



CERTIFIED INVESTMENT BANKING ASSOCIATE

## **CERTIFIED INVESTMENT BANKING ASSOCIATE (CIBA)**

### **STUDY GUIDE**

Sponsored by:



**Finance Training Society**

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This study guide has been created for individuals who are studying for the Certified Investment Banking Associate (CIBA) Certification Program. Please use this guide to assist in preparation for your examination.

The contents of this study guide are as follows:

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## **I. FINANCE TRAINING SOCIETY:**

**The Finance Training Society** is the leading online program for specialized niche business certification programs. The team behind the Finance Training Society is comprised of industry experts in niches including online marketing, project management, public relations, consulting, and many more.

This experience, combined with our advisory board's expertise in online education and training, is what makes it possible to provide the training and certification programs found on our website.

The Finance Training Society is a global training and certification organization that has provided practical industry-specific certification to over 15,000 clients from the United States, Europe, and more than 75 other countries around the world.

We provide high value training programs that provide function knowledge on very specific business topics such as public relations, online marketing, project management, international business, and consulting.

**The Finance Training Society's Mission:** To provide professionals with high impact finance training and certifications in niche subject areas that are functional and immediately beneficial.

**The Finance Training Society** helps you to:

- Quickly gain specialized knowledge in highly valuable business niches.
- Enhance your credibility, resume, and overall value in the marketplace.
- Complete our training programs in 5 months from anywhere in the world.

Our programs accept participants year-round and are flexible to work with your current work schedule and academic constraints. You can complete one of our programs in 2 months or 2 years; the choice is yours.

**MASTER'S CERTIFICATE PROGRAMS:** The Finance Training Society is proud to offer several advanced Master's Certificates that require the completion of five programs from the Finance Training Society platform.

To learn more about these Master's Certificates and how to earn one, please see our website: <http://FinanceTraining.com/Masters-Certificate-Online/>

## **II. CIBA DETAILS AND TIMELINE:**

### **PROGRAM DETAILS:**

The **Certified Investment Banking Associate (CIBA)** certification program is unique in that it is modeled after many online courses offered at Ivy League institutions today, offering more value for a more cost-effective program. The CIBA Program is a self-study program that includes educational multimedia resources in video form, a study guide, required readings, and a flexible online examination process, accessible around the world.

The online exam is structured so that in order to complete the exam within the 2-hour time frame one must read through all of the assigned materials and conceptually understand the majority of the material to score well enough to pass the exam.

Our goal is to offer the most challenging program in the industry while also providing all of the learning tools possible to ensure participants get the most out of the experience. By testing the knowledge depth

and comprehension from the materials digested, the CIBA certification prepares individuals for successful, real-world application.

The Certified Investment Banking Associate (CIBA) program is sponsored by the GTC Institute and offered by the Finance Training Society. This certification program is designed to show and certify that you have gained an in-depth understanding and high-level, specialized knowledge.

In addition to the benefits of gained knowledge, growing industry recognition, more knowledgeable career choices, and networking, our organization is also developing additional resources for CIBA Participants. This includes video and MP3 recordings on Q&A or strategies and tactics, webinars, access to interviews with internet marketing professionals who have more than 10 years of experience in the industry, among many more benefits.

### **The experts interviewed for this investment banking certification include:**

**Dr. Edward D. Weinberger:** Edward is a PhD and CEO of Post-Quantitative, Inc. and Professor from Polytechnic Institute of New York University. Dr. Weinberger is an expert on the application of math and finance best practices to the improvement of bank business models and operations.

**John Louden:** John runs Silverstone Capital Partners which is a boutique private equity firm that is sometimes considered an investment banking firm. In this interview he talks about how he has succeeded in his investment career and what his firm is doing right now.

**Richard Wilson:** Richard is the author of 10 books, a global hedge fund speaker and trainer, and head of the 80,000-member Hedge Fund Group and 90,000-member Private Equity Investment Group. Richard has built his finance career from nothing, starting out in Portland, Oregon and going to Oregon State University for his undergraduate degree in business. Within this video Richard shares exactly how just about anyone can have a successful career in finance by focusing on the few key factors that Richard explains in this audio interview.

**Chuck Bush:** Chuck is the CEO of Great Road Capital, Inc. Great Road Capital is a finance advisory firm providing clients advice and counsel on investing in film, television, and digital media projects and companies. He works with those companies to help them evaluate assets and conduct financial modeling for those clients to help investors evaluate potential investments.

