several members of former Coach Lou Holtz’s staff, and for a few months paid salaries to both Holtz’s staff and Coach Steve Spurrier’s staff (Person, 2006a).

Upon arriving on campus, Hyman recognized the department’s financial issues and set out to increase revenues and control costs. To increase revenues, Hyman turned to the department’s strength. By raising ticket prices to football games by $10 per ticket, the program raised an additional $4.5 million (Person, 2006a). The department also began planning to overhaul its ticket distribution system for football games, in an effort to increase revenues from members of the Gamecock Club, the South Carolina athletic department’s athletic support group. Under the existing system, to qualify for a season ticket package, an individual first had to make a donation to the Gamecock Club. Then, based on the amount of the person’s giving and the number of years the individual had given, the department determined the person’s season ticket package eligibility. Packages ranged from a full package (all seven home games) to a partial, four-game package featuring the team’s lesser opponents. Donors were rewarded for longevity, not the total amount they had given to the booster organization. To increase revenues, Hyman instituted a premium seating system.

South Carolina’s premium seating system is referred to as yearly equitable seating (YES). The system was created to honor the loyalty of past donors while balancing donors’ giving level and history of donations. To keep their seats for Gamecock football games during the 2009 season, members had to maintain their 2008 Gamecock Club membership status through annual giving to the club. The Gamecock Club members were also required to make a YES donation ranging from $50 to $395 per seat, based on seat location.

At Auburn University, a premium seating system was expected to generate an additional $3.5 million in revenues annually. To keep a seat located between the 30-yard lines and in the lower bowl, Auburn season ticket holders were required to make an additional donation of $400 per ticket. In other sections, season ticket holders were required to donate an additional $200 or $300 per seat (Person, 2006b).

The South Carolina athletic department’s changes enabled the department to reverse its financial position by the end of 2007. Exhibit 14.8 gives the department’s 2015 budget. Seat fees added $5.8 million in revenue on top of the $13.6 million collected through membership in the Gamecock Club. The department has run a surplus since 2007.

Since FY 2007, the South Carolina athletic department has been able to replenish its reserve fund through departmental surpluses. Revenues have grown from $48.1 million in 2007 to $94.1 million in 2015. In addition to increasing its football ticket revenues, the department signed a nine-year, $50.5 million contract with IMG College under which the athletic department received an additional $2.4 million per year for multimedia rights (Person, 2008). Increases resulting from the SEC’s lucrative media rights deals, the YES program, and a new sales program have led to a 95% increase in revenues over nine years.

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**EXHIBIT 14.8 University of South Carolina athletic department budget**

<table>
<thead>
<tr>
<th>Revenues</th>
<th>FISCAL YEAR 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admissions</td>
<td>$21,822,000</td>
</tr>
<tr>
<td>Guarantees</td>
<td>$3,500</td>
</tr>
<tr>
<td>Premium seating</td>
<td>$5,803,400</td>
</tr>
<tr>
<td>Student fees</td>
<td>$2,425,000</td>
</tr>
</tbody>
</table>

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Financial profitability

To examine an athletic department’s profitability is a challenging task. As mentioned earlier, the reporting of financial data is not standardized. One institution’s method of recording revenues and expenses is likely different from another institution’s. As a result, institutions often have difficulty comparing their financial performance to benchmarks published by the NCAA. Another source of difficulty is that individuals analyzing athletic department performance frequently treat revenues allocated to the department in varying ways. For example, USA Today publishes on its website revenues and expenses of 230 Division I public colleges and universities (see http://sports.usatoday.com/ncaa/finances/).* The data for FY 2014 show that 68 athletic departments lost money. One hundred and sixty-two schools reported a profit or broke even. These results contrast with Fulks’ (2014c) statement that in FY 2013, only 20 Division I institutions (all FBS schools) were self-sustaining.

Without examining the financial data, we would probably expect that a school affiliated with a major conference would be in better financial standing than one that is not. An examination of only the net operating surplus or net operating deficit (expense to revenue difference), however, would also be superficial. To

---

<table>
<thead>
<tr>
<th>Revenues</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gamecock Club revenues</td>
<td>$13,645,000</td>
</tr>
<tr>
<td>Gifts and donations</td>
<td>$9,920,000</td>
</tr>
<tr>
<td>NCAA/SEC revenue</td>
<td>$23,070,000</td>
</tr>
<tr>
<td>Sponsorships, media rights, royalties</td>
<td>$9,700,000</td>
</tr>
<tr>
<td>Ancillary sales</td>
<td>$4,010,200</td>
</tr>
<tr>
<td>Other revenue</td>
<td>$3,667,300</td>
</tr>
<tr>
<td><strong>Total Revenues from Departmental Operations</strong></td>
<td><strong>$94,066,400</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries</td>
<td>$36,285,900</td>
</tr>
<tr>
<td>Grants-in-aid</td>
<td>$9,505,700</td>
</tr>
<tr>
<td>Team travel</td>
<td>$6,074,000</td>
</tr>
<tr>
<td>General travel</td>
<td>$628,300</td>
</tr>
<tr>
<td>Recruiting</td>
<td>$1,215,900</td>
</tr>
<tr>
<td>Game services</td>
<td>$5,832,100</td>
</tr>
<tr>
<td>Other services</td>
<td>$3,903,400</td>
</tr>
<tr>
<td>Supplies &amp; equipment</td>
<td>$4,535,300</td>
</tr>
<tr>
<td>Facilities</td>
<td>$6,468,700</td>
</tr>
<tr>
<td>General and administrative</td>
<td>$6,038,600</td>
</tr>
<tr>
<td>Guarantees</td>
<td>$2,977,700</td>
</tr>
<tr>
<td><strong>Total Expenditures from Department Operations</strong></td>
<td><strong>$83,465,600</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Before transfers</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transfers</td>
<td>$10,600,800</td>
</tr>
<tr>
<td>Capital and other transfers in (out)</td>
<td>$(10,242,800)</td>
</tr>
<tr>
<td><strong>Total Transfers (net)</strong></td>
<td>$(10,242,800)</td>
</tr>
<tr>
<td><strong>Revenue over Expenditures and Transfers</strong></td>
<td><strong>$358,000</strong></td>
</tr>
</tbody>
</table>

*Source: University of South Carolina (2014).
understand the financial strength of an athletic department, we must examine revenue closely.

A quick glance at the revenues and expenses in the *USA Today* database shows that 69 schools lost money in 2014. When we do this, however, we are looking only at the expenses to revenue differences for each athletic department, while ignoring significant variations in the way departmental revenues were reported at many of the schools in the study. Revenues are reported to the NCAA in two categories (Fulks, 2014c): department-generated revenues are those revenues generated independently by the athletic department and its programs; allocated revenues are revenues that the school transfers to the athletic department. These revenues are not generated by the athletic department but given to the department by the institution or a governmental entity. As Brady, Berkowitz, and Schnaars note, allocated revenues are bailouts by universities that enable their athletic departments to balance their books. When Fulks (2014c) reported that 20 schools were self-sustaining in 2013, he meant that the revenues generated by these athletic departments alone covered each department’s operating expenses. These institutions did not need to allocate revenues to offset revenue shortfalls in their athletic departments.

To understand the importance of allocated revenue versus department-generated revenues better, let’s compare revenue and expense data submitted to *USA Today* for two athletic departments. Exhibit 14.9 lists the revenues and expenditures for FY 2014 of Miami University (Ohio) and the University of California-Los Angeles (UCLA), as reported by *USA Today*. Miami, a member of the Mid-American Conference (MAC), had a net operating surplus of $680,662. UCLA, a member of the Pac 12, had net operating income of $0. According to *USA Today*, 71.8% of Miami’s revenues were allocated revenues, while only 3.1% of UCLA’s revenues were allocated revenues. If we remove allocated revenues from the analysis, Miami had $8.3 million of operating revenues and $28.7 million in operating expenses, for an operating expense to revenue difference of −$20.4 million. For UCLA, the expense to revenue difference is −$2.7 million. Hence, although the raw data contained in the *USA Today* reports make it appear that the Miami athletic department was in the stronger financial position, in reality the athletic department at UCLA was much stronger, as it could nearly cover its operating expenses with its operating revenues, whereas Miami relied heavily on institutional support and student fees to operate its department.

**EXHIBIT 14.9 2014 revenues and expenses of two Division I-FBS universities**

<table>
<thead>
<tr>
<th>Revenues</th>
<th>MIAMI UNIVERSITY (OHIO)</th>
<th>UCLA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Department Generated Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total ticket sales</td>
<td>$1,210,725</td>
<td>$17,807,674</td>
</tr>
<tr>
<td>Rights/licensing/NCAA &amp; conference distributions</td>
<td>$2,096,074</td>
<td>$37,836,281</td>
</tr>
<tr>
<td>Cash contributions from alumni and others</td>
<td>$1,615,928</td>
<td>$16,229,179</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>$3,355,276</td>
<td>$11,842,374</td>
</tr>
<tr>
<td><strong>Total Generated Revenues</strong></td>
<td>$8,278,003</td>
<td>$83,715,508</td>
</tr>
<tr>
<td><strong>Allocated Revenues:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Institutional support</td>
<td>$5,380,079</td>
<td>$60,000</td>
</tr>
<tr>
<td>Student fees</td>
<td>$15,735,046</td>
<td>$2,651,272</td>
</tr>
<tr>
<td><strong>Total Allocated Revenues</strong></td>
<td>$21,115,125</td>
<td>$2,711,272</td>
</tr>
<tr>
<td><strong>Total All Revenues</strong></td>
<td>$29,393,128</td>
<td>$86,426,780</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants-in-aid</td>
<td>$9,434,519</td>
<td>$12,138,363</td>
</tr>
<tr>
<td>Salaries and benefits</td>
<td>$10,646,809</td>
<td>$34,755,309</td>
</tr>
<tr>
<td>Building/grounds</td>
<td>$205,309</td>
<td>$9,082,941</td>
</tr>
</tbody>
</table>
Moreover, both the *USA Today* revenue and expense reports and Fulks’ statement regarding self-sufficiency neglect a significant expense: debt service on athletic facilities. Both Miami and UCLA report only operating expenses and fail to include debt service and costs for replacement of facilities in expenses. The athletic department budgets given in Exhibits 14.7 and 14.8 show the impact of these expenditures on profitability. Michigan (see Exhibit 14.7) shows a net operating surplus of $5.1 million (operating expense to revenue difference), while South Carolina (see Exhibit 14.8) shows a net operating surplus of $10.6 million. When non-operating expenses are subtracted, South Carolina has a net increase of $358,000 in its operating surplus; for Michigan, we now see a $1.9 million operating deficit. Considering debt service reduces profit further and at times turns a profit into a loss. Based on analysis of these two budgets, we can conjecture that the number of self-supporting Division I athletic departments is fewer than Fulks’ estimate.
A deeper look at athletic department budgets

An argument has been made—and was used in the O’Bannon case—that the NCAA intentionally provides inaccurate data when reporting on the financial health of athletic departments (Goff & Wilson, 2013). The main tenets of this argument are that data presented in the Fulks reports on revenue and expenses in NCAA divisions include one-way adjustments that reduce revenue, while adjustments for items that would increase revenue or reduce expenses are not made. Next, as athletic departments operate in a non-profit setting, there is not an incentive to show a profit. Without equity holders in the “business” closely monitoring revenues and expenses in order to produce profits and generate dividend payments, a use-it-or-lose-it budget management process may develop (see Chapter 6 on budgeting). Finally, on college campuses, significant related-party transactions often occur, which hide the true size and scope of the athletic department by understating substantial sources of profits. These related-party transactions primarily include business done between the parent company (the university) and its subsidiary (the athletic department) and business done between two subsidiaries (e.g., the athletic department and university housing) of a common parent (the university). See Exhibit 14.10 for examples.

Several studies support the notion that profit and loss statements for athletic departments understate profits. Borland, Goff, and Pulsinelli (1992) found that a reported $1.5 million loss for Western Kentucky University athletics was only a $330,000 loss when it was adjusted for several related-party transactions. For example, concessions revenues were understated, and the costs of providing food and grants-in-aid to athletes were overstated. When the researchers also accounted for the enrollment impact of athletics on the university as a whole, a $5 million gain was seen. Regarding the impact on enrollment (positive in this case), the statement is often made that “athletics are the front porch of the university.” However, the athletic department receives no credit for its marketing and public relations work on behalf of the institution. Other studies with similar findings include those by Skousen and Condie (1988), Goff (2000), and Rascher and Howell (2011).

EXHIBIT 14.10 Examples of possible related-party transactions in collegiate athletics.

<table>
<thead>
<tr>
<th>Revenues under-valued</th>
<th>Expenses over-valued</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concessions</td>
<td>Gifts-in-kind</td>
</tr>
<tr>
<td>Sport camps</td>
<td>Food (40% of listed cost)</td>
</tr>
<tr>
<td>Licensing</td>
<td>Books (80% of wholesale)</td>
</tr>
<tr>
<td>Merchandise (bookstore)</td>
<td>Room (may be very low cost if not excess demand)</td>
</tr>
<tr>
<td>Parking</td>
<td>Tuition (no out-of-pocket cost unless the non-paying student-athlete blocks a full-paying non-athlete from taking course)</td>
</tr>
<tr>
<td></td>
<td>Gold-plating (use-it-or-lose-it)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Revenues not listed</th>
<th>Expenses not listed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Athletic donations directly to tuition</td>
<td>Cleaning and security for events</td>
</tr>
<tr>
<td>The marketing arm of the university</td>
<td>Capital costs</td>
</tr>
<tr>
<td>Increase in applicants due to the &quot;Flutie Effect&quot; (athletic success yields more applications)</td>
<td>Student services and compliance costs for specific athletic-related work (Registrar’s Office, Admissions, Financial Aid, Data Services)</td>
</tr>
<tr>
<td>Enrollment of non-tuition athletes</td>
<td></td>
</tr>
<tr>
<td>Increases in quality of freshmen applicants</td>
<td></td>
</tr>
<tr>
<td>Increases in retention rates and graduation rates</td>
<td></td>
</tr>
</tbody>
</table>
Division I: School trends and performance

Exhibit 14.11 gives a breakdown of median revenues and expenses for Division I athletic departments by subdivision. The median revenues are based on data collected for the 2004–2013 NCAA Revenues and Expenses of Division I Intercollegiate Athletics Programs Report (Fulks, 2014c). For FBS schools, the median revenue was $61.9 million, while the medians for FCS and non-football Division I programs (Other) were $14.7 million and $13.1 million, respectively. It is important to note that there was not much difference among the median values of total allocated revenues across all three subdivisions. The median was $11.5 million for FBS schools, $10.9 million for FCS schools, and $10.7 million for Other schools. The difference in total revenue results from revenues generated by the athletic department. The median was $41.9 million for FBS schools, $3.8 million for FCS schools, and $2.4 million for Other schools. Large differences in median values among subdivisions are found in ticket sales, NCAA and conference distributions, cash contributions, broadcast rights, and game day revenues (concessions/programs/novelties).

The median operating expense for an FBS school was $62.2 million; it was $14.5 million for FCS schools and $14.0 million for Other schools (see Exhibit 14.11). Likely, the differences in expenses are tied to costs associated with running FBS football programs. For example, the varying costs for scholarship football players affected median values for scholarships across the three subdivisions. For the FBS, the median cost was $8.7 million; for FCS schools, $4.2 million; and for Other schools, $3.9 million.

Guarantees, a fixture of FBS programs with seven home football games per season, have a median cost of $1.2 million for FBS programs, compared to $60,000 for FCS schools and $27,000 for Other schools. The cost of operating major programs, both football and basketball, is reflected in the median values of university-paid salaries and benefits; we see a large difference in median values among subdivisions: $20.7 million for FBS schools, $4.6 million for FCS schools, and $4.4 million for Other schools. The same can be said for major differences in median expenses between FBS schools and the rest of Division I schools for team travel, recruiting, game expenses, and facility maintenance and rental.

Fulks (2014c) also analyzed trends during a five-year span (2009–2013). He noted that from 2009 to 2013, median revenues rose 35% for FBS schools, 21% for FCS schools, and 26% for Other schools. Expenses grew on par with revenues for FBS and FCS schools during the same time frame, up 35% for FBS and 21% for FCS schools. Expenses grew at a higher rate for Other schools, 33%. As a result, median losses remained constant or grew across all three subdivisions.

The major sources of revenue during each of the five years of the study were ticket sales and contributions from alumni and others. This was true across all three subdivisions. Similarly, two items were the major expenses across the three subdivisions: grants-in-aid (or scholarships) and salaries and benefits. The author noted that these two expenses make it difficult for athletic departments to control costs. As the cost of tuition increases nationwide, the cost for providing scholarships correspondingly increases for all schools. In the case of salaries and benefits, market demand for top coaches drives these costs. In 2013 the median FBS head football coaching salary was $1.9 million. For basketball, the median FBS head coaching salary was $1.21 million for the men’s coaches and $374,000 for the women’s.

Fulks (2014c) also discussed programmatic trends. For FBS schools, total athletic expenditures as a percentage of the total university budget grew from 4.6% in 2004 to 5.8% in 2013. For FCS schools, growth was similar: 5.2% to 6.8%. For the schools in the “Other” category, expenditures have fluctuated as a percentage of overall budgets, ranging from 4.5% to 6% over the same time frame. Generated revenues have remained constant as a percentage of athletic department expenses for FCS schools at 25% and have dropped to 18.0% for Other and 73.2% for FBS programs. These trends indicate that it is becoming increasingly difficult for most athletic departments to maintain a high ratio of generated revenue to expenses—a measure of self-sufficiency. Among FBS football and men’s basketball programs, between 50% and 60% reported surpluses for each of the years from 2004 to 2013. For FCS football, 1% of programs reported a surplus in...
2013, and for FCS men’s basketball the figure was 4%; 3% of men’s basketball programs in the “Other” category reported a surplus. Overall, the FBS departments have a greater ability to generate revenues compared to programs in the other two subdivisions. The FBS programs rely heavily on football revenues, which generate 45.5% of their total revenues. At FCS schools, football generates 23.3% of total revenues.

EXHIBIT 14.11 Median operating revenues and expenses for Division I athletic departments by subdivision.

<table>
<thead>
<tr>
<th>FY 2013</th>
<th>FBS</th>
<th>FCS</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department-generated revenues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total ticket sales</td>
<td>$8,782,000</td>
<td>$419,000</td>
<td>$221,000</td>
</tr>
<tr>
<td>NCAA and conference distributions</td>
<td>10,417,000</td>
<td>719,000</td>
<td>432,000</td>
</tr>
<tr>
<td>Guarantees and options</td>
<td>869,000</td>
<td>598,000</td>
<td>182,000</td>
</tr>
<tr>
<td>Cash contributions from alumni and others</td>
<td>8,720,000</td>
<td>889,000</td>
<td>589,000</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concessions/programs/novelties</td>
<td>1,044,000</td>
<td>43,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Broadcast rights</td>
<td>5,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total generated revenues</td>
<td>$41,897,000</td>
<td>$3,793,000</td>
<td>$2,428,000</td>
</tr>
<tr>
<td>Royalties/advertising/sponsorship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports camps</td>
<td>121,000</td>
<td>10,000</td>
<td>23,000</td>
</tr>
<tr>
<td>Endowment/Investment income</td>
<td>462,000</td>
<td>39,000</td>
<td>35,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>806,000</td>
<td>140,000</td>
<td>106,000</td>
</tr>
<tr>
<td>Total generated revenues</td>
<td>$41,897,000</td>
<td>$3,793,000</td>
<td>$2,428,000</td>
</tr>
<tr>
<td>Allocated revenues</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct institutional support</td>
<td>$3,704,000</td>
<td>$6,742,000</td>
<td>$7,394,000</td>
</tr>
<tr>
<td>Indirect institutional support</td>
<td>124,000</td>
<td>921,000</td>
<td>852,000</td>
</tr>
<tr>
<td>Student fees</td>
<td>1,926,000</td>
<td>1,052,000</td>
<td>554,000</td>
</tr>
<tr>
<td>Total allocated revenues</td>
<td>11,497,000</td>
<td>10,866,000</td>
<td>10,674,000</td>
</tr>
<tr>
<td>Total all revenues</td>
<td>$61,915,000</td>
<td>$14,693,000</td>
<td>$13,130,000</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants-in-aid</td>
<td>$8,747,000</td>
<td>$4,152,000</td>
<td>$3,936,000</td>
</tr>
<tr>
<td>Guarantees and options</td>
<td>1,182,000</td>
<td>60,000</td>
<td>27,000</td>
</tr>
<tr>
<td>Salaries and benefits – university paid</td>
<td>20,706,000</td>
<td>4,620,000</td>
<td>4,395,000</td>
</tr>
<tr>
<td>Severance pay</td>
<td>46,000</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Team travel</td>
<td>3,973,000</td>
<td>1,260,000</td>
<td>1,053,000</td>
</tr>
<tr>
<td>Recruiting</td>
<td>920,000</td>
<td>255,000</td>
<td>211,000</td>
</tr>
<tr>
<td>Equipment/uniforms/supplies</td>
<td>1,345,000</td>
<td>468,000</td>
<td>400,000</td>
</tr>
<tr>
<td>Fundraising</td>
<td>1,219,000</td>
<td>189,000</td>
<td>236,000</td>
</tr>
</tbody>
</table>
Division II: School trends and performance

Exhibit 14.12 gives revenues and expenses for the average Division II program. Division II programs are classified as either football or non-football. Like the Division I reports, the Division II reports provide information on median revenues and expenses in each classification. For Division II programs with football, the average generated revenues were $640,000, with allocated revenues adding $4.8 million. Non-football program-generated revenues averaged $334,400, with allocated revenues adding $3.8 million. We can see major generated-revenue differences between the two classifications in total ticket sales, cash contributions from alumni and others, NCAA and conference distributions, and royalties/advertising/sponsorship. Under allocated revenues, a total of $1.0 million more institutional support was provided for football programs than non-football programs.

As with revenues, expenses were greater for Division II programs with football. Although scholarship costs were only $205,100 higher for football programs, salaries were $520,400 higher for these programs.

Fulks (2014a) discussed trends in Division II athletic department financial operations. The benchmarks, published in 2014, cover the 2013 fiscal year. Between 2004 and 2013, generated revenue fell from 17% to 12% for schools with football programs and from 9% to 7% for those without. Universities are, therefore, making up the increases in Division II budgets through increases in allocated revenues. During the same period expenditures increased for football schools from $2.9 million in 2004 to $5.6 million in 2013. For those without football, expenditures grew from $2.2 million to $4.2 million over the same period. The average operating loss for Division II schools grew during this time, as well. Operating losses (with direct institutional support not included in revenues) increased $2.4 million for programs with football and $1.8 million for programs without. These results indicate that Division II institutions were increasing their institutional support at a greater rate than department-generated revenue was increasing. Therefore, the total rate of revenue growth was inflated in order to offset increases in departmental expenditures. The impact on revenue growth of increases in institutional support is evident, as 61% of revenue received by programs with football is direct institutional support, while the figure is 67% for programs without football. As with Division I programs, the two largest expense categories were grants-in-aid and salaries.

EXHIBIT 14.12 Median operating revenues and expenses for Division II and Division III athletic departments by classification.

<table>
<thead>
<tr>
<th>FY 2013</th>
<th>DIVISION II</th>
<th>DIVISION III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Football</td>
<td>Non-Football</td>
</tr>
<tr>
<td>Revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Department-generated revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total ticket sales</td>
<td>$41,800</td>
<td>$10,500</td>
</tr>
<tr>
<td>Revenue Category</td>
<td>2023</td>
<td>2024</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
</tr>
<tr>
<td>NCAA and conference distributions</td>
<td>23,700</td>
<td>240,000</td>
</tr>
<tr>
<td>Guarantees and options</td>
<td>13,800</td>
<td>55,000</td>
</tr>
<tr>
<td>Cash contributions from alumni and others</td>
<td>233,000</td>
<td>146,300</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concessions/programs/novelties</td>
<td>16,000</td>
<td>2,600</td>
</tr>
<tr>
<td>Broadcast rights</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>19,700</td>
<td>2,700</td>
</tr>
<tr>
<td>Royalties/advertising/sponsorship</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sports camps</td>
<td>32,600</td>
<td>15,500</td>
</tr>
<tr>
<td>Endowment/Investment income</td>
<td>2,500</td>
<td>2,500</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>16,000</td>
<td>9,400</td>
</tr>
<tr>
<td>Total generated revenues</td>
<td>$640,000</td>
<td>$334,400</td>
</tr>
<tr>
<td>Allocated revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct institutional support</td>
<td>$3,605,500</td>
<td>$2,758,800</td>
</tr>
<tr>
<td>Indirect institutional support</td>
<td>398,000</td>
<td>279,300</td>
</tr>
<tr>
<td>Student fees</td>
<td>239,000</td>
<td>0</td>
</tr>
<tr>
<td>Total allocated revenues</td>
<td>4,271,700</td>
<td>3,750,100</td>
</tr>
<tr>
<td>Total all revenues</td>
<td>$5,890,200</td>
<td>$4,127,500</td>
</tr>
<tr>
<td>Expenses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grants-in-aid</td>
<td>$1,699,700</td>
<td>$1,494,600</td>
</tr>
<tr>
<td>Guarantees and options</td>
<td>1,800</td>
<td>500</td>
</tr>
<tr>
<td>Salaries and benefits – university paid</td>
<td>1,777,900</td>
<td>1,257,500</td>
</tr>
<tr>
<td></td>
<td>1,551,200</td>
<td>704,100</td>
</tr>
<tr>
<td>Team travel</td>
<td>418,100</td>
<td>341,600</td>
</tr>
<tr>
<td>Recruiting</td>
<td>57,300</td>
<td>32,300</td>
</tr>
<tr>
<td>Equipment/uniforms/supplies</td>
<td>214,500</td>
<td>154,600</td>
</tr>
<tr>
<td>Fundraising</td>
<td>36,500</td>
<td>15,700</td>
</tr>
<tr>
<td>Game expenses</td>
<td>91,300</td>
<td>84,400</td>
</tr>
<tr>
<td>Medical</td>
<td>106,700</td>
<td>52,800</td>
</tr>
<tr>
<td>Membership dues</td>
<td>28,900</td>
<td>30,800</td>
</tr>
<tr>
<td>Sports camps</td>
<td>11,000</td>
<td>400</td>
</tr>
<tr>
<td>Spirit groups</td>
<td>9,400</td>
<td>200</td>
</tr>
<tr>
<td>Facilities maintenance and rental</td>
<td>31,800</td>
<td>29,200</td>
</tr>
<tr>
<td>Indirect institutional support</td>
<td>398,000</td>
<td>279,300</td>
</tr>
<tr>
<td>Other</td>
<td>179,000</td>
<td>108,700</td>
</tr>
<tr>
<td></td>
<td>113,000</td>
<td>46,200</td>
</tr>
<tr>
<td>Total operating expenses</td>
<td>$5,643,900</td>
<td>$4,171,100</td>
</tr>
<tr>
<td></td>
<td>$3,228,700</td>
<td>$1,522,800</td>
</tr>
</tbody>
</table>

Note: Revenues and expenses were reported in median dollars. Median values cannot be added; therefore, the total amounts are the median totals for the data collected. They are not the summations of data presented in this table.
Division III—School trends and performance

Exhibit 14.12 also provides median expenses for Division III athletic departments, also classified as football or non-football. As with the benchmark data for Division II programs, the most recent publicly available Division III data cover the 2013 fiscal year (Fulks, 2014b). For programs with football, operating expenses increased 109% from 2004. The increase was 131% for programs without football. As Division III schools offer no grants-in-aid for athletes, major expenses were slightly different than for Division I and II programs. Still, salaries and benefits was one of the two major expenses. For programs with football, the second largest expense was indirect institutional support, and for programs without football, team travel was the second largest expense category.
ATHLETIC DEPARTMENT FUNDRAISING

Analysis of NCAA revenues and expenses shows that operating expenses are increasing faster than operating revenues. In fact, the desire of some university administrators and alumni to win, coupled with rising salary and scholarship costs, caused growth in athletic department spending to outpace overall university growth. From 2004 to 2011 inflation-adjusted spending on athletics by public four-year colleges grew at 24.8% across all NCAA divisions, while overall spending per university student grew at 1.6% (Lewin, 2014). This growth led schools to become increasingly reliant on allocated revenues, especially direct and indirect institutional support and student fees.

