

U N I V E R S I T Y E D I T I O N

Updated
with Additional
M&A Chapter
100+ New Pages

S E C O N D E D I T I O N

Investment Banking

*Valuation, Leveraged Buyouts,
and Mergers & Acquisitions*

with data & analytics from **Bloomberg**

JOSHUA ROSENBAUM
JOSHUA PEARL

FOREWORD BY JOSEPH R. PERELLA
AFTERWORD BY JOSHUA HARRIS

WILEY

Contents

[Cover](#)

[Contents](#)

[Series Page](#)

[Title Page](#)

[Copyright](#)

[Dedication](#)

[Instructor and Student Resources](#)

[INSTRUCTOR RESOURCES](#)

[STUDENT RESOURCES AVAILABLE FOR
PURCHASE](#)

[About the Authors](#)

[CONTACT THE AUTHORS](#)

[Foreword](#)

[Acknowledgements](#)

[Introduction](#)

[STRUCTURE OF THE BOOK](#)

[VALUECO SUMMARY FINANCIAL INFORMATION](#)

[PART One: Valuation](#)

[CHAPTER 1: Comparable Companies Analysis](#)

[SUMMARY OF COMPARABLE COMPANIES
ANALYSIS STEPS](#)

[STEP I. SELECT THE UNIVERSE OF
COMPARABLE COMPANIES](#)

[STEP II. LOCATE THE NECESSARY FINANCIAL
INFORMATION](#)