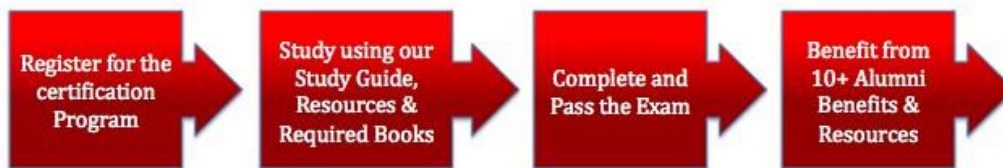
### **Certified Investment Banking Associate (CIBA) Video Modules:**

1. The Business of Investment Banking
2. Financial Statements
3. Valuation Overview
4. Comparable Companies Analysis
5. Mergers & Acquisitions
6. Precedent Transactions Analysis
7. Basic Financial Modeling Part 1 of 3
8. Basic Financial Modeling Part 2 of 3
9. Basic Financial Modeling Part 3 of 3
10. Leveraged Buyouts Overview
11. Discounted Cash Flow Analysis 1 of 2
12. Discounted Cash Flow Analysis 2 of 2

13. Advanced Modeling Techniques
14. Debt Restructuring
15. Private Equity Offerings
16. Leveraged Recapitalizations
17. Accretion - Dilution Analysis
18. Leveraged Buyout Modeling Part 1
19. Leveraged Buyout Modeling Part 2
20. Leveraged Buyout Modeling Part 3
21. Financial Statements
22. The SEC Filings - The S1 Stock Offering
23. The SEC Filings - The 14A Proxy Statements
24. The SEC Filings - The 10Q Quarterly Report
25. The SEC Filings - The 10K Report (NEDED)
26. The SEC Filings - The 8K Current Report
27. The Investment Banking Resume
28. The Investment Banking Cover Letter
29. Investment Banking Interview Topics
30. Investment Banking Interview Process
31. Investment Banking Internships
32. Investment Banking Associate Programs
33. Investment Banking Analyst Programs
34. Investment Banking: After the Job Offer
35. Financial Modeling Best Practices Part 1
36. Financial Modeling Best Practices Part 2
37. RAMP Formula for Business Career Success
38. How to Get a Summer Business Internship
39. Developing Your Strategic Career Plan
40. Business Career Salary Boosters
41. How to Nail a Business Interview
42. How to Create Your Business Resume
43. Leveraging Conferences & Seminars in Your Business Career
44. Work More Efficiently: Time Saving Business Tools
45. How to Double Your Chances of Business Success
46. How to Become a Doctor Within Your Business Field
47. Knowledge Asset Management: A Competitive Advantage for Your Business
48. Single Focus: The Key to Maximum Productivity
49. Fertilize Your Brain

- 50. Learning Before Outsourcing
- 51. 5 Techniques to Efficiently Capture Your Business Ideas
- 52. Paying the Price for Success
- 53. The Power of Positive Business Habits
- 54. The Importance of Business Ethics to Your Success
- 55. The Power of Inevitability Thinking in Business

#### 4 STEP CERTIFICATION PROCESS



#### TIMELINE & EXAMINATION DATES:

Programs are offered through open enrollment, making our programs 100% flexible to accommodate your current work or academic schedule. After joining, you can select an examination date that works best for you. We hold examinations on the first Wednesday of the new month, providing you with 12 different options each year.

The Finance Training Society exams are administered 100% online. When you have completed the strategic project (outlined later in this study guide), please follow the project submission instructions. Once you have submitted your completed project and sent it in for grading, you are welcome to schedule your exam date.

**Please note that your exam date request and completed project must be received at least 2 weeks before the exam date.** The scheduling deadlines for the year are as follows:

#### To register for an examination date:

1. Email your completed CIBA project (*explained in detail in this study guide*).
2. Include your desired exam date in the email with your completed project.

#### LEARNING OBJECTIVES OF THE CIBA:

- Put your studies in perspective through exposure to the business of investment banking.
- Recognize that “valuation” lies at the core of an investment banker’s skill set.
- Prepare to learn about valuation by gaining exposure to financial statements and accounting. Discover how figures flow between income statement, balance sheet and cash flow statement, and gain exposure to more complex topics such as depreciation, goodwill and deferred taxes.
- Learn valuation based on comparable companies’ analysis. You’ll learn how to choose comparables, find relevant financial data, analyze statistics and calculate valuation.
- Learn valuation based on precedent transactions analysis. You’ll learn how to choose transactions, find relevant historical data, analyze multiples and calculate valuation.