However, with many public universities facing cuts in state appropriations, athletic departments are being pressured to reduce their reliance on allocated resources. Organizations such as the Knight Commission on Intercollegiate Athletics have been examining ways to reform college sport, including finances. The financing of college athletics and the commercialization of many athletic programs are issues that unite university administrators, faculty, and students (Lewin).

On campuses where pressure is growing to reduce the athletic department’s allocated resources, the development staff must find ways to generate greater amounts of revenue through giving. These development officers must raise increasing amounts of revenue not only for the operating budget but also to fund new athletic facilities on campus. Athletic fundraising, therefore, is crucial, as monies generated through the development office will offset the rising expenses of operating an athletic department and help to reduce the department’s reliance on allocated revenues. The largest athletic departments and their affiliated booster clubs raised $1.26 billion during 2014 (Wolverton & Kambhampati, 2015). The majority of this money was raised through such initiatives as capital campaigns and annual giving programs.

The Capital Campaign

Much of the money that athletic departments raise goes to offset the costs of new facilities and other capital projects. Usually, when an athletic department needs to begin replacing its older facilities, the department will initiate a capital campaign, an intensive effort to raise funds in a defined time frame through gifts and pledges for a specific purpose. When infrastructure built with public funds need replacing, athletic departments increasingly turn to fundraising. From 2004 to 2014, the amount of revenue generated by athletic departments through fundraising doubled (Wolverton & Kambhampati, 2015). For example, Texas A&M raised $93.6 million in 2014, with a majority of the funding going to the renovation of Kyle Field. As another example, Texas Tech University Athletics announced its Campaign for Fearless Champions on August 29, 2014, and plans to continue it until 2020. The goal of the campaign is to raise $185 million, of which $160 million will go toward capital support, $15 million toward endowment support, and $10 million toward ongoing support through planned giving (Texas Tech University Athletics, 2014). From 2013 to 2015 Ball State University conducted the Cardinal Commitment: Developing Champions campaign, a $20 million campaign to raise funds to improve and expand athletic facilities. Michigan State University (MSU) Athletics is raising $262 million as its part in the university’s $1.5 billion capital campaign. MSU Athletics plans to raise $92 million to improve facilities and $50 million to increase its endowment, and to achieve $120 million in elevated annual giving.

Making a case

One of the most important elements of a capital campaign is the campaign case statement. The case statement answers all the critical questions regarding the campaign and presents arguments for why an individual should support the campaign. The case statement also lets potential donors know how they can give to the campaign. According to Kihlstedt (2009), a typical case statement includes six sections:

1. institutional mission,
2. record of accomplishment,
3. directions for the future,
4. urgent and continuing development objectives,
5. plan of action to accomplish future objectives, and
6. the institution’s sponsorship.

For a better understanding of each of these sections, examine the case statement presented in Exhibit 14.13 for the Texas Tech University athletic department’s “Fearless Champions” campaign.
**Major gifts planning**

To reach a capital campaign goal, a development department needs to receive major gifts from program supporters. Most development departments define a major gift as a donation worth $25,000 or more. The number, size, and types of major gifts needed to reach a campaign goal are determined through various mathematical formulae based on national giving patterns. A major gifts table is developed from these formulae. Dove (2000) notes that a major gifts table demonstrates the importance of major gifts to a campaign. Not only does the table provide an outline of the number and size of gifts needed to reach a campaign goal, it also serves as a reality test for the organization. After the table is developed, the organization can determine whether it indeed has enough prospective donors to reach the campaign goal.

Gift table rules. There are three major mathematical ways to create a major gifts table (Dove). The first applies the 80/20 rule. This rule states that, based on past giving patterns, 80% of the needed funds will come from 20% of the donors. Hence, for Texas Tech, $148 million of the $185 million total would come from 20% of the campaign’s donors. Trends in giving seem to be shifting, however. Some development officers now rely on the 90/10 rule, which states that 90% of the total money needed for a campaign will come from 10% of the campaign’s donors. On this basis, for the Texas Tech campaign, $166.5 million would come from 10% of those giving to the campaign.

**EXHIBIT 14.13 Example case statement for Texas Tech University’s Campaign for Fearless Champions, titled For Our Fearless Champions.**

<table>
<thead>
<tr>
<th>Institutional mission. The TTU athletic department’s document contained the following statements regarding the department’s mission:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Preparing our student-athletes for life after graduation is a key part of our mission at Texas Tech.</td>
</tr>
<tr>
<td>■ We want to make access to a first-rate college education available for even more student-athletes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Record of accomplishment. In speaking of the department’s record of accomplishment, the document contained the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Two national titles in individual sports</td>
</tr>
<tr>
<td>■ First College World Series appearance and NCAA Super Regional Championship</td>
</tr>
<tr>
<td>■ Fifteen NCAA All-America Honorees and one Academic All-America Honoree</td>
</tr>
<tr>
<td>■ 102 First Team All-Big 12 Selections and 72 Academic All-Big 12 Selections</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Future directions. The case statement should discuss the department’s directions for the future. Texas Tech’s case statement stated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Such substantial upgrades will improve team facilities, modernize sports medicine areas and provide new fan amenities, setting the stage for the next decade of athletic accomplishments.</td>
</tr>
<tr>
<td>■ Establishing an endowment guarantees the Fearless Champions Leadership Academy will become an integral and lasting component of Texas Tech Athletics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development objectives. Texas Tech’s urgent and continuing development objectives, which include the campaign’s priorities and costs as well as the master plan, are expressed in the following statements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Our competition and training facilities give us an advantage when recruiting prospective student-athletes ... We have some of the best stadiums, arenas and fields in the Big 12, and we plan to keep them that way.</td>
</tr>
<tr>
<td>■ Surpass $20 million in student-athlete scholarship endowments</td>
</tr>
<tr>
<td>■ Complete 25 facility projects that upgrade every sporting venue for our student-athletes and fans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plan of action. In outlining its plan of action, TTU stated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Unwavering in their loyalty to Texas Tech, [the student athletes] deserve an equal commitment from each of us.</td>
</tr>
<tr>
<td>■ Reaching our campaign goals will take a new level of support from our alumni and fans. Every gift counts, and each gift brings us closer to realizing our vision for the future of Texas Tech Athletics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Institution’s sponsorship. Finally, the institution’s sponsorship of the campaign is stated as follows:</th>
</tr>
</thead>
<tbody>
<tr>
<td>■ Announcing The Campaign for Fearless Champions, Texas Tech University’s effort</td>
</tr>
</tbody>
</table>
The third model uses the rule of thirds. According to this rule, the top ten gifts to the campaign will account for 33% of the campaign’s total goal; the next 100 gifts will account for an additional 33%, and the remaining gifts will account for the final third. For Texas Tech, $61.05 million would come from the top ten donors, $61.05 million would come from the next 100 donors, and the remaining funds would come from the rest of the campaign’s donors.

Traditional gifts table. All of these rules lead to campaigns developing similar major gifts tables, known as traditional gifts tables.

For the $185 million Campaign for Fearless Champions, we would develop a traditional gifts table as follows (see Exhibit 14.14):

- The lead gift, or the largest single campaign gift, is set at 10% of the campaign goal—$18.5 million.
- The amount of the next largest gift is set to half of the lead gift, or $9.25 million, and we double the number of donors needed—i.e., we double one to get two.
- The value of the next largest gift is half of the previous gift amount ($4.625 million), and the number of needed donors is double the last number (4).
- We continue this process until the campaign goal is reached.

It must be noted that the table does not always work, especially as giving trends appear to be changing. In some instances, 10 to 15 donors have given 50% to 70% of the campaign totals. For some campaigns, the lead gift is set at an amount less than 10% of the campaign goal because an analysis of potential donors reveals little potential for a large lead gift. If the lead gift is set at a level less than 10% of the goal amount, there is a good chance that the campaign’s goal will not be reached, as the mathematical standards that were developed based on actual past giving to campaigns will not have been met (Dove).

When finalizing the gift table, we must factor all known information regarding major gift possibilities into its formulation. For example, if it is known that a donor plans to give a large portion of the campaign total at the launch of the campaign, this gift must be factored into the table. Also, the number of gifts that the program is seeking must be specified. Many athletic departments have conducted capital campaigns in part to endow athletic scholarships. If a goal of a campaign is to endow twenty scholarships, there must be twenty $500,000 spots on the gift table. (This assumes that an average scholarship costs an athletic department $25,000. Endowments generally pay at a 5% rate; therefore, $500,000 must be raised to endow each scholarship.)

Pre-campaign research. The goal of a campaign should be based on pre-campaign research to determine the level of giving that alumni and friends of the athletic program can provide. Once the potential for giving is determined, the campaign amount can be set and the gift table can be created. When setting a campaign goal and creating the gift table, it is important to remember that it takes many donors to reach each level of giving. Also, at each level of giving the gift table must match the donors’ potential for giving at those levels.

Development officers have observed that three or four legitimate prospective donors are required per gift at each level of giving. For the Texas Tech campaign, three or four potential donors must have the ability to give at least $18.5 million, or it is unlikely that Texas Tech will receive its lead gift. Six to eight must have the potential to give $9.25 million, and so on. As we move down the chart, fewer prospects are required per gift. The table in Exhibit 14.14 is based on this fact. At the lower levels of giving, we assume three prospects per gift, rather than making the more conservative assumption of four per gift. This reflects a potential spillover effect of donors from higher to lower giving levels. For example, if Texas Tech identified three potential donors to give at the $18.5 million level, one of those donors might decide to give, but to give $14 million rather than $18.5 million. This gift would be recorded at the $9.25 million level. Spillover from higher categories into lower giving categories occurs often, so that fewer potential donors are needed at lower levels of giving.

EXHIBIT 14.14 Traditional gifts table for a $185 million campaign.
Identifying major donors and prospects

In order to obtain major gifts, an organization must actively identify, cultivate, and solicit major donors. Major donors have the following traits:

- They often desire to provide opportunities that they did not have, to help the less fortunate, to improve quality of life, and to help solve problems in society.
- They tend to be very religious, have a strong belief in free enterprise, and be basically conservative.
- They know someone in the athletic department or know something about the department, and they believe in someone who is working for the department or believe in something that the academic institution or athletic department represents.
- They view giving as an investment and will want to see, or at least understand, the return on their investment.
- They have the resources to make a major gift. (Kihlstedt)

Knowing these characteristics of major donors, the athletic department can identify giving prospects. Kihlstedt defines a prospect as “any individual, foundation, corporation, or organization that has the potential to give and is likely to do so” (p. 189). When a donor has potential to give but little probability to give, the development office must cultivate the donor and move him or her toward becoming a probable giver.

To identify and rate prospects, the research department will evaluate individuals who are affiliated with the athletic department and determine who is capable of making a commitment to the capital campaign. The researcher might begin with those who have previously given to the department. According to one development officer, among all donors who give above $25,000, 75% first gave a gift of $250 or less to an annual giving initiative. Further, 83% had made annual fund donations for at least five years, and almost 60% had made annual fund donations for 11 years or more.

Kihlstedt summarizes the objectives and expected outcomes of the prospect research process. First, beyond simply identifying prospects, research must determine these individuals’ relationships with other prospects and with athletic department constituents. It must determine each prospect’s association with the department, his or her previous levels of giving, and his or her interests in the department. It must also identify the prospect’s wealth, ownership interests, control, and influence. Finally, the research staff must reduce this information into reports that pertain to the current capital campaign.

The development staff uses these reports to rate potential donors and implement a strategy for action for each—that is, a strategy for cultivating the prospect. The staff will determine which campaign items the prospect will probably support and decide which department member is best suited to cultivate the prospect. For example, suppose it is determined that a certain prospect is able and likely to give at the $2 million level. The prospect played tennis at the institution and currently holds basketball season tickets. Also, the prospect was an academic all-American. Based on preliminary research and information gathered through the cultivation process, the development staff will determine at what level the prospect is likely to give and target its solicitation of a gift based on that information. The staff might target this individual to give to a new
academic enrichment center. A staff member overseeing academics would then be assigned to cultivate the prospect. The staff will determine a timeline for cultivating the prospect. According to one development officer, major gifts are usually closed after about nine meaningful contacts over a period of six months to two years.

**Asking for donations**

After the prospect has been identified, researched, rated, and cultivated, he or she must be asked to give the gift. Development officials hold varying opinions regarding when a prospect has been cultivated enough to be likely to respond positively to an “ask.” A few officials feel it is best to ask for a gift right away, as the donor probably knows that you intend to do so at some time. Others feel that a predetermined number of contacts should be made prior to the request. Most state that you should ask when the time feels right.

Kihlstedt provides guidelines for asking for a major gift. First, the amount of money solicited must be sufficiently large. Often, development officers will ask for gifts two to four times larger than the prospect’s giving rating. It is easier to move down to an amount that is acceptable for the prospect than to discover later that a prospect could have given more and try to obtain a higher commitment. Second, development officials should listen during conversations. Suppose that in conversations, the prospect described previously mentions over and over an affinity for basketball and asks questions relating to the basketball program’s needs. That prospect would probably be more receptive to giving to basketball than to an academic center. The development officer must be flexible in presenting alternatives if the conversation indicates that the prospect may be more likely to give in an unexpected area.

**Annual Giving Programs**

Capital campaigns are important to the long-term plans of athletic programs, but annual giving programs are necessary to sustain operating revenues. For Division I institutions, contributions from alumni and others—the third largest source of department revenue for the average FBS program and the largest for the other classifications (see Exhibit 14.11)—is the fastest growing source of athletic department revenues. In 1965, contributions from alumni and others accounted for 5% of the average Division I budget. This figure grew to 17% in the late 1990s, and it is now approximately 21%.

**Athletic support groups**

In most athletic departments, the athletic support group (ASG) or booster club is responsible for the annual giving program. ASGs are usually operated as non-profit organizations, which are tax-exempt, and they are separate legal entities from the college or university. They may also be operated as athletic department clubs. The Gamecock Club, for example, is the University of South Carolina’s ASG. It is incorporated as a 501(c)(3) public charitable organization. According to the club’s 2014 Form 990, the purpose of the Gamecock Club is “to support the University of South Carolina’s Athletic Department by providing the necessary financial resources for scholarships and other educational services.” Other successful ASGs, organized similarly, include North Carolina State’s Wolfpack Club and the University of North Carolina’s Rams Club.

An individual’s level of giving to an ASG results in his or her club membership classification. The level required for membership ranges from $100 to over $10,000. Members receive differing benefits based on their giving level. For the most part, ASGs offer six to ten levels of membership, including student memberships. For the Wolfpack Club, current students can join for $30 and enjoy benefits including a club T-shirt, online access to *The Wolfpacker* magazine, the opportunity to purchase premium student seating at basketball and football games, meetings with coaches and athletes, and a membership card. Non-students must pay a minimum of $120 to join at the base level, called the Teammate Club. The highest level of membership, the Lone Wolf level, requires a donation of at least $30,000. At this level, members receive a football and basketball preview magazine, a membership package and card, a car decal, season ticket applications for football and basketball, an option to purchase parking passes for athletic department events, and an invitation to the “Pride of the Pack” celebration. In between are seven additional levels of membership, each with differing benefits. The benefits increase with the amount given in a year. Donations to the Wolfpack Club, as with all ASGs, are 80% tax deductible.

The University of North Carolina’s Rams Club is structured similarly. Students can join for $25. Non-students must pay $100 to become Tar Heel members of the club. The highest level is the Championship level, for which members contribute at least $25,000. Again, benefits increase as giving increases. For Rams Club members, one category is tied to endowed giving: the Scholarship level. To reach the Scholarship level, a member must give $500,000 within five years to endow an athletic scholarship. The member then must
make an annual contribution at the Coaches Circle level ($6,000) to maintain benefits.

Schools with smaller enrollments have succeeded in increasing departmental donations by focusing on the wealthiest donors. At Wake Forest University, the Moricle Society was created for donors who contribute at least $60,000 per year. These members of the Deacon Club, Wake Forest’s ASG, receive free flights on team charters and may meet with coaches before games for private overviews of game strategy. The Moricle Society has obtained over $1 million per year in additional revenue for the ASG.

**Relation between annual giving and ticket sales**

Most Division I-FBS athletic departments link the purchase of tickets to football and men’s basketball events with annual giving. In Chapel Hill, season tickets to North Carolina men’s basketball are in high demand. The only way a donor can be sure to be able to purchase a season ticket is by giving at either the All-American level ($12,000), the Champion level ($25,000), or the Scholarship level. At the Coaches Circle level ($6,000), a donor has the right to purchase two season basketball tickets if they are available, but tickets are not guaranteed. At the All-American level, a donor may purchase two season basketball tickets, while a donor at the Champion or Scholarship level may purchase four. The ability to purchase tickets for high-demand events and the location of seats are based on a point system.

Point systems. Athletic departments have developed point systems to assign tickets to donors in an objective way. These systems vary slightly from institution to institution, but they generally award points based on the donor’s amount of annual giving, the number of years or consecutive years the donor has given, and the number of years or consecutive years the donor has purchased season tickets. The more points earned, the higher priority the donor has to purchase tickets. The location of the donor’s seat is also based on points earned.

The Wolfpack Club’s website ([www.wolfpackclub.com](http://www.wolfpackclub.com)) provides an example calculation of a donor’s points. A donor can earn points in four ways:

1. The donor receives 1 point for each consecutive year he or she has contributed to the club. For long-time donors, 2 points per year are earned for donations made in years 6 to 10, 3 points are earned each year for years 11 to 20, and 1 additional point is earned each year for donations made in years 21 and prior.
2. The donor’s cumulative gift total includes both annual giving and giving to capital campaigns. The donor earns 0.008 point for each dollar of the cumulative gift total.
3. The donor receives 0.012 point for each dollar of current annual pledge. Further, a donor can earn bonus points for increasing the pledge from year to year. The donor receives 0.012 bonus point for each dollar given over the previous year’s total.
4. Donors earn 1 point per year for ordering season tickets for football and 1 point per year for ordering season tickets for men’s basketball.

Points are totaled, and the donor receives a ranking based on the total points. This ranking determines the donor’s priority when ordering tickets and selecting seat location.

Suppose a member renews at the Lobo Club level and gives $720 for her annual membership. She has donated $6,600 in total, including payments toward one of the club’s capital campaigns and her membership fees over the past five years. She has not ordered season tickets for football or men’s basketball. The calculation for determining this club member’s points is as follows:

- Five consecutive years of membership earns five points: 5 × 1 = 5 points.
- With $6,600 of cumulative giving, she earns 52.8 points: $6,600 × 0.008 = 52.8 points.
- The $720 donation this year earns 8.64 points: $720 × 0.012 = 8.64 points.
- As she has not purchased season tickets to either men’s basketball or football, no additional points are earned: (0 × 1) + (0 × 1) = 0 points.
- Total points earned for this donor are 66.44: 5 + 52.8 + 8.64 + 0 = 66.44 points.

Her rank, or priority, is based on the 66.44 points earned and where her points fall compared to the points of all other Wolfpack Club members.

For many athletic department donors, their only donation to the department is the fee to purchase football or men’s basketball tickets (Wolverton, 2007). Some universities now include donations to other school departments in the calculation of a donor’s points. For example, the Tiger Athletic Foundation at Louisiana State University includes academic contributions in the calculation of points that earn premium seating rights and other athletic department-related benefits. One priority point can be earned for every $4,000 donated to
the LSU Foundation or LSU Alumni Association. Seating policy restructuring. Because the ability to purchase tickets to high-demand games drives donations to ASGs, over time schools reassign seats and overhaul their point systems both to generate additional revenue and to make the system more equitable for long-time and newer donors alike. Some schools, such as the University of Maryland and The Ohio State University, reassign seats each season based on their point systems. Other institutions, such as Iowa State University and the University of Missouri, only reassign seats periodically based on their point systems.
Intra-university development issues

When donations go to an athletic department, many faculty members complain about the emphasis placed on athletics. At Oklahoma State University, T. Boone Pickens donated $165 million to the athletics department. Eight years later, this donation was still the largest single donation in the history of college athletics. All of the money went toward athletic facilities. Football received $120 million for new offices, training rooms, and additional seating in the stadium, and $54 million went to a new multipurpose indoor practice facility. The tennis program received $15 million for a new, modern facility. A former chairman of Oklahoma State’s Faculty Council was publicly critical of the gift and cited the donation as an example of the university’s overemphasis on college athletics. Pickens countered that you give the money to the programs you choose (Wieberg, 2006).

Some are concerned that the increases in giving to athletics will impact the giving of gifts to the university as a whole. At the University of Connecticut, giving to athletics rose from $900,000 in 1989 to $4.29 million in 1993. Over that same period, all other university giving fell from $7.5 million to $4.29 million. The net result, therefore, was a $180,000 increase in giving to the university (Zimbalist, 2007). For Division I-FBS schools, athletic donations were 15% of an average university’s total donations in 1998. By 2003, athletic donations accounted for 26% of the total (Stinson & Howard, 2007). This trend has aroused fear on campuses about the limited pool of money donors are willing to give. If more is given to athletics, less will be available for academic programs (Wolverton, 2007).

As an example, Clemson University restructured its football seating policy after the 2007 season (Strelow, 2008). The restructured policy, according to Clemson officials, rewarded donors’ loyalty, as well as their giving. A reseating usually assigns seats to the donors who gave the most or who earned the most priority points, but the Clemson policy gave current ticket holders the right to keep their premium seats (seating between the 30-yard lines) if they met the new monetary standards set for those seats. The resulting change affected membership in the highest categories of IPTAY, Clemson’s ASG, as 70% of members seated in the newly designated premium seating area increased their giving level in order to retain their seats or to improve their seat location. For example, the Heisman level ($10,000) increased from 200 members to 316 members, and the McFadden level ($5,600) increased from 103 members to 459 members. In all, for the five highest membership categories ($2,100-plus), membership increased 54%. The increase in giving exceeded expectations, and demand for premium seats outpaced supply. Demand was so great that some donors who significantly increased their giving had to remain in their current seat location or even had to move to slightly less desirable premium seats.

Seat licenses. In restructuring their seating policy, some schools have added a second layer of giving for a donor to qualify for premium seats. These schools require a seat license, similar to the PSLs that have been sold in professional sport over the last two decades, on top of annual giving minimums for access to seating purchases. To purchase season tickets in its baseball stadium, a fan at the University of South Carolina must be a member of the Gamecock Club and pay a seat license fee (see Exhibit 14.15). The seat license, which the university refers to as a seat donation, is tax deductible. The cost of each season ticket, then, is the $254 ticket price, plus the seat donation required to purchase the particular seat, plus the required donation to the Gamecock Club. Annual donations to the Gamecock Club bring privileges across sports, so one donation made during the year can fulfill the season ticket requirements for both football and baseball. In 2015, the University of South Carolina raised $5.8 million in seat license fees from football, men’s basketball, and baseball (see Exhibit 14.8).

EXHIBIT 14.15 Seats and seat giving requirements for Carolina Stadium.

<table>
<thead>
<tr>
<th>SEAT TYPE</th>
<th>NUMBER AVAILABLE</th>
<th>MINIMUM GAMECOCK CLUB MEMBERSHIP</th>
<th>SEAT LICENSE FEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>1,746</td>
<td>Century ($165)</td>
<td>$25</td>
</tr>
<tr>
<td>Garnet</td>
<td>1,807</td>
<td>Century ($165)</td>
<td>$50</td>
</tr>
<tr>
<td>Gold</td>
<td>1,250</td>
<td>Century ($165)</td>
<td>$75</td>
</tr>
</tbody>
</table>

471
<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Box</td>
<td>113</td>
<td>Century ($165)</td>
<td>$115</td>
</tr>
<tr>
<td>The Perch</td>
<td>150</td>
<td>Silver Spur ($3,300)</td>
<td>$1,250</td>
</tr>
<tr>
<td>Club</td>
<td>128</td>
<td>Silver Spur ($3,300)</td>
<td>$1,500</td>
</tr>
<tr>
<td>Suite</td>
<td>80</td>
<td>Silver Spur ($3,300)</td>
<td>$37,500</td>
</tr>
</tbody>
</table>

Note: There are five suites with 16 tickets per suite. Fees are on a per suite basis.
Endowed giving has been mentioned already, but it merits a deeper discussion. Establishing and raising funds for endowments may be included in a capital campaign or an annual giving program. For an athletic department, an endowed fund is a fund made up of endowed gifts. These gifts, held by the department or its ASG in perpetuity, are invested, and only a portion of the fund’s annual investment return is used for the fund’s specific purposes. To protect against inflation, the remaining investment return is added to the fund’s principal amount. The goal of the reinvestment is to maintain the value of the principal. Typically, athletic departments use endowed funds for scholarships, coaching salaries, or program-specific support. An endowment may be created through gifts of cash, publicly traded securities, stock in closely held corporations, real estate, or bequests. The donor may receive tax advantages including savings on income taxes, capital gains taxes, and transfer taxes, depending on the asset given and the gift arrangement.
CONCLUSION

Though it appears that college athletics is awash in money—from the NCAA’s $700 million television contract with CBS and Turner Sports to the profile of high-powered athletic programs—it is very difficult for an athletic department to generate more operating revenues than operating expenses, let alone be self-sustaining. This is especially true for Division I-FCS, Division I-Other, Division II, Division III, and non-NCAA schools. As allocated revenues are the foundation of many programs’ revenues, financial pressures on campuses across the country are resulting in an increasing emphasis on athletic department development programs. At all levels, programs are implementing capital campaigns, creating detailed annual giving programs, and creating endowments to support the ongoing mission of athletics on campus in an effort to secure the financial future of intercollegiate athletics.

Endowing Tobacco Road

The University of North Carolina and Duke University have two of the more developed athletic department endowment programs in the NCAA. The main endowed fund at North Carolina is the Scholarship Endowment Trust, with over $196 million in assets. From this principal, 5% ($9.8 million) is used to pay annual scholarship costs. The trust is being built through endowed giving and the fund’s investment returns. As mentioned previously, donors may endow a scholarship with a gift of $500,000, payable over a five-year period. The Scholarship Endowment Trust does not fully cover the costs of all of North Carolina’s athletic scholarships. The goal is to raise over $316 million for this endowment to cover the $15.8 million (which would be 5% of the endowment total) cost of providing approximately 450 scholarships to athletes in 2015. Tuition costs are expected to grow to $21.1 million by 2017. North Carolina hopes to fund athletic scholarships fully through this endowment, but with the cost of education rising faster than inflation (North Carolina scholarship costs have doubled over the past 12 years)—and, more important, rising faster than the return rate of the endowment—North Carolina has had to continue to raise money for the fund.