STEP III. SPREAD KEY STATISTICS, RATIOS, AND TRADING MULTIPLES

STEP IV. BENCHMARK THE COMPARABLE COMPANIES

STEP V. DETERMINE VALUATION

KEY PROS AND CONS

ILLUSTRATIVE COMPARABLE COMPANIES ANALYSIS FOR VALUECO

CHAPTER 1 QUESTIONS

CHAPTER 2: Precedent Transactions Analysis

SUMMARY OF PRECEDENT TRANSACTIONS ANALYSIS STEPS

STEP I. SELECT THE UNIVERSE OF COMPARABLE ACQUISITIONS

STEP II. LOCATE THE NECESSARY DEAL-RELATED AND FINANCIAL INFORMATION

STEP III. SPREAD KEY STATISTICS, RATIOS, AND TRANSACTION MULTIPLES

STEP IV. BENCHMARK THE COMPARABLE ACQUISITIONS

STEP V. DETERMINE VALUATION

KEY PROS AND CONS

ILLUSTRATIVE PRECEDENT TRANSACTION ANALYSIS FOR VALUECO

CHAPTER 2 QUESTIONS

CHAPTER 3: Discounted Cash Flow Analysis

STEP I. STUDY THE TARGET AND DETERMINE KEY PERFORMANCE DRIVERS

STEP II. PROJECT FREE CASH FLOW

STEP III. CALCULATE WEIGHTED AVERAGE COST OF CAPITAL

STEP IV. DETERMINE TERMINAL VALUE

STEP V. CALCULATE PRESENT VALUE AND
DETERMINE VALUATION

KEY PROS AND CONS Pros

ILLUSTRATIVE DISCOUNTED CASH FLOW
ANALYSIS FOR VALUECO

CHAPTER 3 QUESTIONS

PART Two: Leveraged Buyouts

CHAPTER 4: Leveraged Buyouts

KEY PARTICIPANTS

CHARACTERISTICS OF A STRONG LBO
CANDIDATE

ECONOMICS of LBOs

PRIMARY EXIT/MONETIZATION STRATEGIES

LBO FINANCING: STRUCTURE

LBO FINANCING: PRIMARY SOURCES

LBO FINANCING: SELECTED KEY TERMS

LBO FINANCING: DETERMINING FINANCING
STRUCTURE

CHAPTER 4 QUESTIONS

CHAPTER 5: LBO Analysis

STEP I. LOCATE AND ANALYZE THE NECESSARY
INFORMATION

STEP II. BUILD THE PRE-LBO MODEL

STEP III. INPUT TRANSACTION STRUCTURE

STEP IV. COMPLETE THE POST-LBO MODEL

STEP V. PERFORM LBO ANALYSIS

ILLUSTRATIVE LBO ANALYSIS FOR VALUECO

CHAPTER 5 QUESTIONS

PART Three: Mergers & Acquisitions

CHAPTER 6: Sell-Side M&A

AUCTIONS

NEGOTIATED SALE

CHAPTER 6 QUESTIONS

CHAPTER 7: Buy-Side M&A

BUYER MOTIVATION

ACQUISITION STRATEGIES

FORM OF FINANCING

DEAL STRUCTURE

BUY-SIDE VALUATION

MERGER CONSEQUENCES ANALYSIS

ILLUSTRATIVE MERGER CONSEQUENCES

ANALYSIS FOR THE BUYERCO / VALUECO

TRANSACTION

CHAPTER 7 QUESTIONS

Solutions Manual

CHAPTER 1 ANSWERS AND RATIONALE

CHAPTER 2 ANSWERS AND RATIONALE

CHAPTER 3 ANSWERS AND RATIONALE

CHAPTER 4 ANSWERS AND RATIONALE

CHAPTER 5 ANSWERS AND RATIONALE

CHAPTER 6 ANSWERS AND RATIONALE

CHAPTER 7 ANSWERS AND RATIONALE

Afterword

Bibliography and Recommended Reading

Index

End User License Agreement

List of Exhibit

Introduction

[EXHIBIT I.I ValueCo Summary Historical Operating Data](#)

[EXHIBIT I.II ValueCo Summary Projected Operating Data](#)

[EXHIBIT I.III ValueCo Summary Historical Balance Sheet Data](#)

Chapter 01: Comparable Companies Analysis

[EXHIBIT 1.1 Comparable Companies Analysis Steps](#)

[EXHIBIT 1.2 Comparable Companies Analysis—Trading Multiples Output Page](#)

[EXHIBIT 1.3 Business and Financial Profile Framework](#)

[EXHIBIT 1.4 Summary of Financial Data Primary Sources](#)

[EXHIBIT 1.5 Sample Comparable Company Input Page](#)

[EXHIBIT 1.6 Calculation of Equity Value](#)

[EXHIBIT 1.7 Calculation of Fully Diluted Shares Outstanding Using the Treasury Stock Method](#)

[EXHIBIT 1.8 Calculation of Fully Diluted Shares Outstanding Using the If-Converted Method](#)

[EXHIBIT 1.9 Incremental Shares from If-Converted Versus Net Share Settlement](#)

[EXHIBIT 1.10 Calculation of Enterprise Value](#)

[EXHIBIT 1.11 Effects of Capital Structure Changes on Enterprise Value](#)

[EXHIBIT 1.12 Gross Profit Margin](#)

[EXHIBIT 1.13 EBITDA and EBIT Margin](#)

[EXHIBIT 1.14 Net Income Margin](#)

[EXHIBIT 1.15 Historical and Estimated Diluted EPS Growth Rates](#)

[EXHIBIT 1.16 Return on Invested Capital](#)

[EXHIBIT 1.17 Return on Equity](#)

[EXHIBIT 1.18 Return on Assets](#)

[EXHIBIT 1.19 Implied Dividend Yield](#)

[EXHIBIT 1.20 Leverage Ratio](#)

[EXHIBIT 1.21 Capitalization Ratio](#)

[EXHIBIT 1.22 Interest Coverage Ratio](#)

[EXHIBIT 1.23 Ratings Scales of the Primary Rating Agencies](#)

[EXHIBIT 1.24 Calculation of LTM Financial Data](#)

[EXHIBIT 1.25 Calculation of LTM 9/30/2012 Sales](#)

[EXHIBIT 1.26 Calendarization of Financial Data](#)

[EXHIBIT 1.27 Calendarization of Sales](#)

[EXHIBIT 1.28 Reported Income Statement](#)

[EXHIBIT 1.29 Adjusted Income Statement](#)

[EXHIBIT 1.30 Equity Value Multiples](#)

[EXHIBIT 1.31 Enterprise Value-to-EBITDA and Enterprise Value-to-EBIT](#)

[EXHIBIT 1.32 Enterprise Value-to-Sales](#)

[EXHIBIT 1.33 Selected Sector-Specific Valuation Multiples](#)

[EXHIBIT 1.34 Selected Enterprise Value-to-EBITDA Multiple Range](#)

[EXHIBIT 1.35 Valuation Implied by EV/EBITDA](#)

[EXHIBIT 1.36 Valuation Implied by P/E - Share Price](#)

[EXHIBIT 1.37 Valuation Implied by P/E - Enterprise Value](#)

[EXHIBIT 1.38 List of Comparable Companies](#)

[EXHIBIT 1.39 Comparable Companies Analysis—Trading Multiples Output Page](#)

[EXHIBIT 1.40 General Information Section](#)

[EXHIBIT 1.41 Selected Market Data Section](#)

[EXHIBIT 1.42 Calculation of Fully Diluted Shares Outstanding Section](#)

[EXHIBIT 1.43 Equity Value](#)