- Learn valuation based on discounted cash flow analysis. You'll learn how to forecast cash flows, determine a cost of capital, compute the terminal value, discount back to the present and calculate valuation.
- Take a hands-on approach to studying financial modeling techniques including more advanced topics such as sensitivities, complex capital structures, scenario toggles and cash flow revolvers.
- Find out how the LBO process works and how LBO models can be used for valuation.
- Become familiar with the M&A process including an examination of the accretion / dilution concept.
- Become familiar with equity and debt offerings.

### III. REQUIRED READING:

- Joshua Rosenbaum & Joshua Pearl. Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions. ISBN-10: 0470442204

### IV. CIBA EXAM PREPARATION

#### 1. EXAM COMPOSITION:

There are a total of 100 points available to earn for the exam, 80 of which can be earned from the multiple choice or true/false questions that are worth 1 point each, and 20 of which can be earned from 2 short answer questions that are worth 10 points each. Please see below for the composition and distribution of the points in-depth.

<u>Topics and Weights</u>	
<b>Financial Statement Accounting [6%]</b>	3 Multiple Choice Questions
<b>Comparable Companies Analysis [10%]</b>	5 Multiple Choice Questions
<b>Precedent Transactions Analysis [10%]</b>	5 Multiple Choice Questions
<b>Discounted Cash Flow Analysis [16%]</b>	8 Multiple Choice Questions
<b>Financial Modeling [16%]</b>	8 Multiple Choice Questions
<b>Leveraged Buyouts [10%]</b>	5 Multiple Choice Questions
<b>Mergers &amp; Acquisitions [6%]</b>	3 Multiple Choice Questions

<b>Equity &amp; Debt Offerings [6%]</b>	3 Multiple Choice Questions
<b>Comprehensive &amp; Conceptual Essay Questions [20%]</b>	2 Questions

You will have 2 hours to complete the exam. Those who have not made the effort to read the materials will have a hard time completing the exam within the allotted time, but for participants who have read the required reading, 2 hours will be sufficient. Your test results will be sent to you 2 weeks after your examination date.

**V.**

**1. TERMS AND CONCEPTS TO KNOW:**

Below, please find the terms and concepts that you should be able to define after having read the required reading. Please define the terms from the required reading rather than a dictionary. You will be tested on the definitions that authors have provided.

- Comparable companies' analysis
- EBITDA
- 10-K
- Proxy statement
- Fully diluted shares outstanding
- Enterprise value
- Transaction comps
- Synergies
- Floating exchange ratio
- LTM financials
- 8-K
- Discounted cash flow analysis
- Terminal value
- WACC
- Free cash flow
- Depreciation
- Net working capital
- Days sales outstanding
- Inventory turns
- Beta
- Present value
- Sensitivity analysis
- Leveraged buyout
- Financial sponsor
- IRR
- Revolver



- Amortizing term loan
- Financial model
- Sources and uses
- Cash flow statement
- Goodwill
- Debt schedule
- Broad auction
- Accretion / dilution analysis
- Data room
- Fairness opinion

2. **SAMPLE QUESTIONS:** (Answers are provided on the last page of this study guide.)

1. *What is the amount of the goodwill created if a company is acquired for \$500 million and that company had \$100 million of pre-existing debt (retired in the deal from the \$500 million purchase price), \$50 million of pre-existing goodwill on its books and had \$300 million of pre-existing shareholders' equity?*
  - a. \$50 million
  - b. \$100 million
  - c. \$150 million
  - d. No goodwill is created.
  
2. *Which of the following is the name given to quarterly reports that public companies file with the SEC?*
  - a. 8-Q
  - b. 10-K
  - c. 10-Q
  - d. DEF14A
  
3. *Which of the following is a correct measure of "enterprise value"?*
  - a. Current assets + long term assets – total liabilities
  - b. Total equity – total debt
  - c. Fixed assets + shareholders' equity
  - d. (Share price x Shares outstanding) + debt - cash
  
4. *Which of the following is a method for projecting a terminal value for a DCF analysis?*
  - a. Accelerated depreciation
  - b. Perpetuity growth method
  - c. Capital asset pricing method
  - d. Weighted average cost of capital method
  
5. *All else being equal, which of the following would increase a sponsor's IRR in an LBO?*
  - a. Moving the exit event closer to the initial investment date
  - b. Increasing the purchase price paid
  - c. Increasing annual capital expenditures
  - d. Reducing the exit multiple