In addition to raising funds to offset scholarship costs, North Carolina has begun to create endowments for each of its teams. The funds for the Sport Endowments are invested, providing an annual yield of 5%, which is the same yield provided by the Scholarship Endowment Trust. Sport Endowments provide supplemental income to each team’s individual budget, and the money may be used at the coach’s discretion. Typically, this fund provides monies to enhance recruiting, team travel, and assistant coaches’ salaries.

Duke University, through its ASG, the Iron Dukes, responded to North Carolina’s endowment efforts with two major programs. First, Duke created an endowment fund for scholarships. According to the Iron Dukes website,

Growing our endowment designated to scholarships is vital to advancing all of our priorities in Duke Athletics, and we invite named scholarship donors to campus each year to meet their student-athletes at our scholarship celebration. With increased endowment support, funds can be otherwise directed to our programs, coaches, recruitment efforts, and facilities.

As the cost of Duke tuition continues to rise so does the gap between endowed scholarships and what it would take to become fully endowed. This gap in 2013–2014 academic year totaled $260 million. By endowing a scholarship, you can help close this gap and help Duke Athletics to continue building champions.

As Duke is a private institution, the cost of providing an athletic scholarship is considerably higher than the cost at North Carolina, a public institution. To endow a full scholarship at Duke requires a gift of $1 million. At North Carolina, the amount is $500,000.

A second major endowment initiative at Duke was its Basketball Legacy Fund, created in 2000 to fund Duke University men’s basketball perpetually. The fund’s yield is used for player scholarship costs, coaching salaries, and the operating costs of its team. The Legacy Fund was fully endowed in 2012. It pays for the costs of 13 scholarships, 2.5 managers’ scholarships, the head coach’s salary, and salaries of two assistant coaches, an intern, and an academic advisor (Beaton & Kyle, 2012).

case questions

1. How are development efforts used to fund athletics at your institution?
2. How do these development activities at your institution compare to North Carolina’s and Duke’s activities?
3. What risks are involved when an athletic department relies on the interest earned from an
endowment to fund its program?
4. What are the benefits of using endowments?

concept CHECK
1. How does money flow from the NCAA to its member institutions?
2. What differences in structure lead to financial differences among NCAA member institutions?
3. What financial role does college football play at NCAA Division I-FBS institutions? How does this compare to Division I-FCs institutions?
4. Why are athletic departments’ development efforts so critical?
5. What problems may exist in the relationship between donations and ticketing for college athletic events?

PRACTICE problems
1. As director of development for Southern Ohio State University (SOSU), you have been charged with developing a plan to endow 12 men’s basketball scholarships. The current cost of a scholarship athlete is $45,000. With tuition expenses expected to increase at a 5.5% rate annually and the endowment’s return expected to average 7% over time, calculate the total amount that will have to be raised to endow the 12 scholarships fully.
2. Based on your work in Problem 1, develop a major gifts table for the capital campaign. Explain the method you used to construct the chart.

REFERENCES
Notes

*The Power 5 conferences include the Big 10, Big XII, the ACC, the Pac 12, and the SEC.
*Data were obtained through freedom of information (FOI) requests. USA Today sent requests to the 225 public schools that have an obligation to release their data through FOI requests. Private institutions have no legal obligation to comply with such requests, and none have done so. Also, state law in Pennsylvania and Delaware exempts schools in those states from complying.
KEY CONCEPTS

collective bargaining
collusion
competitive balance
draft lottery
dynamic ticket pricing
expansion fee
franchise ownership model
free ride
inheritance (death) tax
Larry Bird exception
league think
local market
lockout
luxury tax
monopoly
permanent seat license
personal seat license
player draft
poled debt
profit maximization
relegation system
reserve clause
salary arbitration salary cap
salary sloting
scalping
secondary ticket market
Sports Broadcasting Act (SBA)
stadium-related revenue sources
territorial rights
variable ticket pricing
win maximization
wins above replacement (WAR)
Introduction

“NFL owners are fat-cat Republicans who act like socialists.”
FORMER CLEVELAND BROWNS AND BALTIMORE RAVENS OWNER ART MODELL

“To me, NBA franchises are like pieces of art. There are only 30 of them. They aren’t always on the market…. If you just looked at the Cavaliers in terms of revenues, profits, and balance sheets—and you paid this amount for it—people would say ‘You’re insane! You’re nuts…. ’ But if you look at all the tentacles, the impact on our other ventures, it makes tremendous sense.”
CLEVELAND CAVALIERS OWNER DAN GILBERT

Professional sport leagues operate differently from other businesses. Whereas most companies would like to dominate and even eliminate their competitors, individual franchises in professional sport leagues need other franchises to exist so that competitive games can be scheduled. Without competitors, a franchise is unlikely to attract many customers. Owners of professional sport teams must consider the impact of their financial decisions on the other owners in the league.

This is just one aspect of the fact that professional sport franchise owners often have different motivations in purchasing and operating a team than owners in non-sport industries. Certainly, one goal of every business is to generate revenues that exceed costs and expenses, and consistent generation of profits will maximize the value of the organization (Groppelli & Nikbakht, 2000). In most cases, shareholders will insist that management pursue the continual generation of profits. Although all professional sport owners certainly desire to generate profits, for some, profit maximization—the pursuit of the highest profits possible—is a secondary goal. In the early 1900s, the majority of professional sport owners operated their team as their primary income source, but today most professional sport owners have already established highly successful non-sport organizations that have earned millions or billions of dollars in profits. For some of these owners, ownership of a professional sport franchise is primarily about competition, the opportunity to be a key figure within a community, and ego gratification (Rascher, Nagel, McEvoy, & Brown, 2011). These owners may be more interested in win maximization—the pursuit of winning as a primary goal.

Owners for whom profit maximization is not the primary goal typically focus their financial resources on their team’s on-field success. The pursuit of winning may or may not increase the overall value of the firm. For example, in MLB throughout the 2000s, the New York Yankees had the highest player payroll in the league. The Yankees’ spending attracted numerous high-quality players, who led the team to on-field success and higher profits. On the other hand, in the early 2000s Jerry Colangelo, owner of the Arizona Diamondbacks, spent lavishly in an attempt to sign players to win a championship. Though the Diamondbacks beat the Yankees in the 2001 World Series, Colangelo eventually experienced financial hardship, as the team did not generate enough additional revenues to offset expenses. The Diamondbacks had to decrease salaries, as well as other expenses, a few years after the World Series victory, and in 2004 Colangelo sold his interest in the franchise.

Within a league, the various team owners possess different financial resources that accrue from the team and other business ventures. The “excessive” pursuit of on-field excellence by one franchise or a small group of franchises could have an adverse financial impact on other owners. If an owner who has large financial resources elects to diminish or eliminate potential franchise profits in the pursuit of winning, other owners may not be able to compete in signing the best players. If many teams in a league do not have an opportunity to acquire or retain top players, the league’s competitive balance is disrupted. Competitive balance may be defined or measured by various specific metrics, but generally it is held that each franchise, if its management executes a sound strategy, should have a reasonable opportunity to compete for a playoff spot at least every couple of seasons. When competitive imbalance—or merely the perception of competitive imbalance—occurs, fans may lose interest not only in their local team but also in the entire league.

Because of the unique financial nature of professional sports, where owners have divergent goals regarding win maximization versus profit maximization, league offices establish rules and regulations to ensure that individual teams, as well as the entire league, can succeed financially. Complicating this effort is the fact that each franchise operates in a local market that has distinct differences in population, economic activity, and passion for sport. League offices attempt to balance franchises’ financial and competitive goals with the overall goal of increasing the financial viability of the league.
LEAGUE STRUCTURES

The most popular professional sport leagues in North America—MLB, the NBA, the NHL, and the NFL—began as regional enterprises with limited financial resources. During their early existence, financial survival was typically their most pressing concern. However, as these leagues became financially stable and began to expand, concern for the league’s structure and operating procedures became more important. Leagues that have been established more recently, such as Major League Soccer, Major League Lacrosse (MLL), and the National Lacrosse League (NLL), have been able to learn from the experiences of the Big 4 professional leagues.

Franchisee/Franchisor Structure

North American professional sport leagues usually operate as quasi-socialist franchisee/franchisor cartels (Scully, 1995). Under the franchise ownership model, owners purchase individual franchises from the league and then sign players, arrange for a facility in which to play games, conduct marketing activities, and control all other aspects of the team’s operation. While operating their individual franchises, owners work with the owners of other franchises to set policies that affect the entire league.

Role of the commissioner

Typically, owners in a league hire a commissioner and establish a league office. The commissioner’s office, in consultation with the owners, will negotiate national television contracts, establish relationships with vendors for league-wide licensed merchandise sales, hire and supervise game officials, and negotiate a collective bargaining agreement with the players’ union. The commissioner is the “leader” of the league, but he or she remains the employee of the owners. Kennesaw Mountain Landis, former federal judge and the first MLB commissioner, worked under a “lifetime” contract, but today most commissioners do not enjoy such job security. Many fans believe that the commissioner’s role is to do what is best for the sport, but in reality it is to do what is best for the owners. Former MLB Commissioner Fay Vincent displeased the owners to such an extent that they gave him a vote of no confidence after he had served less than three years on the job. The vote effectively ended his commissionership, and he resigned on September 7, 1992.

SIDEBAR 15.A
Beyond the Big 4

In addition to the Big 4, a number of additional North American professional sport leagues have been established or are emerging. Numerous minor league baseball leagues have operated for over 100 years, and many of their teams continue to set yearly attendance records. Sports such as lacrosse now have professional leagues that attract thousands of fans each year. Leagues for individual sports such as golf (Ladies Professional Golf Association, Professional Golfers Association), tennis (Association of Tennis Professionals, Women’s Tennis Association), and bowling (Professional Bowlers Association) have for many years operated popular events.

Every professional sport league or organization, regardless of its history or current operation, faces similar financial challenges. This chapter focuses primarily on the Big 4 North American professional sport leagues, as well as the NASCAR and MLS, because these leagues tend to have the highest revenues and the greatest diversity of revenue sources. In most cases, their considerable financial reserves ensure that they will remain in existence for many years into the future. Among the “emerging” leagues, the AFL had one of the more stable financial foundations. Despite this, the league folded operations in 2009 with dwindling revenues and a stalling economy. The league was able to re-form in 2010, but it has continued to struggle to attract a consistent and considerable fan base. Certainly, a variety of professional sport leagues are worthy of study and potential employment, and readers are encouraged to study the establishment, growth, and financial operations of other professional sport leagues.
Pete Rozelle and “league think”

The National Football League has been the dominant North American professional sport league for over 30 years. The NFL’s tremendous financial success can in large part be directly attributed to Commissioner Pete Rozelle and his idea of “league think.” When Rozelle became NFL commissioner in 1960, the 12-team league had low attendance figures for many of its games, and much of its television coverage occurred at the local level. Rozelle immediately began to lobby the NFL owners to think of the overall financial health of the league as their first priority and individual franchise profits as a secondary concern. His “league think” philosophy was intended to pull the disparate NFL owners together in their efforts. Although financially “stronger” franchises, such as the Cleveland Browns, New York Giants, and Washington Redskins, appeared to have power and financial status to lose in a “league first” environment, their willingness to pool television revenue was a critical factor in the rapid growth of the NFL’s popularity in the 1960s. Without Rozelle’s prodding and the willingness of NFL owners such as Wellington Mara to relinquish some of their short-term profits, the NFL likely would not be the most popular professional sport league in the United States today.

In addition to convincing the NFL owners that it would be in their best interests to collectivize some of their efforts, Rozelle lobbied Congress for a special antitrust exemption for professional sport leagues. The pooling and selling of television rights by leagues was against the law until passage of the Sports Broadcasting Act (SBA) in 1961, which provided the exemption Rozelle sought. Once Rozelle had convinced the U.S. Congress that the SBA would not cause significant hardship to consumers, he negotiated a television contract with CBS that dramatically increased the revenues of every NFL owner. The NFL’s television contracts continued to increase, in some cases dramatically, throughout Rozelle’s tenure and after his retirement in 1989. Although every professional sport league has financially benefited from pooling television rights, the NFL has especially benefited, since it pools and sells every regular season and playoff game.

Rozelle’s efforts to strengthen the league through collective action were not limited to television revenues. While owners in other leagues often voiced public disagreements over league operations, Rozelle kept the owners (except for Al Davis) primarily working toward the league’s financial goals. The NFL’s ability to maximize league revenues through shared ticketing and licensed merchandise revenues has enabled “small market” franchises, such as the Green Bay Packers and Pittsburgh Steelers, not only to exist but to prosper competitively and financially. NFL franchises are now by far the most valuable among the North American professional leagues, and much of that value is directly attributable to Rozelle’s vision.

Role of the league owners

The commissioner’s office will handle routine activities, but a major responsibility of league owners (or their representatives) is to meet regularly to vote on various league policies. Each league establishes rules and voting procedures for decision making. In some cases, a majority vote is all that is required to approve a change in policy, while in other cases a larger majority, such as two-thirds or three-fourths, is needed. League votes on certain issues can have a tremendous impact on the finances of the league and individual franchises. On occasion, individual owners, despite having agreed to operate under the league bylaws when they entered the league, have rejected league decisions and sought legal recourse.

The most famous example of an owner suing his own league took place in the 1980s and involved the NFL’s Oakland Raiders. Despite sellout crowds in Oakland throughout the 1970s, by 1980 Raiders owner Al Davis desired to move his team to Los Angeles, where it could play in the Los Angeles Memorial Coliseum (which was much larger than the Oakland–Alameda County Coliseum). The move required yes votes from three-fourths of the owners—but in fact they voted 22–0 (with some abstentions) against the move, partially because they felt it would send a bad message to every NFL fan if a team that had attracted sellout crowds simply abandoned its home marketplace (Harris, 1986; Shropshire, 1995). The Los Angeles Memorial Coliseum Commission (LAMCC) and the Raiders sued the NFL for restricting franchise movement. The LAMCC and the Raiders claimed that restricting movement was an unfair restraint of trade and a violation of antitrust law (Los Angeles Memorial Coliseum Commission v. National Football League, 1984, 1986).

The Raiders and the LAMCC eventually won the case, despite the negative public relations that the case created in the Bay Area and the efforts of the City of Oakland to retain the franchise (Harris). Numerous subsequent legal decisions established that professional sport leagues could require relocating teams to
compensate the other league owners financially if the move had a negative effect on overall league revenue (Shropshire). The NFL’s St. Louis Cardinals did provide compensation to the rest of the league’s owners when they moved to Arizona in 1987, as did the Los Angeles Rams when they moved to St. Louis in 1995. Ironically, despite the extensive litigation the Raiders endured for their move to Los Angeles, Al Davis decided to move the franchise back to Oakland in 1995 due to the changing economic environment in the NFL (which placed greater emphasis on luxury suite revenues rather than general ticket sales) and promises of considerable upgrades to the Oakland–Alameda County Coliseum.

Single-Entity Structure

Despite occasional contentious battles with maverick owners, most North American professional sport leagues operate effectively with a franchisor/franchisee structure. However, some leagues have now attempted to adopt a single-entity structure, in which owners purchase shares in the league rather than purchase an individual franchise. With a single-entity structure, the league office handles all player transactions, such as negotiating contracts and assigning players to teams. This structure is designed to distribute players throughout the league in a manner that encourages competitive balance, which should increase fans’ interest. Under a single-entity structure, the league office will also negotiate sponsorship and media contracts for the entire league and will ensure that revenues are generated and used in a manner that maintains the league’s financial solvency.

As discussed in Chapter 1, a single-entity structure will typically reduce league costs, as individual owners cannot sign players to salaries that do not conform to the overall goals of the league. In addition, the league office can ensure cost containment for travel, equipment, and team staff. Although a single-entity structure provides some financial benefits, critics have argued that it reduces individual franchises’ incentives to maximize their revenues (Mickle & Lefton, 2008). Most professional sport franchises generate a substantial portion of their revenues from local sources. Though the league office may be effective in negotiating national media contracts and sponsorship agreements, local sponsorships are difficult to identify and foster. In addition, if individual teams do not have incentive to increase revenues, creative marketing activities that would attract additional customers are less likely to occur, which negatively affects the entire league. The Women’s National Basketball Association initially operated under a single-entity structure but soon switched to a franchisee/franchisor model to encourage the maximization of local revenues. The WNBA commissioner at the time, Donna Orender, noted, “While the launch model was successful, it became evident that owners wanted more control” (Mickle & Lefton, para. 10). However, as individual owners exert marketing and financial control in a franchisee/franchisor model, large revenue discrepancies can occur, which can hurt the league’s overall competitive balance.

Major League Soccer began play as a single-entity league in 1996. Though the single-entity model enabled the league to build its fan base slowly and consistently, some of the players argued that the league’s structure unfairly and illegally held down player salaries. Because just two men, Lamar Hunt and Philip Anschutz, were the league’s primary investors and the “operators” of multiple franchises, the players felt that there was no incentive for these owners to compete for player services. In Fraser v. Major League Soccer (2000), a group of players filed an antitrust suit against the MLS claiming that the league’s structure unfairly restrained trade, since players could not offer their services among the different MLS teams. The league countered that the single-entity structure instead prevented any unfair restraint of trade, because one individual entity cannot conspire with itself to hurt the marketplace (“Court accepts,” 2000). In addition, the league argued that competition for player services had increased since the MLS was founded, because before 1996 there was no viable Division I professional soccer league in the United States. The court eventually ruled in favor of MLS, determining that its single-entity structure, though unusual in North American professional sport at the time, was legal under antitrust laws. The players lost the case, but the attention that the lawsuit drew led to negotiations between the league and the players that increased player benefits. In addition, as the MLS became profitable, new investors were attracted, and the league began to incorporate elements of a franchisee/franchisor model (Wagman, 2008).
Every professional sport league has an interest in maintaining financially successful teams. Because a successful league depends on competent and well-financed owners, leagues establish ownership rules and policies to protect the solvency of every league member. If one or more of the league’s franchises experience significant financial hardship, then the league itself might suffer.

Each of the major North American professional sport leagues experienced numerous franchise problems during its early history. Some teams, such as the Akron Pros of the NFL, Louisville Grays of MLB, Pittsburgh Pirates of the NHL, and Toronto Huskies of the NBA, failed and no longer exist. Other teams, such as the NFL’s Decatur Staleys (Bears) and the NBA’s Fort Wayne Pistons, moved from their initial location shortly after being created in an effort to establish a viable fan base. Given these early franchise problems, it is no wonder that leagues sought to put rules and policies in place to protect the financial well-being of the league. This section discusses league rules and policies regarding new ownership, debt, expansion, and territorial rights.

New Ownership

Each of the professional sport leagues has established rules regarding who may become an owner and join the “club.” In many cases, the potential new owner must convince the current owners that he or she will work well within the established league structure. In 2009 Jim Balsillie met with resistance to his attempt to purchase the NHL’s financially struggling Phoenix Coyotes. Much of the resistance was not related to Balsillie’s offered purchase price, financial reserves, or mental acumen, but rather to his earlier attempts to purchase NHL teams. In particular, other NHL owners were not happy with Balsillie when he attempted to purchase and relocate the Nashville Predators in 2007. Balsillie announced the purchase and move of the franchise before the league owners approved the sale, which caused consternation among the owners and in the commissioner’s office. As another example, the NBA has fined Dallas Mavericks owner Mark Cuban over $1 million for his actions and criticisms of the league since he purchased the team in 2000. Observers have speculated that if the NBA owners had anticipated Cuban’s behavior, they would have rejected his purchase. Although many owners may agree with some of Cuban’s observations and opinions, the way he has voiced his displeasure regarding certain league activities has caused internal strife.
NASCAR

The National Association for Stock Car Auto Racing (NASCAR) has a unique ownership structure in North American professional sports. Founded by William France, Sr. in Daytona Beach, Florida, in 1948, NASCAR is a sanctioning body of automobile racing. NASCAR’s early years were focused on organizing stock car races, primarily in the southern portion of the United States. Since the early 1980s, the popularity of NASCAR events has grown tremendously. NASCAR currently organizes multiple racing series, the Sprint Cup Series being the most popular. Each year, millions of fans attend NASCAR events, and millions more watch the races on television. Though William France, Sr. retired as chairman in 1972, NASCAR has remained largely a family-operated business, with William France, Jr. succeeding his father and grandson Brian France succeeding William Jr. in 2003.

Though NASCAR is certainly the dominant force in the North American automobile racing industry, it is “only” an organizer of events. The racing teams are owned and operated by other individuals. These racing teams hire drivers and all of the other employees necessary to prepare for competition. The racetracks are also owned by separate entities. However, the France family is the majority shareholder of International Speedway Corporation (ISC), an organization that currently owns and operates 12 racetracks that host NASCAR events. William France, Sr. founded ISC in 1953 as the organization that would build and operate the Daytona International Speedway. Despite opening the Talladega Superspeedway in 1969, ISC experienced slow growth during its first 40 years of existence, until in 1999 it merged with Penske Motorsports, which gave it control of four additional tracks. Since the merger, ISC has continued to open new racetracks, and these have typically been awarded races in NASCAR’s popular Sprint Cup Series.

The France family’s “dual ownership” of NASCAR and selected racetracks has generated criticism of the family and legal challenges to NASCAR’s structure. In 2005, Kentucky Speedway filed an antitrust lawsuit against NASCAR and ISC claiming that they had conspired to prevent eligible racetracks from submitting bids to host NASCAR events. Though Kentucky Speedway had hosted NASCAR Nationwide Series and Camping World Truck Series events, it had not been successful in its attempts to host a Sprint Cup Series event. A Sprint Cup Series event would have generated millions of dollars in additional revenue for the racetrack and the surrounding community. Kentucky Speedway argued that NASCAR could have made more money by running a Sprint Cup Series race at its venue than at some of the other venues that currently hosted Sprint Cup Series races. Kentucky Speedway further argued that the France family had illegally conspired to keep the top NASCAR events out of Kentucky’s newest and “superior” track in favor of other “less desirable” venues (some of which ISC controlled). The case generated considerable publicity in the sport business world, but it was thrown out of court in January 2008. Kentucky Speedway filed an appeal in July 2009, but in December 2009 it decided to drop litigation against NASCAR. In 2011, NASCAR began holding a Sprint Cup Series race at the Kentucky Speedway. Each year since, the Quaker State 400 has run in late June or early July.

Potential personality conflicts are important considerations, but of greater importance is a potential owner’s ability to operate a franchise without incurring significant financial losses. Each of the leagues requires that potential owners provide information regarding their finances. If a prospective owner does not have sufficient financial resources, the league is likely to reject the ownership bid in fear that a financial problem for an individual franchise could prove detrimental to the entire league.
Japanese professional baseball problems beginning to change?

Professional baseball has been popular in Japan since the game’s founding in 1936. Nippon Professional Baseball (NPB) operates with teams in two separate leagues (Central and Pacific) and uses rules similar to those of MLB, but it has a very different business model. Whereas most MLB owners are individuals who desire to achieve some combination of on-field and financial success, the owners of NPB franchises have traditionally been corporations. In most cases, the owners of the NPB teams have not been motivated primarily by direct profits. Instead, corporate owners have viewed their teams as marketing vehicles for enhancing the brand recognition and sales of the parent company (Whiting, 1989, 2004). Previously, teams rarely considered implementing marketing initiatives to attract and retain customers or revenue-generating ideas that are commonplace in professional sport in the United States.

This financial and operating structure was adequate for many years, but it has recently created problems, as many prominent Japanese players have sought to leave Japan to play in MLB. With several of the top Japanese stars leaving—and access to MLB games in Japan growing because of new television distribution opportunities and the prevalence of the Internet—many baseball fans in Japan have decreased their consumption of NPB games and ancillary products. For years, the Japanese have taken great pride in developing some of the world’s top baseball players through the country’s unique baseball system. Unfortunately, the traditions and cultural expectations that have helped to develop top players have also hindered change to NPB’s business activities.

However, this may finally be changing. Former MLB managers, such as Bobby Valentine and Terry Collins, have taken jobs in Japan and attempted to incorporate revenue-generating ideas into the Japanese system. Changes have also come from young Japanese baseball executives who were educated or employed in the United States. Although change has met considerable resistance in the past, the understanding that the high-quality on-field Japanese baseball product may fade if changes to the business model are not implemented is slowly but steadily beginning to permeate some of the franchises and the league office (Nagel & Brown, 2009).

The NFL has the most strict ownership requirements of all the North American professional sport leagues, including a steep cash down payment requirement. Potential owners who cannot meet this requirement may find their bids rejected. In 2005, Reggie Fowler agreed to purchase the Minnesota Vikings from Red McCombs for $625 million (Casacchia, 2005). McCombs and Fowler announced the sale prior to the other NFL owners’ granting final approval. The sale was to be historic, as Fowler would have been the first African American owner in the NFL and only the second African American owner in the Big 4 leagues. However, the other owners rejected Fowler’s bid because he was unable to meet the NFL’s mandated 25% cash down payment (in this case over $150 million). Fowler’s net worth was well over the purchase price, but his lack of liquidity forced the owners to reject his bid. The team was later sold to Zygmunt Wilf.

In addition to a cash down payment, the NFL also requires that an individual owner, rather than a corporation, operate the team. (As discussed in Chapter 5, the Green Bay Packers’ current ownership is permitted because it was established prior to the current ownership rules.) The NFL also requires that the individual majority shareholder have at least a 30% stake in the franchise (Clayton, 2008). In 2009, four of the five brothers who had inherited 80% of the Pittsburgh Steelers from their father, Art Rooney, Sr., sold some or all of their shares in order to meet the NFL’s requirement (Prine, 2009). Prior to the sale that provided Dan Rooney with enough shares to meet the NFL’s mandate, the five brothers each owned 16% of the team (“Art Rooney Jr.,” 2008). In addition to the 30% requirement, the Steelers also had violated NFL rules against the ownership of gambling businesses, as some of the brothers had expanded their holdings in racetracks to include casinos.

In 2013, the NBA was involved in “choosing” a new owner. In 2008 Commissioner David Stern and the other owners allowed the Seattle Supersonics to move to Oklahoma City to become the Thunder, leaving Seattle without an NBA franchise. When, in 2013, the owners of the Sacramento Kings experienced significant financial difficulty and desired to sell their franchise, a Seattle ownership group headed by Chris Hansen and then–Microsoft CEO Steve Ballmer offered $625 million for the team. However, the NBA “encouraged” the Kings’ owners, George, Joe, and Gavin Maloof, to seek a new ownership group that would keep the team in Sacramento (Richter & Hurt, 2013). In 2013, the Kings were sold to an investment group headed by Vivek Ranadive for $534 million (“Done deal,” 2013).