6. *Please complete the following statement: When creating a financial model, each period-over-period change to a balance sheet account must be accounted for by a parallel change to a line on the ...*
  - a. Cash flow statement
  - b. Debt schedule
  - c. Sources and uses
  - d. Income statement
  
7. *As compared to a strategic acquirer, a financial sponsor typically doesn't consider which of the following when evaluating the purchase price in an acquisition?*
  - a. Comparable companies analysis
  - b. Precedent transactions analysis
  - c. Discounted cash flow analysis
  - d. Accretion / dilution analysis

## **VI. BOOK SUMMARIES:**

### **INVESTMENT BANKING: VALUATION, LEVERAGED BUYOUTS, AND MERGERS & ACQUISITIONS**

By Joshua Rosenbaum & Joshua Pearl

*"Valuation is at the core of investment banking. Any banker worth his salt must possess the ability to properly value a business in a structured and defensible manner." (from Joseph Perella's foreword)*

#### **INTRODUCTION:**

- The book's introduction notes that the text will focus on "the lifeblood of the corporate financier's work – namely, valuation." The first three chapters will cover the main pillars of valuation – comparable companies, precedent transactions and discounted cash flows. The following two chapters will cover LBOs, including the more complex cash flow modeling that they entail. Most important in the intro is the summary financial information for ValueCo, the fictional company that will be at the center of the book's valuation exercises. It is also worth mentioning that the authors define an investment bank (on page 162) as a "financial intermediary that performs corporate finance and M&A advisory service as well as capital markets underwriting activities."

#### **CHAPTER 1:**

- *Comparable Companies Analysis.* The chapter explains how a comparable company analysis is used as a "market benchmark" for valuation that can be used for "various merger & acquisitions situations, initial public offerings, restructurings and investment decisions." The method is based on the premise that "similar companies provide a highly relevant reference point for valuing a given target." Page 52 includes a list of "pros" and "cons" associated with this valuation method.

Exhibit 1.1 shows the steps involved in the analysis: select the universe of comparable companies, locate the necessary financial information, spread key statistics, benchmark the comparable, and determine valuation. As the authors note (and repeat in later chapters) "it is first necessary to gain a sound understanding of the target (ValueCo in this case)."

Resources for selecting comparable include the target's annual report and proxy statement, equity research reports, and various financial database companies that offer screening by industry codes. A common theme in the text is that "senior bankers" are often a great additional resource. Exhibit 1.4 shows a list of sources for various financial information.

The chapter then moves on to the various calculations required including equity value, fully diluted shares outstanding, enterprise value, gross profits, EBITDA, EBIT and net income. The authors are also sure to note that adjustments may often need to be made to “normalize” financial results for non-recurring items (such as losses on asset sales, inventory write-offs, etc); such one-time events are frequently disclosed in the MD&A section of SEC filings (10-Ks and 10-Qs).

In a comparable companies’ analysis, the most commonly used trading multiples are enterprise value to EBITDA, enterprise value to EBIT, enterprise value to sales, and share price to EPS. The authors show how the multiples from the universe of comparables are “benchmarked” or adjusted to come up with a relevant mean, median and range.

The final step in this valuation technique simply involves applying the benchmarked data to ValueCo’s data. In the book’s example, an LTM EBITDA range of 6.5x-7.5x is applied to ValueCo’s LTM EBITDA of \$146.7 million to imply a valuation range of \$953 million to \$1,100 million.

## CHAPTER 2:

- *Precedent Transactions Analysis*. The chapter explains how a precedent transactions analysis is used as another “market benchmark” for deriving an implied value for a business. It is premised on multiples paid for comparable companies in prior M&A transactions. Page 94 includes a list of “pros” and “cons” associated with this valuation method.

The method tends to provide a higher valuation as compared to comparable companies as acquirers typically pay a control premium to purchase a business, and strategic buyers can often justify a higher price thanks to operating synergies.

Exhibit 2.1 shows the steps involved in the analysis: select the universe of comparable acquisitions, locate the necessary deal-related financial information, spread key statistics, benchmark the comparable, and determine valuation.

Resources for selecting transactions include M&A databases, the M&A history of the target and its comparable companies, research reports, and senior bankers. Exhibit 2.4 shows a list of sources for various transaction-related information.

The authors review the various forms of purchase consideration including all-cash, a cash/stock mix and stock-for-stock which can be via fixed exchange ratio (such as one new acquirer share for each old share) or a floating exchange ratio (such as \$10 worth of new acquirer stock for each old share).

The chapter then moves on to the various calculations required including equity value and enterprise value. In a comparable transaction analysis, the most commonly used purchase price multiples are enterprise value to EBITDA, enterprise value to EBIT, enterprise value to sales, and share price to EPS (very much similar to the multiples used in the comparable companies’ analysis). The authors show how the multiples from the universe of transactions are “benchmarked” or adjusted to come up with a relevant mean, median and range; as they note, “the most recent transactions ... are the most relevant as they likely took place under similar market conditions ... often, the banker focuses on as few as two or three of the most similar transactions.”

One of the major drawbacks of this method is that financial data is not always readily available for the best precedent transactions; this can be due to a non-publicly-traded acquirer or target or due to a deal that is relatively small for an acquirer, thus not requiring full disclosure under SEC rules.

The final step in this valuation technique simply involves applying the benchmarked data to ValueCo’s data. In the book’s example, an LTM EBITDA range of 7.0x-8.0x is applied to ValueCo’s LTM EBITDA of \$146.7 million to imply a valuation range of \$1,026 million to \$1,173 million (a full 0.5x higher on both ends of the range as compared to the comparable companies’ analysis shown in Chapter 1).

## CHAPTER 3:

- *Discounted Cash Flow Analysis.* The book's third chapter moves away from the two market-based valuation techniques by introducing the reader to a cash-flow based valuation, which is also known as an "intrinsic value." DCF is premised on the notion that "the value of a company can be derived from the present value of its projected free cash flow." This free cash flow is itself derived from an assortment of projections and assumptions including top-line growth, operating margins, and cash expenditures.

Free cash flow is typically forecasted for 5 years (or when operations reach a steady-state), and a terminal value is used to account for the additional value beyond the projection period. Both the free cash flow and the terminal value are discounted back to the present using the target's weighted average cost of capital (WACC), a discount rate that attempts to quantify the target's riskiness. As a DCF valuation is highly dependent upon a few key assumptions (especially WACC and terminal value), the DCF is normally presented as a range of values in a data table (a form of sensitivity analysis). Along these lines, the authors stress that "a DCF is only as strong as its assumptions."

Exhibit 3.1 shows the steps involved in the analysis: determine the target's performance drivers, project free cash flow, calculate the WACC, project a terminal value (via two methods), calculate the present value, and determine the valuation.

Projecting free cash flow requires the banker to have an excellent grasp of financial statements as well as accounting principles. This material is not thoroughly covered in the book, but it is explained for students via the CIBA course's video content.

Exhibit 3.3 shows the basic free cash flow calculation (EBIT – taxes + depreciation & amortization – capital expenditures – increase in working capital); an understanding of this formula (and the reasons behind it) is crucial for a banker. The authors then move on to the process of projecting sales, EBITDA and EBIT, which requires some basic assumptions about top-line growth and profit margins.

Pages 119-124 cover the more complicated process of forecasting D&A, capex and changes in working capital. These techniques rely on that solid understanding of financial statements mentioned above, but the authors do a good job in giving the reader some guidelines for making approximations ("depreciation is often projected as a percentage of sales or capex based on historical levels"; a similar method is used for capex as a percentage of sales). The change in working capital is highlighted in exhibits 3.5 and 3.6, and the authors suggest common industry methods for projecting accounts receivable (days outstanding), inventory (turns), and accounts payable (days outstanding).

Pages 125-131 are dedicated to the WACC calculation. Exhibits 3.12, 3.13, 3.15, 3.18 and 3.19 are useful visual aids for this task. As noted, bankers often consult with their in-house experts to estimate a target's cost of debt. The cost of equity calculation is based upon an academic theory known as the capital asset pricing model (CAPM); the book gives a concise overview of this theory as it relates to its use in DCF valuations.

The chapter then moves on to the two methods of forecasting terminal value: exit multiple method (an EBITDA multiple similar to that used for the comparable companies and precedent transactions) and the perpetuity growth method.

The authors end the chapter with the present value calculations, which capture the time value of money. The ValueCo DCF output is shown as a data table with a 6.5x-7.5x exit multiple range and a 10.5%-11.5% range yielding a valuation of \$1,057 million to \$1,213 million.