Though the NBA experienced some public backlash from fans in Seattle who were annoyed that the league permitted the Sonics to leave and prohibited the Kings from later taking their place in the Evergreen State,
few could have anticipated the public furor over the comments made by Los Angeles Clippers owner Donald Sterling in 2014. Sterling, long unpopular with fans because of his unwillingness to spend money to retain players or maximize the fans’ game-day experience, was recorded making blatantly racist remarks to his long-time female companion, V. Stiviano. Though Sterling had committed worse actions in his dealings with various minority groups as a prominent landlord, the recorded comments became international news and the backlash was extensive. In one of his first acts as NBA Commissioner, Adam Silver announced that Sterling was permanently suspended and would be required to sell his stake in the Clippers franchise. Eventually, Steve Ballmer paid a record $2 billion for Sterling’s interest.
Long-term family ownership to end in professional sports?

With the recent rapid increase in the value of North American professional sport leagues, some concerns have been raised regarding the future ownership of franchises—particularly those in the NFL. The United States (as well as many individual states) applies an inheritance (or death) tax to wealthy estates when a person dies. In 2009, a 45% tax applied to any inheritances exceeding $3.5 million. In the case of an estate worth $5 million, the heirs would have had to pay $675,000 (45% of $1.5 million) in taxes. The President and the U.S. Congress often alter the inheritance tax—sometimes in an apparently haphazard manner—for political gain. In 2010, there was no scheduled federal inheritance tax, so an estate could pass directly to the heirs without a federal tax consequence (though many individual states retained inheritance taxes). This situation inspired morbid jokes about it being wise to pick 2010 to die in rather than 2011, if a person were given the choice. New York Yankees owner George Steinbrenner did die in 2010, “saving” his family an estimated $500 million in death taxes that would have been due had he died in 2009 (“How Steinbrenner saved,” 2010). The 2011 laws scheduled a 35% inheritance tax on estates larger than $5 million, with small increases scheduled in the estate-size exclusion amount in future years.

Inheritance taxes are a contentious political topic. Some argue that it is unfair to tax the assets of deceased individuals, as the money that person earned has already been taxed (in some cases multiple times). Others counter that considerable accrued wealth should not be permitted to be passed down from one generation to the next. Since many professional sport franchises are worth hundreds of millions or even billions of dollars, the cash necessary to pay potential inheritance taxes may be overwhelming, and the heirs might be forced to seek loans or even sell the team. Former Cleveland Browns owner Art Modell sold the team partially because of his concern regarding inheritance taxes. Former Jacksonville Jaguars owner Wayne Weaver sold his majority interest to Shahid Khan for $760 million, having earlier expressed a desire to avoid inheritance tax issues (Clayton, 2008).

Debt

In addition to scrutinizing prospective owners’ financial standing, leagues also establish ownership rules regarding the debt levels that a team may carry. For example, the NBA requires teams to have no more than $175 million in debt (Lombardo & Kaplan, 2014). Prior to 2005, MLB teams could carry debt equal to 40% of their franchise value (Kaplan, 2003). In 2005, MLB changed the debt limit to a maximum of ten times the team’s earnings before interest, taxes, depreciation, and amortization. Up to 15 times was acceptable if the franchise had recently borrowed money to build a new stadium. In addition, MLB raised the required principal payments when teams paid back loans on the league’s established credit lines. These rules are intended to prevent franchise owners from reckless borrowing.

The MLB debt rules were applied in 2009 when Joseph Ricketts and his family purchased the Chicago Cubs out of bankruptcy. In perhaps the most complicated sport franchise sale in history, the Tribune Company sold the Cubs, Wrigley Field, and other broadcast assets for $845 million (Sachdev, 2009). Once the Ricketts family established how they would fund and finance the purchase, MLB became concerned about their proposed debt levels. As a result, the Ricketts family had to agree to provide an additional $35 million in cash as an extra reserve in the event that projected cash flows did not meet expectations (Sachdev).

Leagues establish debt rules to prevent owners from experiencing significant financial problems, but in some cases a league must provide financial assistance when an owner does experience financial hardship. In rare cases, the rest of the owners in a league may elect to purchase the troubled team. Major League Baseball purchased the Montreal Expos in 2002 and owned the team until the league moved the club to Washington D.C. and sold it to Theodore Lerner. When the Phoenix Coyotes declared bankruptcy in 2009, it was revealed that for some time prior to the bankruptcy filing the team had largely been funded and operated by the NHL (Sunnucks, 2009).

Professional sport leagues do not want to see any of their franchises experience bankruptcy. This has been a rare occurrence in the Big 4 North American professional leagues since 1950, but teams such as MLB’s Seattle Pilots (1969) and the NHL’s Buffalo Sabres (2003) and Pittsburgh Penguins (1975 and 1998), in addition to the Coyotes, have filed for bankruptcy. When a team enters bankruptcy, potential problems may arise for the league, because of the financial uncertainty—particularly if the team cannot adequately reorganize its debt or if a new owner is not immediately found to purchase the financially troubled franchise. As mentioned earlier, the NHL worked to avoid the sale of the Phoenix Coyotes to Jim Balsillie once the team went into bankruptcy (Morris, 2009). Balsillie’s plan to move the team to Hamilton, Ontario, Canada, might...
have generated increased revenues, but the NHL desired to keep the team in Arizona, and current owners opposed Balsillie’s purchase for the additional reasons described earlier. Eventually the team was sold to Ice Edge Holdings, which agreed to keep the team in Phoenix (though it did plan to play a few games in Canada to increase potential revenue). Most of the recent bankruptcies in the Big 4 have involved hockey franchises, but the Chicago Cubs, one of the most storied teams in all of sports, declared bankruptcy in 2009, indicating that even a rabid fan base and a strong media presence (the Cubs were owned by the Tribune Company) cannot shield a professional sport franchise from poor financial decisions and the impact of a slowing economy.

More recently, the Los Angeles Dodgers experienced a financial disaster, which some observers viewed as actually the least pressing of the team’s problems. Despite MLB rules requiring owners to maintain 60% equity and league scrutiny of any team purchase, Frank McCourt and his wife, Jamie, purchased the Dodgers in 2004, largely through debt that clearly violated MLB rules. It was later determined that their financial position was not as strong as initially believed. However, despite their extensive use of debt, the McCourts likely could have operated the Dodgers successfully if the antics in their personal lives had not caused so much controversy—and expenditure of cash. In October 2009, after nearly 30 years of marriage, the McCourts announced they were separating. As the divorce proceeded, tabloid stories of marital infidelity, general nastiness between the separating couple, and an IRS investigation, as well as tales of massive expenditures of money on luxury items—all financed through debt primarily backed by the Dodgers—dominated much of the Los Angeles media landscape. A variety of websites tracked the sometimes daily developments. As the divorce proceeded, it became apparent to observers, and MLB, that the Dodgers were in danger of experiencing significant financial difficulty. Adding to the team’s misfortunes, in the first week of the 2011 season a San Francisco Giants fan, Brian Stow, was attacked outside Dodger Stadium. Stow suffered extensive injuries that resulted in long-term cognitive difficulties. The attack on Stow shocked the baseball world.

When the Dodgers needed special loans from Fox Broadcasting against a not-yet-MLB-approved future television deal to make payroll in April 2011, the reality that McCourt could no longer successfully operate the Dodgers became apparent to everyone. Major League Baseball stepped in and appointed a trustee to oversee the club on April 21, 2011. When the Dodgers requested that MLB sign a proposed $3 billion media contract with Fox, the league declined. Commissioner Bud Selig perceived the contract to be below market value and to be designed to provide Frank McCourt with enough money in the short term to retain the team while sacrificing long-term revenue opportunities (Wojciechowski, 2011). After a year of contentious negotiations—which included various interventions by different courts—the Dodgers, Dodger Stadium, and some adjacent real estate were sold in March 2012 to investment group Guggenheim Baseball Management (in which Magic Johnson was a minority partner) for $2.15 billion. This figure shocked many because less than two years earlier the team had been believed to be worth less than $1 billion (Egan, 2012).

A league’s purchase or direct assumption of control of a troubled team is a dramatic move and one that happens rarely. However, leagues often will provide various types of financial support for franchises. One is pooled debt. When a lender evaluates a loan applicant, it investigates the applicant’s ability to repay the loan. Since the combined financial stature of an entire league is much stronger than that of an individual team, the league can borrow money more readily than a team. The NFL’s G-3 and G-4 funds (discussed in Chapter 7), established to assist teams building new stadiums, are examples of pooled debt instruments.

In 2009, the NBA created a pooled-debt instrument to assist financially struggling franchises. The league borrowed $200 million to distribute to teams in need of cash. The loan was backed by the projected revenues of the entire league, resulting in a lower interest rate and a larger loan amount than any team could have secured individually. NBA Commissioner David Stern noted, “This was a show of strength in the creditworthiness of the NBA’s teams” (“NBA lines up,” 2009, para. 4). Some teams were criticized for utilizing the fund. The Orlando Magic and Utah Jazz were believed to be interested in tapping into the league’s available credit due to cash-flow concerns. However, despite experiencing (apparent) financial difficulty, the teams signed players to high-priced contracts soon after the NBA announced the new financing. The Magic signed backup center Marcin Gortat to a five-year, $34 million contract, and the Utah Jazz signed backup power forward Paul Millsap to a four-year, $32 million contract. These contract signings suggested that the financial problems some NBA franchises were experiencing may have resulted from their own decision making rather than a sloping economy.

Expansion

A critical element in any professional sport league’s success is the ability to expand into new territories at appropriate times. When a league expands, current owners are likely to see their portion of shared revenue
from media contracts and licensed merchandise decrease in the short term, as more teams are splitting the revenue. To compensate the current owners, the league typically charges a new owner an expansion fee, which is distributed to the other owners. Prospective owners have typically been willing to pay expansion fees to join a league, as professional sport ownership is certainly an exclusive club. Though the initial financial return on an expansion team is often small or even negative, many wealthy individuals are motivated by the non-financial ownership benefits already discussed; they view sport franchise ownership as a new challenge that cannot be duplicated elsewhere. In addition, an expansion franchise presents an owner the opportunity to enhance his or her personal brand while providing a metropolitan area its first opportunity to have a “new” team—an exciting prospect, even if the team’s on-field success in the first few years is limited. During the past 20 years, the expansion fees charged to new league owners have grown tremendously. Exhibit 15.1 lists expansion fees paid in the Big 4 leagues from 1991 through 2015.

EXHIBIT 15.1 Expansion fees paid to the Big 4 leagues, 1991–2015

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<th>TEAM</th>
<th>FEE</th>
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<td></td>
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<tr>
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<tr>
<td>2000</td>
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<td>Columbus Blue Jackets</td>
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<td>1995</td>
<td></td>
<td>Carolina Panthers</td>
<td>$140 million</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>Jacksonville Jaguars</td>
<td>$140 million</td>
</tr>
<tr>
<td>1999</td>
<td></td>
<td>Cleveland Browns</td>
<td>$530 million</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td>Houston Texans</td>
<td>$700 million</td>
</tr>
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<table>
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<tr>
<th>NBA</th>
<th>YEAR</th>
<th>TEAM</th>
<th>FEE</th>
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<td></td>
<td>Vancouver Grizzlies</td>
<td>$125 million</td>
</tr>
<tr>
<td>1995</td>
<td></td>
<td>Toronto Raptors</td>
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</tr>
<tr>
<td>2006</td>
<td></td>
<td>Charlotte Bobcats</td>
<td>$300 million</td>
</tr>
</tbody>
</table>

For most professional sport leagues, expansion is a critical component of their strategic plan. In the late 1950s, the NFL failed to recognize that it should expand to emerging metropolitan markets such as Denver, Boston, and Houston, which allowed the upstart American Football League to establish a presence in these areas. The leagues desire to expand at a rate that prevents rival upstart leagues from entering untapped...
metropolitan areas, but they typically will leave at least one or two viable cities unoccupied. This “failure” to meet potential demand is designed to preserve sufficient scarcity to motivate established markets to spend money to retain established teams. If the leagues allowed the supply of teams to equal or exceed the number of viable markets, this would reduce teams’ ability to use the threat of relocating to force municipalities to build new stadiums or remodel existing ones.
The future of women’s professional basketball in the United States

Since its founding in 1996, the Women’s National Basketball Association has attempted to build its brand and attract a stable fan base. From 2007 through 2014, the league averaged between 7,500 and 8,100 fans at each game, with consistent television ratings that roughly equaled those of MLS (Cardillo, 2013). By playing games in the summer, the WNBA has enabled its players to also play overseas in leagues that often offer far greater financial compensation. In particular, franchises in the Russian Premier League, which are usually owned and supported by tycoons who primarily desire to win games, have begun to offer salaries that can exceed $1 million a year—much larger than the WNBA’s maximum of $107,000. In 2015, the Russian team UMMC Ekaterinburg paid star guard Diana Taurasi $1.5 million and asked her to skip the WNBA season. Taurasi agreed to forgo playing the 2015 season with the defending WNBA champion Phoenix Mercury when UMMC Ekaterinburg offered her more money to rest than her WNBA team did to play (Fagan, 2015). Taurasi’s decision heightened concern among the WNBA and its fans that in the near future other top WNBA players will also sit out the summer season. Most of the best players in the world have been offered lucrative incentives to skip the WNBA season; Taurasi was the first one to accept. If other players follow Taurasi’s lead, the WNBA may need to alter its salary structure significantly—under the current system almost a third of the players received the maximum or close to max salary (as of this writing, $100,000) during the 2014 season. With the WNBA operating on a low budget (especially compared to the NBA and other men’s professional sport leagues), in order to retain the top 12 to 15 players, the league may have to ask other players to take a pay cut. Under this pressure, compensation levels of WNBA could change dramatically in the near future.

Territorial Rights

Ownership of a professional sport franchise confers a variety of benefits. One of the most important involves territorial rights—exclusive control of a predetermined area (typically a city’s entire metropolitan area). In theory, the establishment of specific territories enables a professional sport team to market exclusively in that area without fear that another team in the same sport will enter the area and “steal” customers. Every professional sport franchise vehemently protects its territory, as the limitation of direct competitors increases ticket prices and the value of media contracts. In the rare cases when teams have “invaded” another team’s territory (after receiving permission from the league to relocate)—as the NHL’s Anaheim Ducks and New Jersey Devils did—they paid compensation to the existing team.

Since territorial rules reduce competition, fans of professional sport must pay a premium, especially in large cities. For instance, the New York City metropolitan market could likely support additional teams in the NFL, NBA, NHL, and MLB, but territorial restrictions limit entry to the market. Certainly, New York offers a larger population base and much greater potential corporate support for a third NFL or NBA team than a city such as Kansas City or Indianapolis would provide. However, most professional sport team owners purchased their teams with the expectation of control of an entire metropolitan territory, and they paid for that benefit. Therefore, territorial rules are likely to remain in force, particularly since North American professional sport leagues have successfully eliminated their direct competitors.

In the last several decades, Major League Baseball has experienced two significant territorial disputes. When MLB purchased the Montreal Expos and decided to move the team to Washington D.C., it infringed upon the Baltimore Orioles’ territory. After extensive discussion and numerous legal threats from Baltimore Orioles owner Peter Angelos, MLB agreed to permit the Orioles to control a significant portion of the Washington Nationals’ regional television rights and guaranteed Angelos $365 million if he ever decided to sell the team (Heath, 2005).

In the early 1990s, the San Francisco Giants, frustrated with antiquated Candlestick Park, requested access to unclaimed territories in Santa Clara and Monterey counties, California. After the Oakland Athletics and MLB voted to allow the team to move to either of the new territories, the Giants were unable to secure financing for a new facility in either county. The Giants eventually built a new facility in San Francisco. Meanwhile, the A’s have been enduring an untenable stadium situation ever since the city remodeled the Oakland–Alameda County Coliseum in 1995/1996, shortly after the Raiders returned. Although the A’s supported the Giants’ potential move to Santa Clara County, the Giants have countered any potential A’s move to San Jose or any other Santa Clara County location. The Giants have steadfastly demanded that the territories they acquired when they considered moving should remain exclusively theirs. The A’s, unable to pursue a Santa Clara County destination, have experienced financial hardship compared to other MLB
franchises where revenues are skyrocketing. Their dwindling fan base and lowered generated revenue may affect every other team in Major League Baseball, but other franchise owners have been unwilling to rescind the Giants’ rights to a portion of their territory (Nagel, Brown, Rascher, & McEvoy, 2007). For many years MLB did not choose to act to resolve the problem, despite the willingness of San Jose officials to finance a new stadium. In 2013, in an effort to move the process closer to resolution, San Jose sued MLB for violating antitrust laws (“San Jose officials explain,” 2013). A San Francisco–based federal judge dismissed the lawsuit in October 2013, and the City, in turn, advanced an appeal that was heard in March 2014 (Woolfolk, 2014). In January 2015, the 9th U.S. Circuit Court of Appeals unanimously rejected San Jose’s claims (Mintz, 2015). Despite this legal setback, the City of San Jose elected to file an appeal to the U.S. Supreme Court (Louie, 2015).
COMPETITIVE BALANCE

The numerous rules described previously are intended to maintain a financially viable league, but more critical to a league’s long-term success—and more likely to attract media and fan attention—are the league’s efforts to maintain competitive balance, so that every team has a financial opportunity to field a competitive team. Determining the optimal level of competitive balance and then achieving that level is difficult, because each franchise operates in a unique local market. Teams located in the largest metropolitan areas, such as New York, Los Angeles, and Chicago, have an inherent financial advantage, because these cities have more people to purchase tickets and other game-related products (such as parking and concessions), a greater number of corporations to lease luxury suites and buy expensive club seating, and many local media outlets bidding for the rights to broadcast the teams’ games. Since many stadium-related revenue sources, such as the sale of luxury suites, are not shared with the rest of the league’s teams, a perfectly fair revenue-sharing system is an impossibility. However, leagues work to ensure that fans of each franchise can legitimately hope their team will be successful. The leagues have enacted a variety of “competition” rules and policies to create an environment that fosters competitive balance. This section discusses the financial implications of the rules and policies designed to ensure competitive balance, including those related to player drafts, salary slotting, free agency, player salary negotiations, luxury taxes, and revenue sharing.
The NFL, NBA, NHL, and MLB currently enjoy monopolies in their respective sports, as there are no viable competitors offering similar professional football, basketball, hockey, or baseball contests. However, each of these leagues has had to fight potential competitors. Major League Baseball has had the strongest monopoly among the four leagues. The last serious attempt to establish a viable competitor professional baseball league occurred when the Federal League formed in 1914. The Federal League was able to sign some established Major League players, but others were reluctant to sign for fear of being blackballed by current MLB teams if the Federal League failed.

The Federal League experienced financial difficulty during the 1914 season, partially (the owners felt) due to the actions of MLB. During the off season, the owners filed an antitrust lawsuit against MLB arguing that MLB owners had established an illegal monopoly for the operation of professional baseball. In U.S. Federal Court, Judge Kennesaw Mountain Landis, who would later become MLB Commissioner, urged the parties to settle the dispute, so the case was not immediately deliberated. After the 1915 season, all of the remaining Federal League owners (the Kansas City franchise had declared bankruptcy and been taken over by the league) settled with the MLB owners, except for the Baltimore franchise, which elected to continue to pursue litigation. Eventually, the U.S. Supreme Court ruled that MLB was a legal monopoly immune from antitrust laws (Federal Baseball Club v. National League, 1922). No other serious attempt has been made to compete with MLB. Perhaps the most noteworthy accomplishment of the Federal League, besides the antitrust ruling, was the construction of historic Wrigley Field, which was built for the Federal League’s Chicago Whales.

MLB has experienced nearly 100 years of “peace” from potential direct competitors, but the other three major North American professional sport leagues have faced much more competition. The NFL first encountered a viable competitor when the All-American Football Conference (AAFC) was formed in 1946. Though the NFL initially scoffed at the new rival, by 1949 the AAFC’s Cleveland Browns, Baltimore Colts, and San Francisco 49ers had been admitted to the NFL through a merger agreement. The Browns were such a powerful team that they won the NFL title in the first year after the merger. The NFL would later experience competition from the AFL. Multimillionaire Lamar Hunt had sought to purchase an NFL team in the late 1950s. When he was unable to procure a team, he solicited other wealthy people to start a rival league. The league was able to achieve success partially because of the commitment on the part of Hunt and other wealthy owners and partially because the NFL had sold coverage of its games exclusively to CBS. The American Broadcasting Company (ABC) and the National Broadcasting Company (NBC), being shut out of broadcasting NFL football, were eager to sign a deal with the upstart AFL. ABC signed an initial deal in 1960, and in 1964 NBC secured the AFL’s television rights. The AFL experienced enough success that by 1969 it had merged with the NFL. Lamar Hunt not only helped build the AFL, but he also became one of the NFL’s most influential owners as owner of the Kansas City Chiefs.

The popularity of professional football prompted additional rival leagues to form. In 1974 the World Football League (WFL) was founded as a summertime and fall league. It signed a few established NFL stars but was largely unsuccessful. However, it did help to increase NFL salaries, which had been stagnant despite the growth in the NFL’s popularity.

The United States Football League, which began play in 1983 as a springtime professional league, had some financially powerful owners and immediately signed television contracts with ABC and Entertainment and Sports Programming Network (ESPN). The league also signed some high-caliber NFL players and college stars, such as Herschel Walker, and promised to remain a viable enterprise. However, in addition to the typical problems that start-up leagues endure, numerous USFL owners—such as flamboyant Donald Trump of the New Jersey Generals—refused to adhere to the league’s spending guidelines. With some owners signing players to exorbitant contracts and others unable to match that level of spending, the league began to unravel.

In 1986, the league made the critical decision to move to a fall schedule. The league had signed venue and media contracts to play football in the spring, but the NFL had already secured venues and television deals for Sundays in the fall. With the USFL in turmoil—primarily due to certain owners’ desire to force a merger with the NFL rather than work to keep the league in operation—and no viable way to conduct a fall league, the owners elected to file an antitrust lawsuit against the NFL. The suit claimed that the NFL was a professional football monopoly that had illegally conspired to force the USFL out of business. The USFL named every NFL owner as a defendant, except for Oakland Raiders owner Al Davis, who testified on behalf of the USFL. The circuit court ruled in favor of the USFL but
awarded the league only $1, which was trebled under antitrust laws to $3. When the case decision and awarded damages were affirmed under appeal (USFL v. NFL, 1988), the USFL became a footnote in the history of professional sports.

The NBA and NHL encountered rival leagues in the 1960s and 1970s. The American Basketball Association was formed in 1967. To build excitement, the free-wheeling league used a red, white, and blue basketball, wide-open play, and a three-point shot. The league was able to sign many of the top amateur players, including Julius Erving, Moses Malone, Spencer Haywood, and David Thompson. Some of the league’s teams were financially stable, but others experienced financial hardship. Far too often, teams had difficulty making their payroll, and numerous franchises relocated. At the conclusion of the 1976 season, the Indiana Pacers, San Antonio Spurs, New Jersey Nets, and Denver Nuggets were merged into the NBA.

In 1972 the World Hockey Association (WHA) was formed as a rival to the NHL. The WHA established some of its franchises in “open” hockey cities and, to attract players, attempted to pay higher salaries than those offered in the NHL. The WHA was involved in numerous legal battles with the NHL, most of which did not result in any financial advantage to the WHA. In 1979, four of the remaining six WHA teams were admitted to the NHL, but they each had to pay a $6 million franchise fee. The two WHA franchises that were not absorbed into the NHL were paid $1.5 million in compensation. Although the WHA was not tremendously successful, it was the first professional league in which superstars Wayne Gretzky and Mark Messier played.

Perhaps one of the more interesting side notes to the creation of the WFL, ABA, and WHA is that one man was involved in all three ventures. Attorney Gary Davidson founded or co-founded all three leagues. His tireless efforts to promote the leagues made him one of the most successful sport entrepreneurs of the 20th century. His leagues are estimated to have provided at least $500 million in direct economic impact—a considerable sum in the late 1960s and 1970s (Crowe, 2008). Although Davidson was approached on multiple occasions to begin other leagues, he left the fast-paced world of professional sports to remain close to his family in Southern California. He will be remembered as one of the more important figures in North American professional sport history.

One of the enduring lessons we learn from the attempts to establish professional leagues, whether as rivals to an established league or as new operations, is that owners have to be committed to the new venture and have to be willing to spend money—in most cases, lots of it. In addition to following a slow-growth plan, one of the reasons the MLS has been successful is that Philip Anschutz and Lamar Hunt were committed to seeing the MLS survive long enough to build a fan base capable of supporting soccer-specific stadiums across the country. Hunt (who died in 2006) had a legendary dedication to his sport-business endeavors, as well as a nearly bottomless supply of money to spend. During the first years of the AFL in the early 1960s, it was reported that Hunt was losing over a million dollars a year. When told of this, Lamar Hunt’s father, H.L. Hunt, noted that “At that rate, he will last only a hundred years” (Harvey, 1979, para. 3). Hunt’s commitment not only enabled the AFL to achieving equal status with the NFL and an eventual merger, but it also resulted in Major League Soccer’s achieving a level of success few envisioned when it began competition in 1996. As of 2015, 14 of the 20 MLS facilities were soccer-specific, with at least three additional soccer-specific stadiums planned to be built by 2018.

Player Drafts

The player draft is the process by which the leagues assign incoming high school and/or college players to teams. Some leagues, such as MLB, also utilize other drafts to distribute current minor league players throughout the league. First conducted by the NFL in 1936 (“Pro football draft,” n.d.) and later implemented by each of the other major North American professional sport leagues, player drafts “reward” poorly performing teams by awarding them higher draft picks. Typically, the worst-performing team during each season will “earn” the first pick in every round of the upcoming draft, and the league champion will be awarded the last pick in each round. Others team will draft between the highest- and lowest-performing teams in inverse order of their success during the past season. Drafted players may negotiate only with the team that selected them. In theory, this system allows the teams with the greatest “need” for an infusion of new players the best opportunity to acquire them. Although selected players have occasionally refused to sign, in the vast majority of cases drafted players begin their career with the team that selected them in the draft, as soon as possible after the draft. Of course, each team is responsible for determining the best players to pick, and there is no guarantee that they will make “correct” selections.
NBA draft lottery

A basketball team has only five players on the court at one time, and the best players will usually play over three-quarters of every game. Hence, unlike teams in the other major North American professional sport leagues, franchises in the National Basketball Association can be instantly and dramatically changed with the addition or subtraction of one superstar player. Some teams perceived that their best opportunity to achieve long-term success was to acquire the highest draft pick possible by losing games —so “unsuccessful” teams with poor records often decided to “tank” games by limiting their best players’ minutes or by sitting “injured” players late in the season, once a playoff berth was not a possibility (McCann, 2007).

During the 1983/1984 NBA season, the Houston Rockets attracted attention from the NBA, the media, and fans as it made a series of questionable playing-time decisions during the second half of the season (“Coin flip,” 2008). Many suspected that the Rockets worked to lose games in order to have a chance to pick University of Houston center Akeem Olajuwon with the draft’s first selection. At the time, the NBA awarded the first pick in the draft to the winner of a coin flip between the teams with the worst record in the Western and Eastern Conferences. After the Rockets won the coin flip and selected Olajuwon, the NBA announced that the 1985 draft order for the seven non-playoff teams would be determined by a draft lottery, a lottery used to determine the draft order of the non-playoff teams.