## CHAPTER 4:

- *Leveraged Buyouts*. The book takes a break from valuation techniques to delve into the world of leveraged buyouts (LBOs). The authors define an LBO as “the acquisition of company, division, business or collection of assets using debt to finance a large portion of the purchase price ... the remaining portion of the purchase price is funded with an equity contribution by a financial sponsor.” LBOs are a subset of the M&A universe with the other main subset being strategic acquisitions by operating companies.

Sponsors typically aim to liquidate their investment within 5 years while earning an annualized return of more than 20%. The typical LBO sees debt accounting for 60%-70% of the financing.

Investment banks play a variety of key roles in LBO transactions. Bankers can generate deals by pitching ideas both to financial sponsors (the “buy side”) and to target companies (the “sell side”). Furthermore, investment banks typically arrange and even underwrite the debt associated with LBOs. If all goes very well, the investment bank might even be involved in the eventually liquidity event for the LBO; this can be an IPO, a sale of the company or a recapitalization.

The chapter then moves on to profile some of the major players in an LBO – the financial sponsors (who are often private equity firms that are staffed with former investment bankers), the investment banks, the commercial banks / lenders, the bond investors, and the management team.

Solid LBO candidates tend to have stable and predictable cash flow (to service debt), substantial assets (to borrow against and to serve as a barrier to new entrants), low capital expenditures (to conserve cash), and proven management teams (to manage the business towards the sponsor’s exit strategy); a list of characteristics is shown in exhibit 4.3.

The most complex section of the chapter is called “Economics of LBOs” (pages 171-176). It is important for investment bankers to grasp the concepts laid out on these pages as they are the crux of the LBO business. The authors define the internal rate of return (IRR) as “the discount rate that must be applied to the sponsor’s cash outflows and inflows during the investment horizon in order to produce a net present value of zero.” The book shows an example of an investment with a \$250 million outflow at the outset, followed by a \$750 million inflow 5 years later; the IRR for this investment is therefore 24.6% [the authors don’t show the math for this, but it can be calculated by solving for Y in the following equation:  $250,000,000 \times (1+Y)^5 = 750,000,000$ ]. In that example, another way to describe the return to investors is a 3.0x cash return; note that the cash return approach does not factor in the time value of money. Along these lines, it should be understood that a longer time lag between investment and proceeds leads to a lower IRR (substitute 6 years for 5 years in the above example and the IRR drops to 20.0%).

The “Economics of LBOs” section also points out that LBOs can generate investor returns in two ways (or a combination of the two): debt repayment and growth in enterprise value. Exhibit 4.6 is a great depiction of these methods; the left scenario shows the 24.6% IRR achieved solely via debt repayment as the enterprise value remains constant but 5 years of cash flows are used to repay \$500 million of debt, thus increasing the \$250 million of equity value to \$750 million. The right scenario shows the 24.6% IRR achieved solely via enterprise value growth; debt remains constant but the \$500 million of cash flows over 5 years are used to increase the enterprise value.

Exhibit 4.7 illustrates how debt is used to enhance returns. The two scenarios show identical purchase prices and exit prices, but the returns in the right scenario are boosted by using more debt; carefully read page 175 and the top of 176. This can be simply illustrated by considering a house purchase; someone who paid cash for a house that rose from \$200,000 to \$220,000 would earn 10% cash return, but someone who paid \$40,000 in cash while borrowing \$160,000 would earn 50% cash return as the house rose in value to \$220,000 (excluding interest payments).

## CHAPTER 5:

- *LBO Analysis*. This chapter is by far the book's most technically complicated section, and the comprehension of its content is crucially important to investment bankers. Under the context of performing a full LBO analysis, the authors present the challenge of constructing a fully flowing financial projection model. The previous valuation techniques have allowed bankers to compute values based on simple examination of financial statements (comparable companies and precedent transactions) or by making a handful of key assumptions about certain operating statistics (DCF). The authors postulate that a financial model is required for an LBO analysis; in fact, most investment bankers would agree that the model is also crucial for a proper DCF valuation as well.

For those new to the subject, financial modeling can present quite a challenge with a daunting learning curve. The good news is the CIBA course has many video modules dedicated solely to financial modeling.

In the context of chapter 5, the financial model (LBO model in this case) is a fluid tool that allows for the examination of various scenarios in order to achieve a desired goal (a 20% IRR with a viable capital structure in this case). The authors note that models are built by sell-side bankers to "set sale price expectations" while models are built by buy-side advisors to help calculate their offer price.

Exhibit 5.1 shows a basic list of steps for constructing a financial model. The CIBA course will use this list as the basis of its own financial modeling instruction. The book's model pages are shown in full in exhibits 5.46-5.54.

The authors suggest first creating projections for the non-debt / non-LBO part of the financial statements; this includes the income statement to the EBIT line, the balance sheet (without cash, debt or shareholder's equity) and the cash flow statement through investing activities. That excellent grasp of the relationship between the three financial statements will come in very handy at this time (i.e. how sales on the income statement affect accounts receivable on the balance sheet, and how AR on the balance sheet affects operating activities on the cash flow statement). The authors stress one of the golden rules of modeling – "if the balance sheet does not balance, then the banker must revisit the steps performed ... to correct any input, linking, or calculation errors that are preventing the model from functioning properly."

Exhibit 5.15 provides a useful glimpse of the accounting associated with an LBO including new debt and goodwill (the amount by which the equity purchase price exceeds the target's pre-deal book equity).

The authors also suggest that the model be created with a dedicated debt schedule; this allows for easier viewing and calculating of financial activities. Most importantly, the debt schedule eases the calculation of cash available for debt repayment - both mandatory and optional (also called a cash flow sweep), which together lead to the calculation of the model's cash balance. This is explored in-depth on pages 216-221.

Finally, page 236 shows how the LBO model's output can be integrated with the other valuation techniques to present a more robust valuation.

## CHAPTER 6:

- *M&A Sale Process*. The final chapter of the book focuses on one of the major classes of transactions performed by investment bankers, namely the mergers & acquisitions process (or M&A). Please note that the book does not devote much text to the other main transaction class, underwriting of equity and debt securities; this topic is covered in the CIBA course's video content.

When hired to sell a business, investment bankers work for their clients to "provide an optimal mix of value maximization, speed of execution, and certainty of completion." The authors point out the "sell-side assignment requires the deal team to perform a comprehensive valuation of the target" using the methodologies detailed earlier in the book.

Exhibit 6.3 provides a broad overview of the auction process, from the investment banker's perspective. The authors have written a practical guide that includes details on the various marketing materials that are prepared by investment bankers. One of the most important (and time consuming) of these materials is the "Confidential Information Memorandum" which is a "detailed written description of the target (often 50+ pages) that serves as the primary marketing document for the target in an auction." In preparing the CIM's financial information, the bankers spend much of their time working with the target's executives (often the CFO).

Other areas of focus for investment bankers are the set up of the data room and the preparation of the management presentation. The data room is a "hub for the buyer due diligence ... where comprehensive detailed information about the target is stored" – a sample list of data room items is included in exhibit 6.7. The presentation is most often a PowerPoint slideshow that is prepared by the bankers but verbally presented by the target's management team.

The primary conceptual content of chapter 6 is the section titled "Valuation Perspectives" that is found on pages 267-269. While chapters 4 and 5 focused on LBOs by financial buyers, these pages explore the accretion/dilution issue faced by strategic buyers. Accretion/dilution analysis is used to "measure the pro forma effects of the transaction on earnings." More specifically, "if the pro forma EPS is higher than the standalone EPS, the transaction is said to be accretive ... if the pro forma EPS is lower, the transaction is said to be dilutive." The authors point out that public companies are often loath to engage in dilutive deals because of potential negative effects on share price. The best ways for an acquirer to avoid dilution are to pay the lowest possible purchase price, source the least expensive form of financing, and identify significant synergies.

The detailed example shown in exhibit 6.9 demonstrates an accretion/dilution analysis. Students should understand how the standalone EPS and pro forma EPS figures are calculated. Students should try to calculate the minimum synergies to avoid dilution; that calculation is  $\$2.79 \times 125 = \$348.75$ , divide that by 62% (or 100% - tax rate), then add back the \$50 and \$44 of interest and back out the \$500 and \$140.4 of EBIT to get \$16.1 million.



## **VII. CERTIFIED INVESTMENT BANKING ASSOCIATE (CIBA) STRATEGIC PROJECT:**

The **Certified Investment Banking Associate (CIBA)** Program requires participants to complete a Strategic Investment Banking Project in order to graduate from the program. This plan is worth 100 points and accounts for 50% of the total grade within the program.

As such, non-submission of this strategic plan will result in an automatic failing grade for the CIBA program. If you have any questions, please email us at [Team@FinanceTraining.com](mailto:Team@FinanceTraining.com)

**Once you have completed this project**, please send it and your request to take your desired exam date at least 2 weeks before the scheduled exam date. **To schedule for an exam date**, this project must be received, completed, at least 2 weeks before the exam date. For example, to take the October 10<sup>th</sup> exam date, this project must be received (as well as a request to take the exam) no later than September 26<sup>th</sup>.