The 1985 lottery created considerable excitement, as the winner would likely select Georgetown University center Patrick Ewing. The team with the worst record in the league, the Golden State Warriors, “lost” the lottery and selected seventh in the 1985 draft. The New York Knicks, who had a better 1984/1985 record than the Warriors, won the lottery and eventually did select Ewing. The 1985 lottery aroused controversy, as some pundits claimed that the NBA had a vested interest in seeing its signature franchise in New York draft the best player (Simmons, 2007).

While denying any conspiracy, the NBA has made numerous changes to its lottery process. In 1987, the lottery identified only those teams selecting in the first three positions. The other teams would draft according to the inverse order of their record, starting with the fourth selection. In 1990, the lottery was altered to allow the 11 teams that did not make the playoffs to have a number of chances related to their record. The worst team received 11 chances, and the best non-playoff team received one chance. This format was changed in 1994 after the Orlando Magic won the lottery two years in a row—the second time after earning the best record among the non-playoff teams. The current system provides the team with the worst record a 25% chance to win and the team with the best non-playoff record a 0.5% chance to win. Despite these changes, the lottery format continues to be questioned.

Salary Slotting

In an effort to control costs and assist franchises in salary negotiations, some professional sport leagues have established official or unofficial salary slotting (rules or recommendations regarding initial compensation to be provided to players based on draft positioning) for selected players. The NBA has negotiated salary slots for first-round draft picks. Prior to 2012, Major League Baseball unofficially suggested salaries for each draft “slot”; however, many players and agents insisted that their salaries be negotiated outside the Commissioner’s suggestions. In 2009, overall number one MLB selection Stephen Strasburg signed a four-year, $15.1 million contract, which eclipsed the previous record—a five-year, $10.5 million contract given to Mark Prior in 2001 (“Nats, Strasburg beat deadline,” 2009).
Did the Houston Astros exploit the new MLB draft slotting system?

Major League Baseball’s latest collective bargaining agreement mandates salary maximums for amateur players selected through the draft. However, the assigned slots are not symmetrical in their decreases after the first pick. For example, though the difference between the 20th and 21st picks in the 2011 MLB amateur draft was $25,000, the difference between the seventh and eighth picks was $100,000 and the difference between the first and second picked was $1 million (Jazayerli, 2013). In addition, the first pick was allocated $7.2 million while the fifth pick was allocated $3.5 million, a difference of $3.7 million. The new MLB slotting system “rewards” poorly performing teams with more money to sign draft picks, but there is a special incentive not only to be bad, but to finish with the worst record in the league. Starting in 2013, teams were permitted to spend more money on international players (except those from Japan and some players from Cuba), even though there was no international draft.

Given this set of incentives—and the fact that most baseball prospects take multiple years to develop —after having losing records in 2009 and 2010, and facing limited prospects for success in 2011 due to an aging and significantly substandard roster, the Houston Astros decided that it would behoove the franchise to be not only bad but terrible for a few years. In 2011, the Astros began to trade nearly every veteran player for minor league prospects. Over a four-year period, the Astros finished with the worst record in MLB while fielding some of the most abysmal teams in recent MLB history. However, their poor records translated into higher allocations for signing top amateur prospects under the MLB slotting system—which they did after each draft in 2011, 2012, 2013, and 2014. Though attendance decreased dramatically and the team became a running joke locally and nationally, the Astros were buoyed by a lucrative local television contract that extended through 2022. By the end of the 2014 season, many of the drafted players made it to the MLB roster and began to play well. In 2015, the team enjoyed its first successful season in many years, and most of the best players were young and would be under team control for many future seasons. The long-term results of the Astros’ multi-year extreme “tanking” will not be known for many years, but if the Astros develop into a perennial winner, other losing MLB teams may duplicate their model.

To attempt to create a more “fair” environment, MLB altered its rules beginning with the 2012 amateur player draft. In the 2000s, MLB had instituted “suggested” player salary slots for each of its clubs. The “suggestions” were designed to restrain costs and permit a greater number of talented players to be drafted and signed to lower-revenue producing franchises. As of 2012, however, these salary slots were no longer “suggestions” that some clubs could conveniently ignore. Instead, each team was allocated a specific amount of money for signing drafted players, based on the total number and order of the team’s picks. Every pick in the first ten rounds (of 40 total) was assigned a value. A team could not spend more than its allocation in the top ten rounds. If a team did not sign a draft pick in the first ten rounds, that pick’s value would be subtracted from the team’s overall draft allocation (Thomas, 2012). Players selected after round 10 could be signed for no more than $100,000; amounts in excess would be deducted from the team’s overall pool. MLB enacted tough penalties to restrict teams from violating their draft allocations.

NFL owners long discussed including a salary slotting system in the collective bargaining agreement negotiated with the NFL Players Association. The owners became particularly concerned when first-round picks JaMarcus Russell (2007) and Jake Long (2008) signed contracts that guaranteed them more than $25 million—more money than many established veterans would make over their entire career. Under the CBA signed in 2011, NFL rookie salaries were decreased dramatically in a new slotting system. For example, in 2010 Sam Bradford was selected first overall by the St. Louis Rams. He signed a six-year, $78 million contract. In 2011, first overall pick Cam Newton signed a four-year, $22 million contract with the Carolina Panthers (Kostora, 2013). The owners convinced the current players that a more restrictive salary slotting system would allow established players to receive more money. The new salary slotting system also minimized contract disputes, such as those that occurred in 2009 after the San Francisco 49ers selected Michael Crabtree with the tenth selection of the first round. Crabtree’s agent argued that Crabtree was the best wide receiver in the draft and should have been paid more than Darrius Heyward-Bey, whom the Oakland Raiders selected with the seventh selection. Crabtree missed the first half of the season in the contract dispute.

Free Agency

For many years, players in each professional sport league had few rights regarding their conditions of employment. Leagues used reserve clauses that tied each player to his team in perpetuity. Fortunately for the
players, starting in the 1960s, players associations began to exert more pressure on the owners through collective bargaining—the process that occurs when workers in a company or industry agree to negotiate as one unit with management. In 1966, Marvin Miller became executive director of the Major League Baseball Players Association (MLBPA). By the time he retired in 1982, the MLBPA had become the most powerful sports union in North America. Miller’s initial demands from the owners concerned “minor” issues involving working conditions, pension payments, and the right of players to profit from their likenesses. However, after achieving initial success, Miller took a series of actions that would lead to the greatest change in salary structure in the history of North American professional sport: the elimination of the reserve clause. This created the right of players to become free agents.

Miller’s first attempt to remove the MLB reserve clause involved Curt Flood, an outstanding outfielder for the St. Louis Cardinals in the 1960s (see Sidebar 15.J). Despite the failure of this attempt, Miller was convinced that the players were gaining momentum in their fight for greater rights.

MLB owners had long contended that the reserve clause bound a player to his team for life, but the language in the MLB operating agreement noted that teams controlled players only until they completed their contract and then played out their option (i.e., played another year without a contract). Players rarely played out their option, because they always signed contracts at the beginning of each year. However, in 1975, Andy Messersmith and Dave McNally played a season without signing a contract. Miller believed they had become free agents once the season concluded, and the dispute was submitted for arbitration. Arbitrator Peter Seitz encouraged the owners and players to settle the dispute rather than let him make the final determination, but he eventually ruled that Andy Messersmith and Dave McNally had indeed become free agents after playing a season without a contract (Miller, 1991).

The Seitz decision dramatically altered MLB. Other players began to play out their options and become free agents. Eventually, the owners and players clarified free agent rules through the collective bargaining process. Other leagues have since enacted free agency rules. Players become eligible for free agency after achieving the required service time (typically four to seven years in North American professional leagues). Before players become free agents, most earn salaries that are artificially depressed because the players have little leverage (beyond retiring prematurely) in salary negotiations.

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**SIDEBAR 15.J**

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Curt Flood versus MLB

Curt Flood was a key member of the 1964 and 1967 St. Louis Cardinals World Series Champion teams; he also appeared in three All-Star Games and won seven Gold Glove Awards. At the end of the 1969 season, the Cardinals traded Flood and other players to the Philadelphia Phillies. Flood refused to report to the Phillies, despite his $100,000 playing contract, and demanded that he be declared a free agent—in direct opposition to MLB’s established reserve clause, which bound a player to a team forever, even after the player’s contract had been fulfilled. Baseball Commissioner Bowie Kuhn denied Flood’s request, citing the provisions of the MLB standard playing contract.

MLBPA Executive Director Marvin Miller and the union supported Flood’s refusal to report and provided financial assistance for Flood’s lawsuit. The suit claimed that MLB’s reserve rules were a violation of antitrust law, because they unfairly restricted the ability of players to bargain for their services (Flood v. Kuhn, 1972). Commissioner Kuhn and the owners fought the lawsuit all the way to the United States Supreme Court, where, in a 5–3 decision, the owners prevailed, as the court upheld the 1922 ruling declaring MLB immune from antitrust scrutiny (Federal Baseball Club v. National League).

Flood returned to play in 1971—with the Washington Senators—but his one-year hiatus and the time devoted to the lawsuit had diminished his skills. After playing poorly in 1971, he retired. Although Flood was unsuccessful in his lawsuit, he is remembered as an important figure in professional sports history. Flood’s stance began to alter many fans’ perceptions of baseball’s employment rules. In 1998—one year after Flood died—the U.S. Congress passed the Curt Flood Act, which eliminated MLB’s antitrust exemption with regard to labor issues.

Player Salary Negotiations

When evaluating job opportunities, players are like anyone else in that they consider a variety of factors, such as location, work environment, and relationships with colleagues and supervisors. Potential salary is almost always a primary concern. In professional sports, salary is especially important, because the average playing career lasts only a few years. Since players’ salaries are paid by individual franchises, the leagues must create an environment where each team has adequate financial resources to scout future players, re-sign their own players, and potentially bid for free agents. The leagues achieve this through two mechanisms: salary caps and, in MLB, salary arbitration.

Salary caps

A salary cap limits the compensation an employer may provide to its employees. In sports, a salary cap is designed to restrict salaries for teams across an entire league—ideally, creating an economic environment where every team can be assured of both cost containment and the opportunity to compete for player services. Professional sport team owners can no longer unilaterally implement a salary cap; they must negotiate with the players through the collective bargaining process. Each league has negotiated a variety of compensation systems.

NBA salary cap. Unofficial and official salary caps existed in professional baseball before the 1930s, but the first modern salary cap was implemented in 1983 by the NBA. Numerous NBA teams struggled financially in the late 1970s and early 1980s, and some observers were concerned that teams in larger markets would be able to outspend teams in smaller markets (such as Utah, Indiana, and Cleveland) to the point that small-market teams would suffer considerably diminished oncourt performances—which might, in turn, cause some franchises to declare bankruptcy and even cease operations. The NBA owners and players agreed to a salary cap to reduce the possibility that a small group of teams could sign all of the best players. Each year, the owners and players calculate the league salary cap based on overall league revenues. The cap has typically increased each year, but in 2009 the cap decreased due to a reduction of overall league revenues—partially related to the global economic recession (Abrams, 2009).

The NBA salary cap was designed to maintain a level salary field for every team in the league. However, given the nature of the sport of basketball, the loss of one or two players from a 15-player roster could radically alter the quality of a team’s performance. For this reason, part of the initial agreement the NBA instituted a variety of rules that allowed individual teams to circumvent the cap. The most prominent rule, the Larry Bird exception—so named because the Boston Celtics were concerned that the loss of Larry Bird to free agency would devastate their team—allows teams, in most cases, to re-sign their “own” potential free agents
for salaries that would otherwise cause the team to exceed the designated yearly salary cap. This has created an environment where teams that have drafted quality players tend to have an advantage in free agency salary negotiations, as free agents can usually re-sign with their current team for greater compensation than they could receive from other franchises.

More than ten years after the Larry Bird exception was instituted, the 1998/1999 NBA season was condensed because of a lockout (a decision by management to suspend operations while it negotiates with workers—in this case, players). One of the owners’ concerns was the escalating salaries of the league’s top players. For instance, during the 1997/1998 season, Michael Jordan’s salary was $36 million, although the Chicago Bulls’ team salary cap was $26.9 million. The lockout resulted in the NBA and the players agreeing to limit individual player salaries in addition to team salaries. For certain players whose current salaries exceeded the individual cap, the excessive salaries were grandfathered into the CBA.

With NBA revenues expanding rapidly beginning in 2013, concern about the future application of the NBA salary cap became an important component of collective bargaining negotiations. In 2015, the NBA announced that salary caps were likely to increase in the future—dramatically. One projection pegged the 2015/2016 cap to be $68 million, with the 2016/2017 cap increasing to $90 million, due primarily to the revenue from the league’s new nine-year, $24 billion television contract (Aschburner, 2015). Such a rapid increase after many years of small (3% to 7%) increases would provide nearly every NBA franchise with significant cap space to sign free agents. To maintain some semblance of roster stability and to prevent large-market teams from being able to “outspend” other franchises, the NBA owners proposed a “smoothing” plan that would gradually introduce the increased revenues across multiple years. The NBA Players Association rejected the proposal and indicated that when the CBA could be renegotiated in 2017, the players would protect their right to access all of the projected new revenues when they are generated.

The complexity of the NBA’s salary cap often causes confusion among journalists and fans. To mitigate this confusion, the NBA has released detailed salary cap information (Coont, 2015).

NFL salary cap. The NFL implemented a salary cap system in 1993 in an effort to maintain competitive balance among its franchises. Under the NFL cap system, similar to the NBA’s, a maximum team salary is established each year based on overall league revenues. The NFL’s system also sets a team salary floor (a minimum amount to be paid in salaries per team), created to appease players’ concerns regarding the unwillingness of some NFL owners to participate in the bidding for player services. Unlike the NBA’s salary system, which provides numerous loopholes for exceeding the cap, the NFL’s cap has a “hard” ceiling that must be maintained each year.

However, teams can manipulate the NFL salary cap through the use of signing bonuses. If an NFL player signs a four-year, $4 million contract, each year his salary will count $1 million against the team’s salary cap, and the player will receive $1 million during each season. Since NFL contracts are usually not guaranteed, the player risks not receiving all of the money if he is released (due to injury or ineffectiveness, for example) before the full term of the contract is fulfilled. For this reason, players often negotiate bonuses that are paid immediately upon the contract’s signing. Although the player receives the total signing bonus in the first year, for the purpose of the salary cap the league allows the team to allocate the bonus over the years of the contract.

Suppose a player negotiates a $4 million signing bonus in addition to a $4 million, four-year contract. The player receives $5 million in the first year of the contract, and the team has to allocate only $2 million each year to its salary cap total. If this player were to be cut after playing two years, he would “lose” only $2 million. Although the team will not have to pay the remaining years of salary on the contract, it will have to account for the remaining $2 million from the signing bonus on its salary cap. This is often called “dead” salary cap money because it must be allocated, but it does not get paid to an active player who can contribute on the field.

NFL teams relied on the continuing escalation of the salary cap to provide additional space for “dead” salary cap amounts, but this strategy was more difficult to implement from 2011 to 2013, as the NFL salary cap remained relatively stagnant over those years (see Exhibit 15.2). As a result of this stagnation, it became untenable for some NFL teams to retain many of their long-term contracts as long as initially planned. In some cases, productive NFL veterans were cut or encouraged to restructure their contracts long before anyone would have expected. Contracts signed during this three-year period were adjusted to the “slow growth” model, but many NFL veterans were not pleased, since they had anticipated much more lucrative contracts being available after they completed their rookie contracts (Barnwell, 2013). Though it was anticipated that the salary cap would grow minimally in 2014, as in the previous three years, NFL revenues increased at a rate that resulted in the 2014 salary cap increasing $10 million (8%), with increases of over 5% and 7% projected for 2015 and 2016, respectively (Barnwell, 2014). The dramatic change in the 2014 cap figure allowed many
teams to retain certain players previously expected to become “cap casualties” or to sign prominent free agents at higher salaries than expected.

The use of signing bonuses to circumvent the NFL cap in the short term is not without repercussions, even when done “successfully.” In the 1990s, the Dallas Cowboys and other teams used signing bonuses to pay numerous players large salaries in the hopes of winning championships. The Cowboys were able to field Super Bowl–winning teams in the short term, but as players retired, became injured, and so forth, the team was unable to sign other players under the cap, as they had used up their budget with past signing bonuses (Nagel, 2005). When the strategy of using signing bonuses to sign players to long-term deals is not executed well, on-field and financial disasters can occur. Numerous NFL teams have been forced to field rosters with glaring weaknesses after the release of veteran players who could only be replaced by lower-cost and lower-performing players. The Oakland Raiders mismanaged their salary cap through long-term contracts so badly that in 2013 they had over $50 million allocated to “dead” salary money for players no longer on their roster (“Oakland Raiders 2013,” 2013). Unfortunately, the Raiders and their fans could not look back fondly on (recent) on-field success, as the team did not have a winning record in any season from 2003 through 2014.

EXHIBIT 15.2 Year-by-year history of the NFL salary cap.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>MAXIMUM TEAM SALARY (MILLIONS)</th>
<th>INCREASE FROM PREVIOUS YEAR (MILLIONS)</th>
<th>PERCENT INCREASE/DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>$143.280</td>
<td>$10.28</td>
<td>7.73%</td>
</tr>
<tr>
<td>2014</td>
<td>$133.000</td>
<td>$9.10</td>
<td>7.34%</td>
</tr>
<tr>
<td>2013</td>
<td>$123.900</td>
<td>$3.30</td>
<td>2.74%</td>
</tr>
<tr>
<td>2012</td>
<td>$120.600</td>
<td>$0.22</td>
<td>0.19%</td>
</tr>
<tr>
<td>2011</td>
<td>$120.375</td>
<td>($2.63)</td>
<td>−2.13%</td>
</tr>
<tr>
<td>2010</td>
<td>uncapped</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>$123.000</td>
<td>$7.00</td>
<td>6.03%</td>
</tr>
<tr>
<td>2008</td>
<td>$116.000</td>
<td>$7.00</td>
<td>6.42%</td>
</tr>
<tr>
<td>2007</td>
<td>$109.000</td>
<td>$7.00</td>
<td>6.86%</td>
</tr>
<tr>
<td>2006</td>
<td>$102.000</td>
<td>$16.50</td>
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</tr>
<tr>
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<td>$85.500</td>
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<td>6.10%</td>
</tr>
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<td>$75.007</td>
<td>$3.91</td>
<td>5.49%</td>
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<tr>
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<td>$71.101</td>
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<td>5.48%</td>
</tr>
<tr>
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<td>$67.405</td>
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<tr>
<td>2000</td>
<td>$62.172</td>
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<td>8.53%</td>
</tr>
<tr>
<td>1999</td>
<td>$57.288</td>
<td>$4.90</td>
<td>9.35%</td>
</tr>
<tr>
<td>1998</td>
<td>$52.388</td>
<td>$10.93</td>
<td>26.38%</td>
</tr>
<tr>
<td>1997</td>
<td>$41.454</td>
<td>$0.70</td>
<td>1.72%</td>
</tr>
<tr>
<td>1996</td>
<td>$40.753</td>
<td>$3.65</td>
<td>9.85%</td>
</tr>
<tr>
<td>1995</td>
<td>$37.100</td>
<td>$2.49</td>
<td>7.20%</td>
</tr>
<tr>
<td>1994</td>
<td>$34.608</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NHL salary cap. For many years, the National Hockey League’s owners desired a salary cap, which the players resisted during collective bargaining negotiations. The 1994/1995 season was nearly cancelled when the owners locked out the players, but a partial season was played after the owners reluctantly agreed to abandon their demand for a salary cap. However, the 2004/2005 season was cancelled when the owners demanded a salary cap and the players refused to acquiesce. After the owners cancelled an entire season for the first time in major North American professional sport history, the players reluctantly agreed to return for the 2005/2006 season with a salary cap in place. In addition, the players allowed the value of every contract to be reduced by 24% (Fitzpatrick, 2005). Owners, players, and fans alike hoped that the highly contentious collective bargaining sessions would yield a salary system that would ensure labor peace in the NHL for a considerable time. However, this was not the case.

The NHL’s salary cap implemented in 2005 was designed to be similar to the NFL’s, as it had a floor and a ceiling that were based on league revenues. However, even though the NHL’s cap was designed to offer few “creative accounting” loopholes, teams quickly realized how to circumvent the cap. One particular loophole was the use of long-term contracts front-loaded with large yearly salaries, with very small annual salaries in the final years. Unofficially dubbed the “Luongo Rule” after the Vancouver Canucks signed goaltender Roberto Luongo to a 12-year, $64 million contract, the loophole violated the spirit of the salary cap while adhering to the terms of the CBA. Luongo’s contract counted $5.33 million against the Canucks’ yearly cap but called for the goaltender to earn $10 million in 2010, roughly $6.7 million each year from 2011 to 2017, $3.3 million in 2018, $1.6 million in 2019 and 2020, and finally $1 million each year in 2021 and 2022. Since the NHL’s salary cap allocated the annual average of a contract to the team’s yearly salary cap figure, the Canucks’ use of the extended “final” years on Luongo’s contract, when he would be over 40 years old and unlikely to be playing, allowed the franchise to lower the annual salary average. Luongo’s contract became a model for other players, such as former New Jersey Devil Ilya Kovalchuk, who signed a 15-year, $100 million deal in 2010.

Use of this loophole, combined with concerns regarding the rapid growth in revenues and, therefore, the NHL salary caps and floors among the highest-earning teams in the league, led the NHL once again to lock out the players in 2012. Fortunately, the league was able to avoid another cancelled season, as it reached an agreement with the players to begin a condensed season in January 2013. Among the numerous provisions in the new CBA was the elimination of the “Luongo Rule” and stricter penalties for attempts to circumvent the salary cap. However, despite the new CBA, concerns remained about how the very long-term contracts signed by some clubs under the previous CBA would affect teams as those contracts came closer to expiration after 2018 (The Neutral, 2013).

Among the numerous new salary cap rules, perhaps the most interesting is that teams may choose to retain part of a player’s “cap hit” when trading the player to another team. In essence, a team could extract “value” in a trade with another club by retaining a portion of the salary cap allocation that would normally be transferred to the other club. Although a variety of stipulations limit the potential trades, this new wrinkle certainly presents an additional set of strategic decisions for NHL teams (Mirtle, 2013). It will be interesting to see if other leagues copy or adapt this unique salary cap provision.

MLB salary cap. Despite baseball’s having been the first professional sport to institute salary caps, which it did during the early part of MLB’s history in the 19th century, the Major League Baseball Players Association has adamantly opposed any salary cap system. On August 12, 1994, the MLB players went on strike to protest a potential salary cap. The strike eventually resulted in the cancellation of the World Series for the first time since 1904. Although the players “won” the dispute—they avoided a salary cap—the cancellation of the World Series and the perceived greed on the part of both the players and the owners caused outrage among fans. Major League Baseball players are adamant that they will continue to oppose the implementation of a salary cap (Bloom, 2009).

MLS salary cap. Major League Soccer—which operates as a single entity, with all player salaries paid from a league pool—approved a new salary structure in November 2006. Under this structure, each team had a $2 million salary cap, but individual franchises could sign one player outside the cap limit as a “designated player.” The first $400,000 of this “marquee” player’s contract would be paid by the league, but the team would be responsible for the remainder. Each team could trade its marquee “slot” to another team, enabling that other team to sign up to two marquee players, whose salaries did not fully count against the team’s cap. That rule was unofficially called the “Beckham Rule,” because many anticipated that English star David Beckham might be attracted to the MLS if he could earn a salary comparable to what he was making in Europe (“MLS ok’s ‘Beckham,’” 2006). It did not take Beckham long to fulfill the prediction: in 2007, he signed a multimillion-dollar deal with the Los Angeles Galaxy.
In 2013 MLS increased its salary cap to $2.95 million per team and $368,750 per player and then, in 2014, increased those figures again to $3.1 million and $387,500. In 2015, the league and the players signed a new collective bargaining agreement that increased the overall cap to $3.3 million, with projected increases of 7% per year, suggesting that the overall salary cap will be roughly $4.2 million by 2019 (Oshan, 2015). In addition, the new CBA permits each team to sign two players whose salaries do not apply to the individual or team salary caps and permits a team to sign a third star player if the team pays a $250,000 luxury tax to the league. Increases in the salary cap and the ability to sign more designated players have enabled MLS to retain and attract more top-level players, particularly those Americans who in past years would likely have played professionally in Europe (McIntyre, 2013).
MLB collusion

The efforts of MLBPA Executive Director Marvin Miller and his successor, Donald Fehr, resulted in increased salaries for Major League Baseball players. With MLB’s increased popularity during the early 1980s, the owners also saw their overall profits increase. However, many owners were not pleased that they could no longer artificially control players’ salaries. In a series of acts that were eventually deemed illegal, the owners, under the direction of MLB Commissioner Peter Ueberroth, refused to offer contracts to other teams’ free agents during the 1985 through 1987 off seasons. Prominent players were forced to return to their former MLB teams, as they received no viable contract offers. In perhaps the most shocking example of the owners’ conspiracy to reduce salaries, Montreal Expo Andre Dawson essentially had to ask the Chicago Cubs to sign him for any price. Dawson played for the Cubs in 1987, winning the National League Most Valuable Player Award while earning a salary well below market value.

Eventually, the owners’ three years of collusion resulted in a court award to the MLBPA of $280 million in damages. Though this episode is unknown to many younger fans and forgotten by most who followed baseball in the 1980s, it was one of the most important financial situations in MLB history, and the MLBPA often cites it as a reason to distrust owners’ comments regarding the financial health of the league.

Salary arbitration

Unlike other professional sports, Major League Baseball gives players the right to salary arbitration, a process whereby an independent judge determines whether the team’s submitted salary or the player’s requested salary will be paid. The MLBPA initially negotiated the right to arbitration in 1973 and has consistently insisted that arbitration remain a key component of the MLB’s CBA (Haupert, 2007). Players with at least three years of MLB service time, as well as the top 22% of players (by service days in MLB) with at least two years of experience (known as “Super Twos”) are eligible for salary arbitration if they are unable to reach a salary agreement with their team (Ray, 2008). Most players come to an agreement with their club, and only a limited number of cases proceed to arbitration. Both the players and the owners closely monitor these cases to detect any arbitration “trends.”

The rule allowing Super Two players to participate in salary arbitration has resulted in some player personnel decisions that are more likely driven by monetary concerns than players’ level of preparation. Some teams, particularly those with limited budgets compared to other franchises, have left players in the minors who were likely “ready” to play in the majors to delay their service time clock and keep the players under team control longer. In 2013, the Tampa Bay Rays kept top-rated outfielder Wil Myers in the minors until June 18, likely ensuring he would not qualify for arbitration until after his third season. In 2015, the Chicago Cubs kept highly touted third baseman Kris Bryant in the minor leagues for the first two weeks of the season despite his hitting nine home runs in 14 pre-season games. The move assured the Cubs greater control of Bryant’s future earning potential. Some teams, however, have promoted players as soon as they were deemed ready to play at the major league level. In 2013 the Miami Marlins promoted 20-year-old pitching phenomenon Jose Fernandez to the majors on April 7. As a result, Fernandez had a greater chance to become a Super Two free agent than if the Marlins waited a bit longer before promoting him. Unfortunately, during the 2014 season, Fernandez required Tommy John surgery and was out for 14 months. Though he did not qualify for early arbitration, the Marlins offered him a 6-year, $40 million contract in 2015. Fernandez, feeling that he would return to his pre-injury form, elected to instead accept a 1-year contract valued at $651,000. If Fernandez pitches well, he is likely to earn much more than the Marlins offered once he becomes arbitration eligible after the 2015 season.
What is the cost of a win?

Every professional sport franchise desires to win games through cost-efficient methods. If a team can generate a profit of $10 million and win a division championship, these accomplishments reflect more effective management than if the team generates a profit of $10 million and finishes with a record below .500. In baseball, one of the recent points of emphasis among front office personnel is analyzing how much each player contributes to on-field success beyond what an easily obtainable player (such as a minor league player at the same position or an unsigned free agent) can contribute. Analysts calculate a figure called wins above replacement (WAR), which involves a variety of factors (such as batting, fielding, and base running proficiency for position players and, for pitchers, pitching proficiency across the number of innings pitched) that contribute to a team’s success. WAR is intended to indicate the number of runs that a player either created or prevented over a season. Typically, ten runs created or prevented are considered to equal one win. A great player will typically produce five or more WAR, solid players produce three or four WAR, and mediocre players generate one or two WAR. Players who do not produce any WAR or produce negative WAR should probably be replaced with readily available alternative options.

As the evaluation of players has evolved—particularly with the success of the small-market Oakland Athletics under General Manager Billy Beane—and as owners of MLB teams have become more concerned with efficiency of expenditures, WAR has been applied to player salaries. Successful teams are those that efficiently allocate resources to acquire players whose performance can exceed what is readily available for little investment. That is, if a player who is called up from the minor leagues and paid the league’s minimum salary can contribute a certain level of on-field performance, then a team should not spend any additional resources (either in trade value or in player salary) to acquire a more expensive player, unless that player can perform at a correspondingly higher level. In 2013, the average cost of 1 WAR was roughly $6 million—meaning that a player who was paid $18 million a year should produce 3 WAR. If the player did not, he was overpaid (Keri, 2013). Certainly, a player’s performance will fluctuate over time, and each player should be evaluated on his WAR over the period of his contract.

Obviously, teams will seek to sign players who will “overproduce” their contracts. As an example, in 2013 the Los Angeles Angels had a payroll of $142 million and finished with a losing record (78–84), while the Oakland Athletics won 96 games and made the playoffs while spending $68.6 million. The inefficiency of the Angels was particularly shocking given that All-Star Mike Trout produced 8.9 WAR (tied for the highest in MLB) while being paid “only” $510,000, the best “bargain” in the league. The rest of the Angels were largely overpaid given their lack of ability to produce wins above what the Angels could have acquired at minimal cost.

Luxury Tax

In addition to individual player and team salary caps, in its efforts to promote competitive balance the NBA also imposes a luxury tax on high-spending teams to encourage teams to limit their player salaries. The salary cap and luxury tax limits are based on a percentage of the Association’s basketball-related income (BRI). In the recent past, the luxury tax limit has been set at roughly 61% of BRI (Coon, 2015). Prior to 2011, teams that paid salaries in excess of the threshold were assessed a dollar-for-dollar tax, and the collected amounts were distributed equally to all of the teams in conformance with the threshold. However, under the CBA negotiated in 2011, beginning in the 2013/2014 season luxury tax rates have increased depending on a team’s level of spending above the luxury tax threshold. Also, for the first time, the NBA established a “repeater” tax rate, which in the 2014/2015 season applied to teams that spent above the luxury tax limit the previous three seasons (see Exhibit 15.3). The repeater tax rate applies in 2015/2016 and beyond to those teams that exceeded the threshold three of the previous four seasons (Coon).

Teams that are close to or at the luxury tax level often avoid paying any additional salaries, since the tax essentially means amounts paid in excess of the threshold actually cost the team double. Further, teams that exceed the luxury tax limit cannot receive any luxury tax revenues. The luxury tax has helped to restrict some franchises’ team salaries to a level that is above the salary cap and below the luxury tax limit, but a handful of teams have continued to surpass the luxury tax in most years, as shown in Exhibit 15.4. For example, the New York Knicks have consistently exceeded the luxury tax limit, and the Los Angeles Lakers have greatly exceeded the luxury tax in many recent years. Whether the new, more harsh luxury tax rates and the repeater tax will limit the spending of high-payroll teams is not known. Notably, in the case of the Brooklyn Nets,
owner Mikhail Prokhorov permitted his general manager to trade for aging (and highly paid) stars Paul Pierce and Kevin Garnett, even though it meant the Nets’ 2013/2014 payroll and luxury tax could exceed $183 million (Beck, 2013). After the L.A. Lakers paid over $29 million in luxury taxes in 2013, there was widespread speculation that the team might use a special “amnesty” provision to cut injured franchise icon Kobe Bryant in 2013 to release themselves from upcoming luxury taxes (Bresnahan, 2013). The Lakers instead chose to cut Metta World Peace to save $14 million in luxury tax payments—though they still paid $9 million in luxury tax (McMenamin, 2013).

EXHIBIT 15.3 NBA repeater and non-repeater luxury tax rates beginning in the 2013/2014 season.

<table>
<thead>
<tr>
<th>TEAM SALARY ABOVE TAX LEVEL</th>
<th>NON-REPEATER</th>
<th>REPEATER</th>
</tr>
</thead>
<tbody>
<tr>
<td>$0</td>
<td>$4,999,999</td>
<td>$1.50</td>
</tr>
<tr>
<td>$5,000,000</td>
<td>$9,999,999</td>
<td>$1.75</td>
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<td>$10,000,000</td>
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</tr>
<tr>
<td>$15,000,000</td>
<td>$19,999,999</td>
<td>$3.25</td>
</tr>
<tr>
<td>$20,000,000</td>
<td>$3.75 plus $.50 for each additional $5 million</td>
<td>$4.75 plus $.50 for each additional $5 million</td>
</tr>
</tbody>
</table>


EXHIBIT 15.4 Comprehensive history of NBA luxury tax payments, 2001–2015 (in millions).
Although the MLBPA has adamantly opposed a salary cap, it has permitted the owners to implement a luxury tax. The luxury tax was first employed in the 1997 through 1999 seasons, was phased out, and then was implemented once again, starting in 2003. Under the 2003–2006 MLB collective bargaining agreement, the tax penalized a first-time offender 22.5% of the amount over the tax limit. When a team exceeded the limit a second time, the penalty rate increased to 30%. For the third and any succeeding violation, the rate was 40% (Brown, 2007). See Exhibit 15.5 for MLB luxury tax payments from 2003 to 2014.

Under the 2012 CBA, new luxury tax limits and luxury tax rates were enacted (see Exhibit 15.6). In addition to the rates listed in the table, higher rates were set for teams that had paid luxury tax in 2011. The

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New York Yankees had paid luxury tax every season since 2003, so their 2012 tax rate was 42.5%, resulting in a tax bill of $18.9 million on a $223 million payroll. The Boston Red Sox had paid in 2010 and 2011, so their 2012 rate would have been 40%; however, the team avoided paying any luxury tax by reducing overall salaries by $47,177 below the $178 million limit. They accomplished this when they traded Adrian Gonzalez, Carl Crawford, Josh Beckett, and Nick Punto to the Los Angeles Dodgers (recently purchased by Guggenheim Baseball Management from Frank McCourt) in the middle of the 2012 season (“Report: Yanks,” 2012).

Under new management, the Dodgers have appeared willing to pay the luxury tax each season, especially after advancing to the 2013 playoffs with their new high-priced roster. In 2013 the Dodgers paid $9.9 million in luxury tax, and in 2014 they paid $26.6 million. Though the Yankees had paid the luxury tax from 2003 to 2013 (totaling over $250 million), a new component of the CBA caused the Yankees to contemplate lowering their 2014 payroll below the $189 million threshold. Under the CBA, any team could “reset” their rate to first-time offender status by going below the luxury tax threshold for one year. Yankee General Manager Brian Cashman noted that the opportunity to “reset” the Yankees’ luxury tax rate “affects my decision-making process, my communication about the pressure points we have” (“Report: Yanks,” para. 6).


<table>
<thead>
<tr>
<th>YEAR</th>
<th>DODGERS</th>
<th>YANKEES</th>
<th>RED SOX</th>
<th>ANGELS</th>
<th>TIGERS</th>
<th>TOTALS</th>
</tr>
</thead>
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<tr>
<td>2014</td>
<td>$29.60</td>
<td>$18.33</td>
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<td></td>
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</tr>
<tr>
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<tr>
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</tr>
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<td>$11.80</td>
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<td>$12.90</td>
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</table>


EXHIBIT 15.6 MLB luxury tax limits and tax rates under the 2012 CBA.

<table>
<thead>
<tr>
<th>TAX LIMITS</th>
<th>TAX RATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012: $178 million</td>
<td>17.5% first-time offenders</td>
</tr>
<tr>
<td>2013: $178 million</td>
<td>30% second-year offenders</td>
</tr>
<tr>
<td>2014: $189 million</td>
<td>40% third-year offenders</td>
</tr>
<tr>
<td>2015: $189 million</td>
<td>50% fourth-year offenders*</td>
</tr>
</tbody>
</table>
Ironically, the Yankees’ potential unwillingness to pay the luxury tax in 2014 likely at least partially contributed to their failure to make the playoffs in 2013. When third baseman Alex Rodriguez was injured to start the season, the Yankees, without any decent options in their minor league system, were unwilling to sign any third baseman on the free agency market to a contract for longer than one season. The team signed aging and often injured Kevin Youkilis to a one-year contract. Youkilis subsequently played poorly and later became hurt, leaving the Yankees to field a group of substandard third basemen. Rodriguez returned too late in the season to help the Yankees overcome their other team deficiencies to make the playoffs. Even with Rodriguez’s stats, the Yankees’ third basemen produced only a .633 OPS (on-base plus slugging percentage, calculated as the sum of a player’s on-base percentage and slugging average), which ranked 29th of the 30 MLB teams (Carelli, 2014), and the Yankees missed the MLB playoffs for only the second time in 19 years.

Rodriguez subsequently became embroiled in a MLB drug scandal that later resulted in his suspension for the entire 2014 season, providing an even better opportunity for the Yankees to remain under the 2014 luxury tax threshold. However, despite positioning themselves to go below the limit, the Yankees instead decided to pursue a number of prominent free agents, resulting in a 2014 payroll that exceeded $209 million, well above the $189 million luxury tax threshold. Despite their spending, the Yankees failed to make the playoffs in 2014.

**Revenue Sharing**

Another important policy that professional sport leagues have implemented for competitive balance is revenue sharing. Whereas a salary cap is intended to balance teams’ spending on players, revenue sharing is designed to narrow the gaps in the financial resources of the participating teams. Individual owners may earn revenues from various sources other than the teams they own, and the inequality of these non-league revenue sources can become a concern. Some owners may be able to accept a lower profit margin from their team or even take a yearly financial loss, while other owners may not be able to afford such losses. For instance, since Robert Sarver bought the Phoenix Suns in 2004, the team has sold two first-round draft picks to the Portland Trailblazers and has practically “given away” players such as Kurt Thomas and other first-round draft picks, in order to save money (Coro, 2007; Haller, 2007). Unlike Trailblazers owner Paul Allen, co-founder of Microsoft, Sarver operates his team with the financial bottom line as his primary concern. This certainly can be frustrating for fans who want to see their team consistently strive to win championships (Simmons, 2008). Although it is difficult for leagues to maintain a financial environment of total equality, they pursue competitive balance by establishing rules and policies to govern revenue sharing and mitigate potential discrepancies.

**Media revenue**

North American professional sport leagues share revenues from national media contracts equally. The sharing of national television revenue permits every team to generate the same television revenue regardless of the number of their national television appearances. Every league shares national television revenues, but their sharing mechanisms have varying impacts. Each of the 16 games in the NFL’s once-a-week schedule is broadcast under a national television contract, resulting in a much greater percentage of overall league revenues being shared than in other leagues. With the NBA and NHL’s 82-game schedules and MLB’s 162-game schedule, these leagues offer many games each week of the season and many opportunities for individual franchises to generate disparate local revenue. Some games are broadcast under an equally shared national television agreement, but the vast majority of the games are broadcast under local television agreements, the revenues from which will likely not be shared with other clubs. Since the teams’ local television markets vary in size, the potential for generating revenue can vary considerably. For instance, the large population difference between the New York metropolitan area and the Minneapolis–St. Paul metropolitan area means that the New York teams in MLB, the NBA, and the NHL receive potentially millions of additional media dollars.

The proliferation of regional sport networks (SNs) has exacerbated market-size differences. These cable stations generate money through advertising and subscription fees, and, unlike traditional over-the-air television stations, they typically elect to broadcast as many games as the local team(s) will permit. Regional sport networks have provided large-market franchises with a tremendous financial advantage over their small-market competitors.

In 2013, the Los Angeles Dodgers formally announced a 25-year, $7 billion deal with Time Warner Cable to create a new regional cable station (Nakashima & Blum, 2013). The Dodgers’ deal dramatically exceeded its previous cable deal (which paid $39 million in 2013) and all other recently signed deals, including ones that were previously thought to be quite lucrative, such as those of the Los Angeles Angels (17 years, $2.5
billion) and the Texas Rangers (20 years, $1.7 billion; Ozanian, 2012; Thurm, 2012). The Dodgers’ deal increased the imbalance in overall revenue for teams. Some “traditional” low-revenue teams, such as the Oakland A’s, Kansas City Royals, and Pittsburgh Pirates, are stuck in cable deals that provide less than $20 million a year in local cable revenue, and even teams that typically have generated much more local revenue have local television deals that are dwarfed by the Dodgers’ deal and some other recent deals, such as a 20-year, $1.2 billion contract signed by the San Diego Padres in 2012 (Thurm). In the case of the Atlanta Braves, the team made a poor decision in 2007 to lock in its local television deal for 25 years. Though the deal includes “cost of living” increases, it does not permit renegotiation (Tucker, 2012).

Continuing a trend across MLB, the Dodgers’ television deal gives them an equity stake in the newly created cable station. For revenue-sharing purposes, MLB accounts for this equity position differently than it does many other revenue sources (Thurm). For instance, in MLB 34% of most other local revenue sources (such as ticket sales, concessions, and local television deals) is shared, but equity positions in entrepreneurial media ventures are exempt. The league wants to encourage franchises to expand opportunities in new media ventures, so it allows the clubs to retain profits generated from monies they specifically invest. However, in the case of the Dodgers, their initial structuring of the deal had to be modified multiple times to meet MLB rules, since the other owners felt the Dodgers’ deal to be partially motivated by avoiding payments the team would otherwise have been required to make to the revenue-sharing pool. At one point a proposed deal had Time Warner Cable paying the Dodgers for the right to name the new station, which had never been done before. It would have been interesting if this unique idea had been approved, since MLB’s 34% revenue-sharing requirement includes money from stadium naming rights deals (Ozanian, 2013). The initial cable deal was announced in December 2012; however, the final approval did not occur until June 2013 (Shaikin, 2013). Though the Dodgers were not permitted to shelter as much money from the revenue-sharing plan as they had initially hoped, the television deal nevertheless dramatically improved their financial position and likely secured their place as one of the top three MLB revenue producers for many years into the future.

Continuing growth of all things online has provided North American professional sport leagues with the opportunity to share revenue streams from online media sources, and the use of the Internet to generate revenues is still developing. In 2000, MLB created Major League Baseball Advanced Media to investigate and manage new media opportunities in areas such as online game streaming. MLBAM has become one of the most effective sport business enterprises, generating nearly $500 million in revenue in 2010 (Fisher, 2011) and $800 million in 2014 (Brown, 2014). MLBAM controls the teams’ websites and generates revenues that benefit the entire league. Major League Baseball owners voted unanimously to create MLBAM, but the National Hockey League encountered resistance from the New York Rangers when it attempted to control every team’s website. In 2007, the Rangers sued the NHL when the league threatened to fine the Rangers $100,000 a day for failure to relinquish control of the nyranger.com website. The Rangers eventually lost the case, and the NHL was able to recreate the Rangers’ website to match the format of the other team sites (“Madison Square Garden sues,” 2007).

SIDEBAR 15.M
À la carte pricing to doom financial future of sports?

Since 1984, when Congress passed the Cable Communications Policy Act, cable companies have been permitted to “bundle” their cable station offerings. Cable channels such as ESPN, TNT, Fox News, TBS, and dozens more are typically offered to consumers in various packages, but consumers usually are not permitted to purchase individual stations à la carte (Weiner, 2012). This has forced consumers, most of whom typically watch no more than eight to 12 channels regularly, to pay for content they never view. Though this fact of life applies to every cable subscriber, the sport industry in particular benefits. As of 2013, ESPN charges cable subscribers $5.54 per month, even though in a typical month more than 80% of cable TV subscribers will not ever tune in to ESPN and only a very small percentage of households watch ESPN (or other ESPN stations) regularly (Sandomir, Miller, & Eder, 2013). A variety of disparate factions—including economists worried about market inefficiencies, parents (many of whom are religious) concerned about children’s access to inappropriate content, and liberal groups concerned about escalating cable costs and company profits—have begun to challenge the legitimacy of cable bundling. Of course, analysts for both “sides” have declared their option (bundling or à la carte) to be better for consumers. Because so much of the money ESPN and other cable providers have available to bid for live sport content is extracted from consumers who do not watch those sporting events, potential Congressional intervention and alteration of existing cable laws could have massive ramifications for professional and intercollegiate sport. If à la carte pricing were implemented, money that currently accrues to sport properties likely would decrease.

* For comparison, in 2013 TNT was second in price at $1.24, ESPN2 was third at $0.70, TBS was fourth at $0.59, and no other station cost cable purchasers more than $0.25 a month.

Other leagues have embraced the opportunities to generate revenues through new streaming technologies. In 2014, ESPN discussed the possibility of offering online access to Major League Soccer games that were currently outside existing pay-TV subscription packages (Campbell, 2014). The NBA will greatly increase its online presence with a new $24 billion media contract that will begin in the 2016/2017 season. The league and ESPN announced that they see over-the-top (television delivered via the internet) as a significant source of future revenue, both in the United States and abroad (Abbruzzese, 2014).

**Gate receipts**

The NBA and NHL do not share revenues generated from gate receipts. MLB teams in the National League used to share 5% and in the American League used to share 20% with the visiting team (Dobson & Goddard, 2001; Zimbalist, 1992). These policies have been replaced by MLB’s 34% revenue-sharing mandate.* NFL teams share 40% of their gate revenues with visiting teams, but the league allocates the revenues across the entire league, so a visiting team that may attract additional fans does not necessarily collect any additional revenue (Brown, Nagel, McEvoy, & Rascher, 2004). Hence, although the Dallas Cowboys are heavily marketed and are one of the more popular teams, owner Jerry Jones does not realize any added financial benefit when the Cowboys play a road game in front of capacity crowds. The 40% share of the ticket sales is distributed throughout the league.

**Merchandise sales**

The four major North American sport leagues all share revenues from licensed merchandise sales equally among their teams (Grusd, 2004). The only money that teams retain is from sales of products in the team’s facility or in local team stores. The NFL permits a franchise to opt out of the league-wide merchandising deal and keep a portion of their generated licensed merchandise revenues if the team agrees to pay a guaranteed amount back to the league. The Dallas Cowboys are the only NFL team that has opted out of the league-wide sharing agreement (Kaplan & Mullen, 2009).

**Sponsorship agreements**

Revenues from league sponsorship deals are also shared equally. In addition, league rules that are designed to increase the overall value of the league’s brand affect individual franchises’ marketing arrangements. For example, in 1995, the Dallas Cowboys violated the NFL’s exclusive sponsorship agreement with Reebok.
when they signed an agreement with Nike. The NFL sued the Cowboys, the Cowboys countersued, and eventually the team was permitted to keep its agreements, as the parties settled out of court—possibly because the Nike deal (and others that violated NFL exclusivity arrangements) was with Texas Stadium (which Jones owned) and not actually with the Cowboys. Former Baltimore Ravens owner Art Modell noted the conflict that Jones’s (and other owners’) individual agreements could create for the NFL: “His marketing deals have been astonishing…. He just has to remember that this is a great league because we share our revenue. It’s important that he not forget that in his quest to improve the Dallas Cowboys’ balance sheet” (Eichelberger, 1999, para. 28).

Revenue-sharing methods

Each league, regardless of its financial resources, must establish a revenue-sharing percentage and develop a revenue-sharing plan that fits the unique situation of the league. Revenue sharing has become a critical aspect of collective bargaining agreements, and it will likely increase in importance in the future.

In the NHL, for example, the players and owners agreed to a complex revenue-sharing plan that augmented the salary cap implemented after the cancelled 2004/2005 season. The bottom 15 revenue-producing clubs received additional revenue-sharing dollars beyond the equally shared sources, such as national television contracts (Bernstein, 2005). However, lower revenue-producing clubs in metropolitan markets that have at least 2.5 million households were ineligible to receive revenue-sharing dollars. In addition, clubs had to achieve predetermined attendance levels to be eligible to receive these revenue-sharing dollars. NHL Deputy Commissioner Bill Daly noted, “You don’t want a revenue-sharing program that doesn’t incentivize performance” (Bernstein, para. 18). The NHL’s complex revenue-sharing formula worked to stabilize the league, but some were concerned that too much money was being shared with teams in untenable positions. The majority of revenue-sharing dollars have been directed to teams in the southern portion of the United States (such as in the states of Florida, Tennessee, and Arizona), causing many Canadian owners to question why they are subsidizing teams in areas that have traditionally not been interested in hockey (“NHL owners,” 2008). As previously mentioned, in 2009 the NHL had to take over financial control of the Phoenix Coyotes as a result of the team’s mismanagement and failure to attract a sufficient fan base to generate revenues to cover costs, despite receiving revenue-sharing dollars (Sunnucks). In the case of the Atlanta Thrashers, low attendance and minimal community interest led to the team’s relocation to Winnipeg in 2011 to become the second version of the Winnipeg Jets.

Under the NHL CBA signed in 2013, the league made some changes to its former revenue-sharing model. The 2013 plan requires the top ten grossing teams to contribute based on how much more revenue they generated than the 11th-ranked team. Under this plan, the top revenue-producing team contributes more—possibly much more—than the 10th highest producing team. Playoff teams also allocate 35% of their gate receipts to the revenue-sharing pool. In contrast to the previous CBA, which prevented any “large market” teams or teams that did not reach certain attendance targets from receiving revenue-sharing monies, the new plan has removed some of those restrictions. The plan is designed to help low-revenue teams to be able to pay players salaries that are closer to the midpoint between the salary floor and the salary cap (Hoag, 2013).
Fixing free riding with a relegation system in European soccer

Every professional sport league is concerned about the potential of free riding by its franchises, but many of the professional leagues outside North America do not have the same problems that the NFL or MLB may experience. Many European soccer leagues have a relegation system, in which, after each season, a certain number of the worst-performing clubs will be sent down or relegated to a lower division, while a certain number of the top-performing clubs from the lower division will be elevated to the higher division. Since the potential operating revenues are typically lower in a less desirable division, each year every franchise must attempt to maximize its on-field performance in order to remain in or earn a place in the higher division. The relegation system provides an effective incentive for clubs playing in a low- or middle-level division to work to achieve success that will translate to a better division, higher revenues, and greater profits. Relegated teams will have decreased revenues, but most of the leagues provide some sort of phase-in or phase-out of shared revenues to minimize the immediate impact. In addition, some leagues may offer relegated teams a “parachute payment” if it appears that relegation could lead to bankruptcy. In England, Arsenal has not been relegated since 1919, and it is also one of seven teams that have not been relegated since the Premier League was established as the country’s top league in 1992.

Although establishment of a relegation system is occasionally discussed as a means to improve motivation and strategic management of certain North American professional teams, media and sponsorship contracts, as well as other logistical issues, make this highly unlikely in the near future, if ever. For instance, if a relegation system were to be implemented in MLB, national and regional television contracts could be devalued if larger-market teams were replaced by teams with much smaller markets. In addition, since the United States is geographically much larger than European countries, team substitutions could create scheduling difficulties and dramatically increase travel costs.

Major League Baseball’s 34% revenue-sharing model and luxury tax payments are designed to help teams improve their on-field product. Some observers are concerned that a few MLB clubs may simply be pocketing their revenue-sharing dollars as profits. The Milwaukee Brewers, formerly owned by Commissioner Bud Selig and his family, received tens of millions of dollars in revenue sharing while fielding low-payroll teams in the early 2000s. This situation aroused speculation that Selig, as Commissioner, would not fine the team for pocketing revenue-sharing dollars rather than spending them to improve the team (“HBO’s Real Sports examines,” 2004). The Miami Marlins have long been one of MLB’s largest revenue-sharing recipients. In 2010, the Marlins were forced to increase their payroll after the MLBPA complained that the team was not spending its money on players but instead was pocketing much of the money (“Marlins pay heed,” 2010). The agreement the Marlins reached expired in 2013, which was also the year the team traded many of its better players for inexpensive minor league prospects. It was also the year after the Marlins opened a new $634 million stadium, which was largely financed by the public. Despite their history, in 2014 the Marlins signed superstar outfielder Giancarlo Stanton to a 13-year, $325 million contract. Many pundits wondered if Stanton had made a mistake, as in order to be competitive the Marlins would need additional money to sign other quality players. Stanton’s contract did include an escape clause available after six years, providing Stanton some protection if the Marlins intentionally decreased their payroll and the quality of their team.

The Dallas Cowboys’ dispute over their Nike deal and the New York Rangers’ dispute over control of their website generated tremendous headlines and reinforced a common concern among owners of professional sport teams: that teams receiving revenue-sharing dollars from the league may elect to free ride—to benefit at another’s expense without expending usual cost or effort, in this case by electing to minimize their marketing efforts while receiving financial benefits from the “extra” efforts of more successful teams. Jerry Jones has been critical of other NFL owners who he feels have failed to maximize their revenue opportunities (Helyar, 2006). Whereas Jones invests heavily in marketing endeavors to advance the Dallas Cowboys brand, other owners appear content to maintain a smaller marketing staff and a lower advertising budget while they benefit from Jones’s efforts. The Cowboys are certainly not the only large-market team in the major professional sport leagues to complain about the detriments of revenue sharing, but their complaints are certainly the loudest, since the NFL shares much more of its revenues than other leagues.
Soccer is by far the most popular sport in the world. Though nearly every country has thousands or millions of people who play, and though talented players are developed in both large and small countries, a growing concern is that too many professional soccer leagues can no longer retain their best players. Professional soccer franchises have long sold or “transferred” their players to other teams, sometimes in other leagues, and free agent players have often moved to new teams for better opportunities to play and/or to earn a higher salary. However, over the past ten years, the revenue disparities among various soccer leagues and among individual teams have grown dramatically. Where there used to be a significant difference in revenue for leagues in Europe versus those in South America, Africa, and Asia, now even some European leagues are unable to retain their best players. Franchises at the top of the Barclays English Premier League and the German Bundesliga, as well as Real Madrid and FC Barcelona, have developed extensive revenue sources that dwarf those of other franchises throughout the rest of the world, and the rest of their leagues. Former FIFA presidential advisor Jerome Champagne noted, “The majority of football (soccer) is today facing this crisis [sic] while the wealthy are becoming wealthier … the reality is that for two percent of privileged clubs or competitions, you have 98 percent in the opposite situation” (Homewood, 2013, paras. 6 & 8).