### ***Strategic Project Instructions:***

Your investment banking group will be making a sell-side M&A advisory pitch to the CEO and CFO of CIBA Airways, a fictional US-based major passenger airline. The managing director of your bank's transportation investment banking group has asked you to provide valuation guidance based on a comparable companies' analysis and a precedent transactions analysis.

Using the skills that you have learned from this course's textbook, study guide and video modules, please edit the Excel file that has been provided to you. You should keep in mind the following basic financial data about CIBA Airways; it had LTM revenue of \$4.3 billion and LTM EBITDA of \$540 million.

You should focus on the following specific tasks:

1. The "Comparable Companies" sheet shows a very basic template for a comps analysis with one comparable already provided. **Please find 5 more comparable** to add to the analysis. The comparable must be publicly-traded US-based passenger airlines with annual revenue of more than \$2 billion. For consistency in grading your project, please use data that would have been available to a banker as of August 23, 2011 (share prices and SEC filings). Use any resources to come up with the comparable – your own knowledge, news articles, stock screeners, annual reports, etc. After choosing your comps, you should be able to find all of your information (other than share price) from public filings on [www.sec.gov](http://www.sec.gov)
2. The "Precedent Transactions" sheet shows a very basic template for an M&A comps analysis with one transaction already provided. **Please find 2 or 3 more M&A comps** to add to the analysis. The comps must involve a publicly-traded target that was a US-based passenger airline with revenue above \$2 billion; please only use deals that were announced between January 2008 and December 2010. Be resourceful when searching for the transactions, especially with online searches; it is very likely that you've heard of (or even been a customer of) these acquirers. After you find news of the acquisitions, all of the financial information can be found in public filings on [www.sec.gov](http://www.sec.gov).
3. Use your findings from tasks 1 & 2 to complete the "football field" graph on the "Valuation Summary" sheet.
4. Please refer to this spreadsheet while completing this strategic project:  
<http://financetraining.com/wp-content/uploads/2017/04/CIBA-Project.xlsx>

## **VIII. FAQ (FREQUENTLY ASKED QUESTIONS):**

### **Have more questions or need more information?**

Please see our consistently updated FAQ (Frequently Asked Questions) section on the Finance Training Society website here at <http://FinanceTraining.com/FAQ.html>.

You can also get in touch with the Finance Training Society team via email at Team@FinanceTraining.com, by phone, and through our Click and Chat tool, accessible from our homepage: <http://FinanceTraining.com>.

Thanks for joining the Finance Training Society! Please let us know if you have any questions.

### **-The Finance Training Society Team**

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## **IX. SAMPLE QUESTION ANSWERS:**

1. B. \$100 million of goodwill is created. See calculations on page 210 and 212. Goodwill is the amount by which the equity purchase price exceeds book value. In this case, the equity purchase price of \$400 million (\$500 million less the \$100 million of debt retired) exceeds the book value (\$300 million) by \$100 million. The existing \$50 million of goodwill is irrelevant to the creation of new goodwill, though it will remain on the books as part of total goodwill.
2. C. The report is called a 10-Q. See pages 22-23. The 10-K is the corresponding annual report. The 8-K (not an 8-Q) is a report about material news. The proxy statement is also called the DEF14A.
3. D. Enterprise value is the sum of equity value and net debt (debt less cash). See pages 88-89.
4. B. The perpetuity growth method is one of the two primary methods for computing a DCF analysis' terminal value. See pages 131-133. The other choices are not applicable to forecasting terminal values in a DCF analysis.
5. A. Moving the exit event closer to the initial investment date will increase an IRR. See pages 171-172. All of the other options would actually reduce the IRR. As an example, a \$10 million investment that yields a \$30 million exit in 3 years implies an IRR of 44%. If the exit is moved up to just 2 years (rather than 3 years), the IRR rises to 73%.
6. A. Period over period changes on the balance sheet must be reflected on the cash flow statement. See page 204. As an example, an increase in "Accounts Receivable" from year 1 to year 2 on the balance sheet must appear as a use of cash in the "Changes in Working Capital" section of the cash flow statement.

D. Accretion / dilution analysis typically only pertains to strategic acquirers as they have EPS and stock prices to consider when making acquisitions. See pages 267-269. The other three methods are typically used by both strategic and financial.