The massive increase in television dollars for sports that has affected North American leagues such as the NFL, MLB, and NBA has also impacted top European soccer leagues in England, Italy, Spain, and other traditional powers. Unfortunately, the continued growth of television revenues is not likely to affect each league and country in a similar manner. As some leagues generate more and more dollars, their ability to develop their youth teams will increase. To complete those rosters, teams will likely mimic what FC Barcelona has done over the past 15 years. In an effort to build their youth academy, FC Barcelona signs young players from around the world. Top player Lionel Messi was signed from Argentina at the age of 11. As teams attempt to sign top youth players earlier and earlier, South American, African, and Asian soccer prodigies will likely grow up like Lionel Messi, playing in another country even before they turn 18.

There is no perfect system to ensure competitive balance—particularly since every professional sport owner has a unique rationale for operating a franchise. “Perfect” competitive balance, in fact, is not necessarily a desirable situation, since it would mean all teams finish with nearly the same number of wins as losses—a situation that would likely discourage most fans. Whether they are casual or deeply committed, fans enjoy watching superior players from highly successful teams compete for championships. If the highly successful teams are always the same, problems also arise. The key for each league is to develop a system whereby great players are not all playing for a small number of the league’s teams.
EMERGING REVENUE SOURCES

Every professional sport league and individual franchise is constantly investigating and developing new revenue sources that address its unique financial issues. For example, over the past 20 years, the importance of a team’s facility has grown. Most of the urban sport facilities built in the early part of the 20th century have been replaced, first, in the 1960s, by “cookie cutter” facilities that were primarily designed to offer large seating capacities and expansive parking areas and then, starting in the 1990s, by more “intimate” facilities. In the case of every new facility and the remaining historic facilities, such as Wrigley Field in Chicago and Fenway Park in Boston, the emphasis in construction and renovation has been revenue maximization.

An investigation and discussion of professional sport revenue sources could fill its own book. In the remainder of this chapter, we describe some interesting revenue sources that are now influencing the financial management of professional sport organizations, including luxury seating, seat licenses, ticket reselling, variable ticket pricing, fantasy sports and gambling, and securitization.

Luxury Seating

Franchises have always desired to sell a large number of season tickets. These tickets provide revenue, facilitate game management, and earn interest, as the money is typically received prior to the season (and many of the season’s expenses). Thus, luxury seating has become an important revenue source for many teams. In addition to “traditional” luxury suites and club seats, some facilities, such as the Palace at Auburn Hills, where the NBA’s Detroit Pistons play, are offering luxury suites that do not have a direct view of the field of play. These luxury suites are part of a growing trend to attract higher-end customers, who can afford to pay for exclusive access to certain areas of the facility. Whereas most teams 25 years ago worried primarily about the total number of attendees, now many teams pay significant attention to attracting a small number of affluent customers, whether they are individuals or businesses.

Seat Licenses

Another indication of the trend toward high-priced seating is the use of personal seat licenses (discussed in Chapter 9) and permanent seat licenses. A PSL is the right to purchase tickets for a specific seat, for which a customer pays a one-time fee. PSLs can generate a tremendous amount of money for a professional sport franchise, if they are designed and marketed properly. Typically a personal seat license has a limited time frame, and a permanent seat license is valid for the life of the facility. When the NFL’s Carolina Panthers began construction of their new facility, they sold permanent seat licenses for most of the seats. All of the PSLs were sold, in most cases quickly. Conversely, when the Los Angeles Raiders returned to Oakland in 1995, many of the personal seat licenses that were sold to pay for upgrades to the Oakland–Alameda County Coliseum were valid for only ten years. This relatively short time frame, combined with owner Al Davis’s less-than-stellar track record of keeping the team in one location for long periods of time, combined to leave many of the PSLs unsold.

The rights that are conferred to the PSL holder vary. Often, a PSL holder will desire to bequeath, transfer, or even sell the PSL to another party. The specific language of the PSL determines whether a customer may confer ownership to another party and whether that transfer may be made in exchange for cash. In numerous instances, PSL holders have believed that the licenses were “theirs” to sell or transfer as they wished. In some cases, litigation resulted (Reese, Nagel, & Southall, 2004). Currently, teams typically allow PSL holders to transfer their rights to another party, as long as they pay a handling fee to the team. Some teams have established websites where PSL holders can solicit bids for their ticket rights.

Ticket Reselling

Season tickets and individual game tickets are increasingly being bought and sold on the secondary ticket market. Ticket reselling or scalping has surely occurred since the first ticketed event in human history, but over the past 15 years the prevailing view of reselling tickets has largely changed. No longer is ticket reselling done primarily by shadowy characters lurking on dark street corners or in back alleys. Most municipalities have rescinded anti-scalping laws, and ticket reselling has become a multimillion-dollar enterprise. Teams and leagues have recognized the importance of acquiring this growing revenue source. In 2007, StubHub signed a contract to be Major League Baseball’s exclusive secondary ticket provider (Branch, 2007), and other leagues have also formalized their secondary ticket resale operations.
Variable Ticket Pricing

The secondary ticket market is driven partially by the discrepancy between a ticket’s initial price and its market price. For many years, teams set ticket prices without thoroughly researching the optimal price, often setting prices based on the previous year’s prices, with some adjustment for the team’s performance. Most teams did not consider individual games to have different potential demands, even though the airline and hotel industries had long since determined that the same seat or room can be priced differently based on, for example, the day of the week or month of the year. As research and technology in sports have improved, more franchises are employing variable ticket pricing (VTP) to capture added revenues by increasing initial ticket prices for highly demanded games and decreasing ticket prices for lower-demanded games, in an effort to attract customers who would not attend at the “typical” price. VTP has proved profitable for many sport franchises, who are now replacing it in some cases with dynamic ticket pricing, in which the ticket price is altered instantly (like a stock on a stock exchange) as demand increases or decreases. The complexity and prevalence of dynamic pricing are likely to increase as teams continue to study their ticket prices and as more advanced software becomes available.

Fantasy Sports and Gambling

The modern era of fantasy sports began in 1979 when writer Daniel Okrent invented rotisserie league baseball and invited a variety of his literary and media colleagues to participate. When members of the league began to write about their exploits, the quirky pastime slowly grew, until it reached the mainstream in the late 1980s and early 1990s. Subsequently, during the Internet boom of the late 1990s and early 2000s, fantasy sports became a multimillion-dollar industry. Millions of participants join season-long leagues where individuals draft a “team” and compete against other league participants. The industry has continued to expand and is now credited with attracting millions of viewers for games in a variety of sports, particularly in the NFL.

Many observers and skeptics of fantasy sports have long believed that it is merely a form of gambling. Despite this concern, under the Unlawful Internet Gambling Enforcement Act of 2006, fantasy sports were specifically exempt from potential prosecution. However, the introduction and rapid growth of daily fantasy sport sites such as FanDuel and DraftKings have many wondering if the government may begin to perceive these games as a form of gambling (Heitner, 2014). FanDuel and DraftKings have attracted hundreds of millions of dollars in entry fees since 2012, despite the potential that the government could shut down the entire industry.

Potential legal concerns have not prevented daily fantasy sites from attracting significant attention not only from participants but also from advertisers and professional sport leagues. In 2013, Major League Baseball acquired a small equity stake in DraftKings (Fisher, 2015). DraftKings also has a sponsorship relationship with the National Hockey League. In late 2014, FanDuel announced a partnership with the National Basketball Association that granted the NBA an equity stake. NBA Commissioner Adam Silver announced that despite the NBA’s longstanding objection to “traditional” gambling, the Association would support the transformation of sports betting from an illegal, often clandestine operation into a more visible and observable industry. Though other leagues have not been as publicly supportive of changing long-standing views on gambling, the profit potential of a legalized gambling environment is likely to change future league stances on the subject.

Securitization

It is obvious that the effort to increase revenues will remain critical for professional sport franchises in the future. As a means of leveraging their revenue streams, some sport organizations are investigating securitization—the use of contractually obligated future revenue as collateral for issued debt. For professional sport franchises or leagues, the contractually obligated income could be derived from media contracts, naming rights fees or other long-term sponsorship agreements, and luxury seating commitments.

Securitization works differently from a typical loan procured at a bank or other lending institution. The contractual ownership of the future revenues is sold to a trust that provides the bondholders primacy over claims of other debtors in case the team or team owner should file for bankruptcy (Allen, 1998). Since the future revenues are contractually obligated, they are usually viewed as safer than other future revenue sources (such as ticket or concession sales) that may or may not materialize. Thus, bondholders will typically be more willing to purchase the bonds, and the bonds can be offered at a lower interest rate, decreasing the team’s or league’s cost of acquiring capital.

Although the bonds are relatively safe, as we saw in the mortgage meltdown of 2008, contractually “guaranteed” future revenues may not materialize. The bond holder is secure from the initial bond issuer failing to meet its financial obligations, but the entity that is actually paying to support the bond payments
(such as a naming rights partner) may be unable to fulfill its obligation. (This was one of the major contributing factors in the 2008 financial crisis. Many bonds had been sold with future obligations guaranteed by mortgages on residential real estate. As the real estate market underwent a price correction, bond holders found that many of the homeowners at the other end of the securitization had stopped paying their mortgage notes.)

Major League Baseball and the NFL have established credit facilities by securitizing some of their future television revenue (Allen). The Staples Center in Los Angeles and the Pepsi Center in Denver were partially financed through securitization. In 2000, MLB’s Detroit Tigers planned to refinance over $250 million through a new securitization proposal (Kaplan, 2000a). However, within a few weeks of announcing that the securitization plan would be implemented, the Tigers reported that they would have to seek loans through more traditional sources instead (Kaplan, 2000b). Closer investigation showed that the Tigers, who had just moved into the new Comerica Park, had experienced lower-than-expected revenues, and many of their anticipated contractually obligated revenue sources had not materialized, making the offering untenable in its current form. Although numerous other sport organizations have considered securitization, the Tigers’ situation suggests that financial principles that have been implemented in other industries are not necessarily applicable in sport.
CONCLUSION

Every professional sport franchise and league will continue to develop financial tools to enhance its profitability. Leagues attempt to foster competitive balance among teams, but since each franchise owner has a unique rationale for owning and operating a franchise, achieving competitive balance among the teams will always be difficult, and “perfect” balance may not be desirable. Professional sport franchises share some of the characteristics of other businesses, but their financial management has unique aspects. As revenues, expenses, and potential profits continue to increase in the future, financial planning will become even more critical. No longer can a person expect to become a key member of a professional sport franchise without a thorough understanding of the numbers that drive the business.

concept CHECK

1. What is the difference between win maximization and profit maximization? How can these differing philosophies cause problems in professional sport leagues?
2. How does a commissioner interact with owners and players in a professional sport league? What are a commissioner’s main responsibilities?
3. How do professional sport leagues such as the NBA, NHL, NFL, and MLB differ in structure from entities such as NASCAR, the PGA Tour, and the PBA Tour?
4. Why do professional leagues establish rules governing the financial operation of individual franchises?
5. Explain the concept of pooled debt instruments.
6. Why have so many rival professional sport leagues failed in the United States?
7. Explain the concept of competitive balance. How have leagues attempted to achieve competitive balance?
8. Discuss the differences among the salary caps in the NBA, NHL, NFL, and MLS.
9. Explain how the NBA’s new luxury tax system operates. Research and explain an example where the new tax rates affected (or may have affected) a team’s decision to sign players for its roster.
10. What is WAR (in the context of sport finance)? Conduct research to determine the ten most efficient players during the last MLB season. Then compare their salaries to determine which player offered the best performance value for his salary.
11. List and describe the most important revenue sources for professional sport leagues. In what ways do you think these revenue sources will change in importance in the future?
12. Do you feel that daily fantasy leagues are gambling or games of skill? How do you feel the legislative and judicial branches of government will resolve this question in the future?
13. Explain why a relegation system would be difficult to implement in North American professional sport leagues.

PRACTICE problems

1. If the federal inheritance tax is set at 40% of all assets above $5 million at the time of death, and a state’s inheritance tax is set at 5% of all assets above $1 million at the time of death, what does an individual who dies owning a professional sport franchise that is worth $420 million owe in total tax liability? (Assume no other assets at time of death.)
2. If a 30-team league is contemplating expanding by two teams, how much money should it charge each new franchise to ensure that during the first year of the new 32-team league, each of the existing 30 owners will receive the same amount of revenue as they would have without the expansion? (Assume each owner earns $40 million per year from media contracts and $10 million per year from licensed merchandise sales, that the league will continue to share these revenues equally after the expansion, and that the media contracts are not scheduled to be renegotiated until a year after the expansion is completed.)
3. Suppose that last season, the top pick in a 30-team league's amateur draft signed a contract for $2 million per year. In the upcoming season, the league will implement a salary slotting system under which each pick will be compensated based on his draft selection. If the compensation plan will be based on a 5% increase of the top selection's compensation from last year and a 1% decreasing scale for every pick after the first selection (second pick will earn 99% of what the first pick earns, and so forth), how much will the top selection in next year's draft earn? How much will the ninth pick earn?
You have been asked to consult for an entrepreneur who is assembling investors for a new professional sport league. A critical decision for the league will be whether to organize under a single-entity structure or a franchisor/franchisee model.

Case Questions

1. Briefly describe how each structure works and explain the advantages and disadvantages of each structure.

2. How have these structures helped or hindered leagues in the past and present? Cite specific examples from existing leagues to support your answer.

References


Note

*MLB’s revenue-sharing formula is complex in regard to who pays and how the funds are distributed. Most reporters discussing MLB revenue sharing simply cite the 34% sharing percentage and do not go into details. For more information, see Wendy Thurm’s November 14, 2012 article, “The Marlins and the MLB Revenue Sharing System,” available at http://www.fangraphs.com/blogs/marlins-mlb-revenue-sharing-system.
APPENDIX

Time Value of Money Tables

Future Value of $1.00 at the End of n Periods
Future Value of an Annuity of $1.00 per Period for n Periods
Present Value of $1.00 Due at the End of n Periods
Present Value of an Annuity of $1.00 per Period for n Periods
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GLOSSARY

80/20 rule  The expectation that 80% of needed funds to reach a capital campaign goal will come from 20% of the donors, based on past giving patterns.

90/10 rule  The expectation that 90% of needed funds to reach a capital campaign goal will come from 10% of the donors, based on past giving patterns.

accounting profit  Profit earned when revenues exceed costs and expenses over a particular period of time. Accounting profit does not necessarily accurately reflect the results of an individual’s or organization’s financial decisions.

accounts receivable  Money owed by a company’s customers.

accrual basis accounting  An accounting method that recognizes income when it is earned and expenses when they are incurred, rather than when the money is exchanged.

acid-test ratio  See quick ratio.

allocated revenues  Revenues transferred by a school to its athletic department.

annual coupon interest payment  A periodic return paid to the owner of a bond.

annuity  A series of equal payments or receipts made at regular intervals.

antitrust exemption  An exemption from the antitrust laws, which prohibit unfair restraint of trade and the creation of monopolies. Through Congressional or judicial action, some entities have been granted exemption from some or all antitrust laws. Major League Baseball enjoys a much stronger antitrust exemption than any of the other U.S. professional sport leagues.

arm’s length  Describes a buyer and seller who are not related to each other in any way, whether they are individuals, businesses, or estates; they have no familial relationship, neither company is a subsidiary of the other, neither company has an ownership interest in the other, and there is no financial relationship between the parties.

arms race  The continuous building of bigger and better athletic facilities for the sole purpose of landing key recruits.

assessed value  The product of the fair market value of a property and its assessment ratio (see formula, p. 346).

assessment ratio  The percentage of a property’s value that is subject to taxation.

asset-backed securities (ABS)  Bonds guaranteed by a franchise’s COI or expected revenue streams.

asset-based approach  An approach to valuing an asset, a business, or an interest or equity in a business by determining what it would cost to re-create the business or asset. Also termed cost approach.

assets  What a company owns, including items such as cash, inventory, and accounts receivable.

athletic support group (ASG)  An organization responsible for an athletic department’s annual giving programs, also known as a booster club.

auction-rate bond  A form of long-term debt that acts like short-term debt, in which interest rates are reset through auctions typically held no more than 35 days apart.

balance sheet  A snapshot of the financial condition of an organization at a specific point in time.

bankruptcy  The process of liquidation or reorganization of an insolvent firm.

base budget  The expenditure level necessary to maintain last year’s service level at next year’s prices.
basis point  A unit, representing one hundredth of a percent, used in measuring changes in financial rates.

benefit principle  The idea that those who benefit from a particular project ought to be the ones taxed to pay for it.

beta coefficient ($\beta$)  A measurement of the volatility of a stock compared to market return, reflecting the degree to which the stock increases or decreases with an increase or decrease in the overall market.

board of directors  An elected group whose job is to select the executives and management of the company.

bond  A promise to pay back borrowed money plus interest to the investor who has purchased the bond; a financial mechanism for raising capital by using debt as opposed to equity.

bond rating  An estimation of the likelihood of a bond issuer’s making payments in full.

budget  A set of financial statements based on projections resulting from a particular scenario, generally the most likely or hoped-for scenario.

budget time horizon  The shortest time period that can be predicted with a reasonable degree of certainty on the basis of past business decisions and commitments.

business planning horizon  The period for which forecasts can be made with a reasonable degree of confidence, generally three to five years.

call premium  A fee charged to a borrower for repaying the principal on a bond prior to the maturity date (see formula, p. 179).

call provision  Provision allowing a borrower to repay a debt before the maturity date.

campaign case statement  In fundraising, a pitch to donors that answers all critical questions regarding the campaign, suggests why an individual should support the campaign, and informs the reader how he or she can give to the campaign.

capital  The long-term, fixed assets that are used in production.

capital asset pricing model (CAPM)  A method of analysis of the relationship between risk and rate of return, built on the notion that a stock’s required rate of return is equal to the risk-free rate of return plus a risk premium, with the risk reflecting the portfolio’s diversification.

capital budgeting  The process of evaluating, comparing, and selecting capital projects to achieve the best return on investment over time. Also known as capital investment appraisal.

capital campaign  An intensive effort to raise funds in a given time frame through gifts and pledges for a specific purpose.

capital expenditure  The funds used to acquire capital assets that will help the organization earn future revenues or reduce future costs.

capital expenditure budget  A forecast of the expenses and income related to a capital investment.

capital gain  The increase in a stock’s price since purchase.

capital gains yield  For a bond, the annualized percentage change in the price relative to the current price.

capital markets  Markets for intermediate or long-term debt, as well as corporate stocks.

capital structure  The amount of debt and equity that a firm has.

capitalism  An economic system in which the majority of capital is privately owned.

capture rate  The portion of an organization’s spending that is spent locally.

cash basis accounting  An accounting method that recognizes transactions when money is either received or paid out.

cash budget  A forecast of how much cash an organization will have on hand in a specific time period and how much it will need to meet expenses during that time.

casual visitor  A visitor attending a sporting event who was already in town for a different reason.

central revenues  Earnings that are paid directly to a league and then distributed to member organizations.

certificate of deposit (CD)  An FDIC-insured debt instrument issued by banks and savings and loans with a fixed term and a specific interest rate. Certificates of deposit are intended to be held until maturity, and
penalties are incurred if the depositor removes the money prior to the term’s completion.

certificate of participation (COP)  Financial instrument that a government agency or a non-profit corporation sets up to build a facility, often sold to one or more financial institutions to obtain the initial capital for construction. The agency or non-profit leases the facility either directly to the tenant(s) or to a facility operator and uses the lease payments to pay off the COP.

coefficient of variation (CV)  A measure of the stand-alone risk of an investment (see formula, p. 69).

collateral  Asset(s) pledged to a lender to be used as repayment of a loan in the event of default.

collective bargaining  The process that occurs when workers in a company or league agree to negotiate as one unit with management to determine salaries and other working conditions.

collusion  Secret agreement or cooperation for an illegal purpose.

common stock  Ownership shares of an organization.

comparables analysis  In a feasibility study for a sport facility, a comparison of similar cities to the one where the new facility is proposed, with the idea that if facilities are successful in those cities, a similar facility may be successful in the subject city.

competitive analysis  In a feasibility study for a new sport facility, the investigation of existing facilities that might compete with the proposed facility.

competitive balance  The condition under which every franchise, if it executes sound management strategy, has a reasonable opportunity to compete for a playoff spot at least every couple of seasons.

competitive issue  A bond issue in which a municipality publishes a notice of sale, seeking bids from underwriters. The underwriter submitting the lowest bid, or lowest interest rate, will be selected to underwrite the bonds.

compound interest  Interest that is calculated on both the principal investment and the interest generated by that investment.

cost approach  See asset-based approach.

cost–benefit analysis  An analysis or study of the cost of a project in relation to its potential benefits.

cost of goods sold (COGS)  Those costs that are directly attributable to the production of goods or products, including raw materials and labor costs.

coupon rate  The rate that a bond issuer pays for the use of money; equivalent to an interest rate.

covariance  The degree to which two variables change together; in finance, it helps us find assets that move
differently from those already held in a portfolio.

credit An increase to a liability or equity account, entered on the right-hand side of a ledger.

current expenditure A short-term expense that is completely written off during the same year as the expense is incurred.

current liabilities Liabilities due within one year.

current ratio A formula that measures a company’s ability to meet its current liabilities with its current assets (see formula, p. 46).

current yield For a bond, the amount earned annually from an interest payment compared with the price, expressed as a percentage return (see formula, p. 180).

debit An increase to an asset or expense account, entered on the left-hand side of a ledger.

debt financing A method of raising capital in which an organization borrows money that must be repaid over a period of time, usually with interest.

debt ratio A measure of an organization’s leverage, sometimes referred to as the debt-to-assets ratio (see formula, p. 49).

decision package A discrete addition to a reduced-level budget to maintain an existing program, serve an increased workload, or add a new program.

decision unit An individual or unit where budget decisions are made, responsible for creating decision packages in zero-based budgeting.

default The failure of an organization to fulfill its obligations toward a loan, often because it ceases operations or enters bankruptcy.

default risk The risk that a borrower will not pay back the principal of a debt plus interest.

default risk premium (DRP) Premium added to the nominal interest rate to account for the risk that the borrower might default.

deferred compensation Salary whose payment is delayed under contractual terms; also known as deferred salary.

demand The quantity of a product or service desired by consumers.

department-generated revenues Funds generated independently by an athletic department and its programs.

depreciation The allocation of an item’s loss of value over a period of time.

depreciation recapture Additional taxes that must be paid on an item that is found to have a higher salvage value than was initially estimated.

direct impact Expenditures on a project or event that contribute to economic impact.

discount factor (DF) See discount rate (1).

discount rate (1) A measure of risk or uncertainty used in present value calculations; also called capitalization rate. (2) The rate charged by the Federal Reserve on loans made to member banks. (3) The rate of return required to justify an investment.

discounted cash flow (DCF) analysis A valuation method based on the idea that the fair market value of an asset is equal to the present value of its expected future cash flows.

discounted payback period The number of years required to recover an initial capital investment, discounting the investment’s cash flows at the investment’s cost of capital.

displaced spending Money spent by a local resident on an event that would have been spent elsewhere in the local economy if the event had not occurred.

diversifiable risk The portion of a stock’s risk that can be removed through a well-diversified portfolio.

dividends Periodic payments made to shareholders of a company, as a way of distributing profits to the shareholders.

dollar return The return on an investment measured by subtracting the amount invested from the amount received (see formula, p. 59).
double-declining balance depreciation A variation of straight-line depreciation in which a much higher amount of depreciation is allocated to the early years of the depreciation schedule.

double-entry bookkeeping A method of recording financial transactions where each transaction is entered or recorded twice, once on the debit side of the accounting records and once on the credit side.

draft lottery A lottery used in the NBA to determine the draft order of the non-playoff teams, in which a poorer record provides a greater chance to “win” the highest picks in the draft.

dynamic ticket pricing A pricing strategy in which ticket prices are altered instantly (like a stock price on a stock exchange) as demand increases or decreases.

earnings before interest and taxes (EBIT) A useful measure of income or profit (see formula, p. 50).

economic cycle A cycle consisting of four stages—growth, peak, recession, and recovery—and typically lasting for just under six years.

economic depression An extreme recession, lasting two or more years.

economic growth The part of the economic cycle when the economy is increasing in real terms (faster than the rate of inflation).

economic impact The net economic change in a host community resulting from spending attributed to an event or facility.

economic profit Profit that remains when opportunity costs are subtracted.

economics “The study of how people choose to allocate their scarce resources” (Wessel, 2000 [Ch. 5 References]).

efficiency principle The notion that a tax should be easy to understand, simple for government to collect, low in compliance costs, and difficult to evade.

endowed gift Funds donated to a department in perpetuity that are invested, with only a portion of the annual investment return used for the gift’s specific purposes.

entrepreneur A person who establishes a business venture and assumes the financial risk for it.

equity financing Financing in which an organization exchanges a share or portion of ownership for money.

excise tax Tax on goods and services that may be imposed within a city, county, or state.

expansion fee A fee charged to the owners of the newly established franchise when a professional sport league expands, to compensate current league owners for the short-term decrease in shared revenue from media contracts and licensed merchandise.

expected rate of return The sum of each possible outcome (return) on an investment multiplied by the outcome’s probability.

expected return on a portfolio The weighted average of the expected returns of a set of assets (see formula, p. 69).

expense budget A list of a business unit’s primary activities, with a dollar amount allocated to each.

expenses Funds flowing out of an organization as costs of doing business.

express partnership A general partnership created by a contract between the parties.

fair market value The net price for an asset that would result in a transaction between a willing buyer and a willing seller, neither of whom is under compulsion to buy or sell, both having reasonable knowledge of the relevant facts, and the two parties being at arm’s length.

fair value The transaction price of two specific parties taking into account the advantages or disadvantages each one will gain from the transaction.

fair tax A national sales tax proposal that would repeal all current federal taxes and replace them with a tax on retail products and services.

feasibility study A study conducted to determine whether a project is likely to be successful, considering such items as engineering, land use, financing, demand, and economic impact.

federal funds rate The interest rate on overnight loans between banks.
Federal Reserve  The central bank of the United States. It is the primary organizing body that attempts to maintain the overall economic health of the United States.

fiduciary duty  The responsibility of a company’s management to act in the best interests of all shareholders.

finance  The science of fund management, applying concepts from accounting, economics, and statistics.

financial management  A sector within firms that is concerned with the acquisition and use of funds to meet the goal of wealth maximization.

financing analysis  An assessment of how much money will be needed for a project, such as facility construction.

fiscal policy  The use of government revenue collection and spending to influence the economy.

fiscal year  A 12-month period over which a company budgets its money.

fixed costs  Expenses that do not vary with volume of sales.

flat tax  A federal levy that would require every American to pay the same income tax rate, rather than rates based on each taxpayer’s yearly income.

forecast  A prediction and quantification of future events for the purpose of budgeting.

franchise free agency  The ability of a team to relocate to another city when it is not obligated to a facility through a lease or a municipality through an agreement.

franchise ownership model  A league structure under which individual owners, rather than the league office, own and control teams. See also distributed club ownership model.

free ride  To benefit at another’s expense without expending a usual cost or effort.

Freedom of Information request  Request filed by a citizen under the Freedom of Information Act to discover, for example, where and how a government agency is spending its money.

future value (FV)  The worth of an asset at a certain date in the future, determined by calculating the change in value of money when an interest rate is applied over the intervening period of time.

general obligation bonds (GOBs)  Bonds issued by a local government, lasting about 20 years and secured by tax revenues and the issuing entity’s ability to impose new taxes, with interest paid each year directly out of the entity’s general funds.

general partnership  The joining of two or more individuals with the intent to own and operate a business.

generally accepted accounting principles (GAAP)  A standard set of guidelines and procedures for financial reporting.

gift financing  Charitable donations, either cash or in-kind, made to an organization.

globalization  The integration of economies into one “world economy.”

going concern  An organization that we assume, for budgeting purposes, will operate indefinitely.

government financing  Funding provided by federal, state, or municipal sources, including land use, tax abatements, direct financing, state and municipal appropriations, and infrastructure improvements.

grant  Monetary aid that does not have to be repaid.

Great Society  A set of initiatives, including Medicare and Medicaid, intended to combat poverty, passed in the 1960s during President Lyndon B. Johnson’s administration.

gross domestic product (GDP)  The market value of all final goods and services produced within the borders of a county, state, country, or other region in a year.

gross domestic sport product (GDSP)  The market value of a nation’s output of sport-related goods and services in a given year. This includes the value added to the economy by the sport industry, as well as the gross product originating from the sport industry.

horizontal equity  The idea that individuals with similar incomes should pay similar amounts of a tax.

implied partnership  A general partnership that is not established by a contract but created by the parties’ merely acting as partners.

income approach  An approach to valuing an asset, a business, or an interest or equity in a business, under
which income or cash flow serves as the basis for the value of the business or asset.

**income statement** A statement of a company’s income over a specified period of time, typically issued on an annual or quarterly basis. Also called a statement of earnings or profit and loss statement.

**incremental budget** A budget arrived at by either decreasing or increasing last year’s budget, based on projected changes in operations and conditions.

**incremental cash flow** Cash flow created through the implementation of a new project.

**incremental spending** Spending above and beyond what a person would have spent had an event not taken place.

**incremental visitor** A visitor who came to town because of an event and would not have come to town otherwise.

**indirect economic impact** Economic impact that represents the circulation of initial expenditures (direct impacts) in an economy.

**induced economic impact** The effect of direct and indirect economic impacts on earnings and employment.

**inflation** The devaluation of money over time.

**inflation premium (IP)** The portion of an investment’s return that compensates the investor for loss of purchasing power over time, calculated by determining the expected average inflation rate over the life of the security.

**inheritance (death) tax** A levy on an estate applied when the owner dies.

**initial cost** The actual cost of starting a project, adjusted for any installation, delivery, or packing costs; discounts to the initial price; the sale of existing equipment or machinery; and taxes.

**initial public offering (IPO)** The offering of shares of a company to the public in order to generate cash for the business, when no shares had previously been available.

**interest** The cost of borrowing money.

**interest coverage ratio** A measure of a firm’s ability to pay the interest on its debt. Sometimes called the times interest earned ratio (see formula, p. 50).

**interest rate risk** The risk of a decrease in the value of a security due to an increase in interest rates.

**internal rate of return (IRR)** The discount rate at which the present value of estimated cash flows is equal to the initial cost of the investment.

**inventory turnover ratio** A measure of how often a company sells and replaces its inventory over a specified period of time, typically a year.

**investment risk** A measure of the likelihood of low or negative future returns.

**investments** Security choices made by individual and institutional investors as they build portfolios.

**jock taxes** Special taxes that apply to professional athletes’ income earned in a particular city, county, or state.

**joint use agreement** A formal agreement for the sharing of a facility between two or more parties.

**junk bond** A bond with a significant chance of default and a high coupon rate, receiving a bond rating below BBB.

**laissez-faire** Describes an economic policy in which the government has little involvement in the business environment beyond setting and enforcing rudimentary laws.

**large-cap company** A publicly traded company that has a market capitalization of at least $5 billion.

**Larry Bird exception** A provision that allows NBA teams to re-sign their “own” potential free agents for salaries that would otherwise cause the team to exceed the designated yearly salary cap; so named because the Boston Celtics were concerned that the loss of Larry Bird to free agency would devastate the team.

**league think** The philosophy, initially advocated by NFL Commissioner Pete Rozelle, that team owners should think of the overall financial health of the league as their first priority and individual franchise profits as a secondary concern.
leakage  The movement of money out of a geographic region.

lease revenue bond  A version of revenue bond in which the revenue stream backing the payment of the bond is a lease.

level of risk  A comparative evaluation of risk, determined by comparing the risk of one asset or firm to that of another. Some firms or assets have a lower degree of risk and some have a higher degree of risk.

leverage  How a company chooses to finance its operation with debt versus equity. A company that relies extensively on borrowing money is considered to be heavily leveraged. Such a company faces greater risk of financial problems than one not so reliant on debt.

liabilities  The financial obligations or debts owed by an organization to others.

limited liability corporation/limited liability partnership (LLC/LLP)  A business structure under which shareholders’ distributions are taxed as ordinary income and shareholders are shielded from personal liability.

limited partner  A partner who is liable only for his or her direct financial contribution and is not permitted to participate formally in the company’s operation.

line-item budgeting  Approach in which line items, also known as objects of expenditure, are the main focus of analysis, authorization, and control.

liquidation  The sale of an organization’s assets piece by piece, effectively removing the firm from existence.

liquidation value  The value of assets when they are not used together (i.e., the value obtained when a company’s assets are sold separately, piece by piece).

liquidity  The ease and speed with which an asset can be converted to cash.

liquidity premium (LP)  A premium added to the interest rate of a security that cannot be converted to cash in a short amount of time at a reasonable price. Also called the marketability premium.

liquidity spread  The difference between a long-term interest rate and a short-term interest rate.

loan  A sum of money borrowed from a financial intermediary, such as a bank or insurance company, that must be paid back over a specific period of time and with interest, the fee for borrowing the money.

loan pool  A league-financed fund from which franchises can borrow at relatively low cost.

local market  The area in which a franchise operates, with distinct differences in population, economic activity, and passion for sport.

local option sales tax  A special-purpose tax levied at the municipal level.

local revenues  Team earnings from home ticket sales, local television and radio, advertising, and sponsorship, shared within the league.

lockout  A decision by management to suspend production while it negotiates with labor.

London Interbank Offered Rate (LIBOR)  A benchmark interest rate based on the average interest rate that banks in the London interbank market pay to borrow unsecured funds from one another.

long-term liabilities  Liabilities due after one year.

luxury tax  A fee imposed on franchises that exceed a salary threshold.

M1  A measure of liquid assets in the form of cash and checking accounts in the total money supply.

M2  A measure of liquid assets in the form of cash and checking accounts (see M1) plus all money in savings accounts and certificates of deposit in the total money supply.

M3  A measure of liquid assets in the form of cash and checking accounts (see M1) plus all money in savings accounts and certificates of deposit (see M2) plus the assets and liabilities, including long-term deposits, of financial institutions.

macroeconomics  The study of forces that affect numerous or even all sectors of the overall economy.

major gift  A donation worth $25,000 or more.

market approach  A method of valuing an asset, a business, or an interest or equity in a business that relies on prices that similar assets sell for in the marketplace.

market capitalization  The market price of a company, equal to the number of outstanding shares multiplied...
by the price per share.

market demand  The demand within a marketplace for a facility.

market multiples approach  A type of market approach based on the premise that the value of a business enterprise depends on what investors in a competitive market actually pay to own equity or shares of stock in similar companies.

market risk  The portion of a stock’s risk that cannot be eliminated through a diversified portfolio; it is measured by the degree to which the stock moves with the market.

market transactions approach  A type of market approach in which the value of a company is determined by reference to the value of comparable firms that have been sold within a reasonably recent period of time, with appropriate adjustments for the time value of money.

market value  An estimate of the value of a company according to the stock market (see formula, p. 52).

marketability  A measure of the readiness with which an asset may be sold or liquidated.

maturity risk premium (MRP)  A premium added to the interest rate of a security that accounts for interest rate risk.

media equivalency  Analysis that measures the exposure for a sponsor (the number of people seeing the sponsor’s ad or signage) and determines what it would cost to achieve the same exposure through some other form of media.

microeconomics  The study of issues, such as supply, demand, and pricing, that occur at the firm level.

mid-year convention  The practice of using June 30 as the accounting date for a cash flow when an analyst does not have the exact details of the cash flow over the year.

mill  A measure of tax rates equal to 1/1000 of a dollar, or 1/10 of a penny.

millage/millage rate  The tax rate approved by a public body such as a state or local government, city council, school board, special purpose district, or county council to meet the budgetary needs of each entity; the total of the levies by the city, county, school district, and any special districts in which a particular resident lives.

minority discount  Discount applied to the purchase price of stock when the purchaser receives no controlling interest.

minority partner  An owner who holds less than a 50% stake in a jointly owned business.

mixed cost  An expense that includes both fixed and variable elements.

modified internal rate of return (MIRR)  The discount rate at which the present value of a project’s cost is equal to the present value of the project’s terminal value.

modified zero-based budgeting (MZBB)  A budgeting concept that starts at a base higher than zero and matches spending levels with services to be performed.

monetary policy  Policy the government sets to control the supply, availability, and cost of money.

money markets  Markets for highly liquid, short-term securities.

monopoly  The status of an individual or organization that has no viable competition and, hence, complete control of the distribution of a product or service.

multiple owners/private investment syndicate model  An ownership model in which individuals pool their resources to purchase a franchise and incorporate as a partnership, LLC, or the like. The most common model of team ownership.

multiple owners/publicly traded corporation model  An ownership model in which a franchise is governed by a board of directors who are elected by shareholder vote. The board of directors appoints the team’s senior management. With the exception of the Green Bay Packers, this model is not currently used in the United States.

multiplier  A variable that measures the change in output for each and every industry as a result of the injection of one dollar of direct impact into any of those industries, to help researchers quantify indirect and induced economic impacts.

multiplier effect  The ripple effects of initial spending (direct impacts), consisting of indirect and induced impacts.
municipal bond A bond for which the borrower is a city.
naming rights The right to place a firm’s name on a facility; a form of sponsorship.
National Association of Intercollegiate Athletics (NAIA) One of three main governing bodies overseeing college sport in the United States.
National Collegiate Athletic Association (NCAA) The largest of the three main governing bodies overseeing college sport in the United States, and the primary governing body; formerly the Intercollegiate Athletic Association of the United States.
National Junior College Athletic Association (NJCAA) One of the three main governing bodies overseeing college sport in the United States, with membership made up of junior and community colleges.
NCAA Division I One of three classifications of NCAA university membership. Division I includes subclassifications based on football sponsorship: (a) Football Bowl Subdivision (FBS), schools that participate in bowl games; (b) Football Championship Subdivision (FCS), schools that participate in the NCAA-run football championship; and (c) Other, schools that do not sponsor football at all.
NCAA Division II One of three classifications of NCAA university membership, requiring the institution to sponsor a minimum of ten sports.
NCAA Division III One of three classifications of NCAA university membership, requiring the institution to sponsor a minimum of ten sports. Athletes cannot receive financial aid related to their athletic ability in this division.
negotiated issue A bond issue for which a municipality selects one underwriter and the municipality and underwriter negotiate the terms of the sale.
net assessed value Taxable worth of property, the difference between total assessed value and tax-exempt property.
net present value (NPV) The present value of a project’s future cash flows less the project’s initial cost; also, a capital budgeting method based on this calculation.
net profit margin ratio A measure of the effectiveness and efficiency of a company’s operations (see formula, p. 51).
net working capital (NWC) The cash needed to run a business on a daily basis (measured in annual dollars needed), which is not available to be given to the owners of the business because it is needed for operations. It is calculated by subtracting current liabilities from current assets.
NIL cap The maximum amount that student athletes can be paid for use of their names, images, and likenesses.
nominal interest rate The interest rate actually charged for a given marketable security, consisting of the real risk-free rate of interest plus multiple risk premiums. These include risk premiums based on the risk of time and the level of risk, which reflect the riskiness of the security itself, and premiums reflecting inflation and liquidity. Also called the quoted interest rate (see formula, p. 64).
nominal risk-free rate The real risk-free rate of interest plus an inflation premium (see formula, p. 64).
nominal value The face value of money.
non-excludable Describes a good that a producer cannot prevent someone from consuming or from enjoying.
non-profit organization An organization not conducted for the profit of owners. Typically, a non-profit organization’s activities are devoted to charitable activities, such as education. Revenues generated by non-profit organizations are treated differently for tax purposes from those of for-profit entities.
non-rival Describes a good that can be consumed by one person without preventing another person from consuming it.
North American Industrial Classification System (NAICS) A classification system used by the U.S. Census Bureau to measure and track economic activity in the United States. The sport industry is not classified as a distinct industry and is scattered across at least 12 different NAICS-defined industries.
operations impact The economic impact of a facility generated through its daily operation.
opportunity cost The cost of a financial decision in terms of forgone alternatives. For example, often part of
the public’s financing for a stadium involves giving away the land or leasing it for a below-market rate. The public’s total cost is not just what it directly spends to support building the facility, but also what it “loses” by not utilizing the land in another manner.

owners’ equity An estimate of the ownership value of a company. Also called shareholders’ equity or stockholders’ equity.

pay-as-you-go approach A financing method where projects are paid for with current assets rather than borrowed funds.

payback period The number of years required to recover an initial capital investment.

payments in lieu of taxes (PILOT) Payments made to a local government instead of franchise, property, or sales taxes.

periodic expense An expense that does not occur regularly throughout the year but must be budgeted for during the year, such as new vehicles, retirement bonuses, and other one-time events.

permanent seat license (PSL) The right to purchase tickets for a specific seat location, for the life of the facility, with fewer restrictions on exchange or sale than those for personal seat licenses.

perpetual growth rate An expected annual growth rate in a dividend payment, in perpetuity.

perpetuity An annuity that has no scheduled ending. Also, “in perpetuity”: without an ending date.

personal seat license (PSL) The right to purchase tickets for a specific seat location, sometimes limited to a period of time that may not match the expected lifespan of the facility.

planning The establishment of objectives and the formulation, evaluation, and selection of the policies, strategies, tactics, and actions required to achieve those objectives.

player draft The process by which a league assigns incoming players throughout the league.

point system System in which donors to athletic programs earn points based on their giving characteristics, which qualify them to purchase tickets for high-demand events or tickets in a desired location.

pooled debt A debt instrument that has the backing of an entire league rather than an individual team, usually providing a more favorable interest rate than the individual franchise could obtain.

portfolio A combination of financial assets held by an investor.

positive externalities Benefits produced by an event that are not captured by the event owners or sport facility being used; also termed overflow benefits.

present value The current value of a payment that will be received or paid in the future, computed by applying a discount rate that measures risk and uncertainty.

price What one party (the buyer) must give to obtain what is offered by another party (the seller).

price elasticity of demand The percentage decrease in the number of units sold compared to the percentage increase in the unit price.

price-to-earnings (P/E) ratio An estimate of how much money investors will pay for each dollar of a company’s earnings, used widely to measure corporate performance and value (see formula, p. 52).

price-to-revenue (P/R) ratio Transaction price divided by total annual revenues, a common starting point for franchise valuation.

primary research The generation of information specifically for the purpose of a study.

prime rate The rate banks charge their “best” customers, usually those that are the largest and most stable or have been with the bank the longest.

private financing Financing that does not use public dollars.

probability distribution A list of all possible outcomes of an investment in terms of expected rates of return, with a probability assigned to each outcome.

production opportunities The reason a company needs capital and the possibility that the money can be turned into more money or benefits.

profit maximization The pursuit of the highest profits possible as an organization’s primary goal.
program budget  A budget in which expenditures are based primarily on units of work and secondarily on the character and object of the work.

program planning budgeting system (PPBS)  An approach to developing a program budget that focuses on outputs rather than inputs, with an emphasis on organizational effectiveness, not spending.

property tax  A government levy based on the value of property, including real property (land and structures built on the land or improvements made to the land) and personal property (everything else that has value, such as automobiles, trucks, furniture, and equipment).

prospect  Any individual, foundation, corporation, or organization that has the potential and likelihood to give to an organization.

psychic impact  The emotional impact on a community of having a local sport team or hosting national or international events.

public facility authority (PFA) bond  A type of municipal bond used for the construction, renovation, or improvement of public facilities.

public financing  The use of public funds to finance a project. For the construction of an arena or facility, tax revenues are typically used to retire debt service.

public good  A good that is non-rival and non-excludable.

public sector sport  Sport programs offered to serve societal need rather than profit potential.

public/private partnership  A collaboration between the public and private sectors.

quantitative easing  The purchase from banks of poorly performing loans or loans likely to soon be poorly performing by the central bank of a country. This increases the individual banks’ latitude under their reserve requirement to issue new loans and their confidence in pursuing additional loan applicants because their “worst” loans have been removed from their financial books.

quick ratio  A measure of a company’s ability to meet its current liabilities with its current assets, not including inventory (see formula, p. 47).

rate of return  The gain or loss of an investment over a period of time (see formula, p. 59).

real risk-free rate  The rate of interest on a riskless security if inflation were not expected; the rate of interest on a short-term U.S. Treasury bill in an inflation-free environment.

real value  The value of money after inflation is taken into account; often referred to as purchasing power.

recession  Two consecutive quarters or more of negative growth in a nation’s gross domestic product.

reduced-level budget  In zero-based budgeting, a budget that results from cutting the base budget by a predetermined percentage.

reinvestment rate risk  Risk related to declining interest rates, primarily affecting short-term bills; the risk measures loss of income that would occur if the interest rate on a bond has fallen at the time the funds are reinvested.

related-party transaction  A transaction between two businesses that have some form of pre-existing relationship.

relegation system  System under which, after each season, a certain number of the “worst performing” clubs will be “sent down” or relegated to a lower division, while a certain number of the “top performing” clubs in the lower division will be elevated to the higher division, to incentivize every franchise to maximize its on-field performance.

relevant risk  The contribution of a single stock to the riskiness of a diversified portfolio.

required rate of return  The profit that an investor would require from a particular investment, whether in stocks or bonds, in order to consider it worth purchasing, given the riskiness of the investment.

reserve clause  An agreement among owners that ties a player to a team in perpetuity.

residual value  What a business or asset will be worth at the end of the period for which cash flows are projected.

retained earnings  A portion of earnings that a firm saves in order to finance operations or acquire assets.
return on assets (ROA)  A similar measure to the return on equity ratio with a similar formula except that total assets is used as the denominator in the calculation instead of shareholders’/owners’ equity. Also referred to as return on investment (ROI).

return on equity capital  The combination of dividend payments and capital gains on an investment.

return on equity ratio  A measure of the rate of return a company’s owners or shareholders are receiving on their investment (see formula, p. 51).

return on investment (ROI)  See return on assets.

revenue bonds  A form of public finance that is paid off solely from specific, well-defined sources, such as hotel taxes, ticket taxes, or other sources of public funding. Also, bonds that are secured by the revenues to be generated by the project being funded. If the source of funding does not meet expectations, the bonds will not be paid off in full.

revenue budget  A forecast of revenues based on projections of the organization’s sales.

revenue sharing  The sharing of revenues among teams in a league to support weaker franchises and maintain the competitive balance in the league.

revenues  Income generated from business activities, such as the sale of goods or services.

reverse time-switcher  A local resident who leaves town during an event period because of the event.

risk  A measure of the chance that some unfavorable event will occur.

risk averse  A quality that investors tend to display: when presented with two alternatives for investment with the same expected rate of return, most investors will select the investment with the lower risk.

risk-free rate  The interest paid on risk-free investments that pay a guaranteed return, such as U.S. Treasury bills.

risk of time  The fact that risk increases as the length of time funds are invested increases.

risk premium  The difference between the rate of return for a risky investment and the risk-free rate.

rule of thirds  The expectation that the top ten gifts to a campaign will account for 33% of the campaign’s total goal, based on past giving patterns.

salary arbitration  A process whereby an independent judge determines whether the salary that a team submits for a player or the salary that the player requests will be paid.

salary cap  A limit on the compensation an employer may provide to employees; in sport, a salary cap restricts salaries for teams across an entire league.

salary slotting  League-established rules or recommendations regarding initial compensation provided to a player based on draft positioning.

sales tax  A tax on the sale of certain goods and services.

scalping  Pejorative term for the resale of tickets.

scarcity  Lack of sufficient supply of an item or a resource to meet current demand.

secondary research  The analysis of data that have already been generated for other purposes but might provide information for a study.

secondary ticket market  The market for the reselling of tickets.

secured claim  A debt for which the borrower provided collateral.

securitization  The use of contractually obligated future revenue as collateral for issued debt.

security market line (SML)  A formula for evaluating the risk and return merits of an investment (see formula, p. 72).

self-sustaining  Describes an athletic department whose revenues cover its operating expenses.

sensitivity analysis  The process of developing several forecasts under different scenarios and assigning probabilities to each scenario to arrive at an acceptable forecast.

serial bond  A bond requiring regular payments on principal and interest over the life of the bond.
Sherman Antitrust Act An 1890 law that forbids contracts or other actions among businesses that would restrict competition.

simple interest Interest that is calculated only on principal.

sin taxes Taxes on alcohol and tobacco.

single-entity structure A league structure in which owners purchase shares in the league rather than in an individual franchise.

single owner/private investor model An ownership model in which one individual owns the firm.

small-cap stock The stock of a publicly traded company with a market capitalization between $250 million and $1 billion.

socialistic Describes an economic system where the government takes an active role in owning and administering the means of production.

sole proprietorship A business that is legally owned and operated by a single individual.

sponsorship A form of advertising in which a firm pays for exposure that supports the firm’s marketing objectives.

Sports Broadcasting Act (SBA) A 1961 law providing an antitrust exemption that permitted professional sport leagues to sell their television rights as a league package.

stadium-related revenue source A non-shared source of revenue from sales related to the venue where a team plays, such as the sale of luxury suites.

stand-alone risk The risk that an asset would present if only that single asset were held.

standard deviation (SD) A measure of variability in a distribution of numbers, denoted σ.

statement of cash flows A report that tracks cash in and cash out of an organization and provides data as to whether a company has sufficient cash on hand to meet its debts and obligations.

step cost An expense that is constant within ranges of use but differs between ranges.

stock A share of ownership in a company.

stock exchange/stock market An organization that provides a place and means for brokers to trade stocks and other securities.

stock market index A measure of a section or sections of a stock market.

stock option A contract that allows a party to purchase a specified number of shares of stock for a certain price.

straight-line depreciation A depreciation method in which the total cost of the item, less its estimated salvage value, is divided by its useful life to determine its yearly depreciation allowance.

strategic planning The process of defining a vision for an organization and creating goals and objectives to help achieve this vision.

strategic planning horizon The far future, planning for which is concerned with the long-term aspirations of the organization and management.

strategic value The value that a buyer would be willing to pay in order to obtain certain assets because it has the ability to use the assets in a way to get more value out of them than a typical buyer would.

subchapter C corporation A business structure under which the company may seek investors and conduct business activities around the world. The corporation must hold annual meetings, elect a board of directors, and provide specific annual paperwork to the government and to shareholders. Often called a C corp.

subchapter S corporation A business structure under which shareholders’ distributions are taxed as ordinary income and shareholders are shielded from personal liability. Often called an S corp.

sum-of-years’-digits depreciation A method of depreciation that takes the non-linear loss of value into account.

surplus The amount of an asset or resource that exceeds the portion that is utilized.

sustainability Meeting today’s needs without compromising future generations’ ability to meet their own
needs.
synergistic premium An additional amount that a buyer would be willing to pay for an asset or business because ownership would provide benefits beyond those of owning the asset or business as a stand-alone investment.
synthetic fixed-rate bond A bond that has elements of both a fixed-rate bond and a variable-rate bond.
T-accounts The method accountants have historically used to track revenues and expenses and to create accounts to be entered on balance sheets and income statements.
tax abatement A government’s forgoing of collection of taxes.
tax increment financing (TIF) The use of only additional or new taxes generated from a certain source, such as property taxes, to help finance a sport facility. Once the facility is built, any increases in tax revenues resulting from the improvement of the area are used to pay off the tax increment bond.
tax rate The total rate of tax that an individual or business pays; the total of levies by the city, county, school district, and any special districts in which the tax payer resides.
tax receipts Tax revenues from all sources received by a municipality.
tax subsidy The use of tax receipts to fund a program or business.
term bond A bond paid in a single payment made at the end of the loan period.
terrestrial rights The exclusive control of a predetermined area (typically an entire metropolitan area), which enables a professional sport team to market exclusively in that area without fear of the presence of another franchise.
time-switcher A visitor who would have come to town at another time, but opted to come to town during an event period in order to attend the event.
time value of money The yearly, monthly, or daily changes in the purchasing power of money.
total asset turnover ratio A measure of how efficiently a company is utilizing its assets to make money (see formula, p. 48).
total expected return The rate of return expected on an asset or a portfolio of assets when all terms of gain are combined.
tourism tax Tax on hotel stays or rental cars; may also include food and beverage taxes in certain districts.
trade credit An agreement between a manufacturer and a retailer that after the manufacturer ships its product to the retailer for sale, the retailer may delay payment for a period of time, according to the terms.
traditional gifts table A table of targeted amounts and numbers of gifts for a capital campaign, developed according to a specific formula.
transfer pricing The pricing of assets transferred within an organization.
units of production depreciation Depreciation calculated by dividing the total number of items produced during a given year by the total number of items the asset will produce during its useful life.
unsecured claim A debt for which the investor has no right to seize any assets from the company or person who borrowed the money.
use tax A levy imposed on certain goods and services that are purchased outside the state and brought into the state.
valuation date The specific date selected for the valuation of a business or asset.
value added tax (VAT) A consumption tax levied on any value that is added to a product.
variable cost An expense that changes with volume of sales.
variable ticket pricing (VTP) A method of placing various values on entry to games, with higher initial prices for highly demanded games and lower prices for lower-demanded games.
vertical equity The idea that a tax should not cause poorer persons to bear a disproportionate share.
voltatility The amount of fluctuation that occurs in a series of similar investment returns and the degree to
which the returns deviate from the average. More volatility translates into greater risk.

wealth maximization  Maximizing the overall value of the firm. This is the goal or outcome of financial management for most organizations.

weighted average cost of capital (WACC)  In a capital expenditure, the weighted average of the cost of each of the funding sources.

win maximization  The pursuit of winning as a primary goal.

wins above replacement (WAR)  A method of analyzing a player’s performance to determine how much the player contributes to on-field success beyond what an easily obtainable player, such as a minor league player at the same position or an unsigned free agent, can contribute.

yield curve  The graphic depiction of interest rates against time to maturity for bonds with equal credit quality, including government bonds.

yield to maturity (YTM)  The percentage rate of return that a bond would provide if held until its maturity date, often used to denote the total annualized return from owning a specific bond. It is the same as the total expected return.

zero-based budgeting (ZBB)  A budgeting approach and financial management strategy that requires building a budget from a zero base rather than from the previous year’s budget.
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