[EXHIBIT 1.44 Balance Sheet Data Section](#)

[EXHIBIT 1.45 Enterprise Value](#)

[EXHIBIT 1.46 Reported Income Statement Section](#)

[EXHIBIT 1.47 Adjusted Income Statement Section](#)

[EXHIBIT 1.48 Cash Flow Statement Data Section](#)

[EXHIBIT 1.49 LTM Return on Investment Ratios Section](#)

[EXHIBIT 1.50 LTM Credit Statistics Section](#)

[EXHIBIT 1.51 Trading Multiples Section](#)

[EXHIBIT 1.52 Growth Rates Section](#)

[EXHIBIT 1.53 ValueCo Corporation: Benchmarking Analysis - Financial Statistics and Ratios, Page 1](#)

[EXHIBIT 1.54 ValueCo Corporation: Benchmarking Analysis - Financial Statistics and Ratios, Page 2](#)

[EXHIBIT 1.55 ValueCo Corporation: Comparable Companies Analysis—Trading Multiples Output Page](#)

[EXHIBIT 1.55\(a\) ValueCo Corporation: Trading Multiples Output Page for Equity Research Analysts and Equity Investors](#)

[EXHIBIT 1.56 ValueCo Corporation: Implied Valuation Range - Enterprise Value](#)

[EXHIBIT 1.57 ValueCo Football Field Displaying Comparable Companies](#)

[APPENDIX 1.1 Bloomberg “Relative Valuation” Comparable Companies Analysis \(RV<GO>\)](#)

[APPENDIX 1.2 Bloomberg Functions for Business and Financial Profile](#)

[APPENDIX 1.3 Bloomberg Company Classification Browser \(CCB<GO>\)](#)

[APPENDIX 1.4 Bloomberg BEst Consensus Estimates \(EEB<GO>\)](#)

[APPENDIX 1.5 Bloomberg Coverage Dashboard \(IBNK<GO>\)](#)

[APPENDIX 1.6 Bloomberg Industries Comparable Analysis for Basic & Diversified Chemicals \(BI<GO>\)](#)

Chapter 02: Precedent Transactions Analysis

[EXHIBIT 2.1 Precedent Transactions Analysis Steps](#)

[EXHIBIT 2.2 Precedent Transactions Analysis Output Page](#)

[EXHIBIT 2.3 Primary SEC Filings in M&A Transaction—U.S. Issuers](#)

[EXHIBIT 2.4 Transaction Information by Target Type](#)

[EXHIBIT 2.5 Precedent Transactions Input Page Template](#)

[EXHIBIT 2.6 Press Release Excerpt for All-Cash Transaction](#)

[EXHIBIT 2.7 Press Release Excerpt for Fixed Exchange Ratio Structure](#)

[EXHIBIT 2.8 Calculation of Offer Price per Share and Equity Value in a Fixed Exchange Ratio Structure](#)

[EXHIBIT 2.9 Fixed Exchange Ratio - Value to Target and Shares Received](#)

[EXHIBIT 2.10 Press Release Excerpt for Floating Exchange Ratio Structure](#)

[EXHIBIT 2.11 Floating Exchange Ratio - Value to Target and Shares Received](#)

[EXHIBIT 2.12 Press Release Excerpt for Cash and Stock Transaction](#)

[EXHIBIT 2.13 Calculation of Offer Price per Share and Equity Value in a Cash and Stock Transaction](#)

[EXHIBIT 2.14 Calculation of Enterprise Value](#)

[EXHIBIT 2.15 Equity Value Multiples](#)

[EXHIBIT 2.16 Enterprise Value Multiples](#)

[EXHIBIT 2.17 Calculation of Premium Paid](#)

[EXHIBIT 2.18 Press Release Excerpt Discussing Synergies in a Strategic Acquisition](#)

[EXHIBIT 2.19 Synergies-Adjusted Multiple](#)

[EXHIBIT 2.20 Initial List of Comparable Acquisitions](#)

[EXHIBIT 2.21 Press Release Excerpt from the Announcement of the Pearl/Rosenbaum Transaction](#)

[EXHIBIT 2.22 Excerpt from Rosenbaum's Proxy Statement](#)

[EXHIBIT 2.23 Input Page for the Acquisition of Rosenbaum by Pearl](#)

[EXHIBIT 2.24 General Information Section](#)

[EXHIBIT 2.25 Calculation of Equity and Enterprise Value Section](#)

[EXHIBIT 2.26 Calculation of Fully Diluted Shares Outstanding Section](#)

[EXHIBIT 2.27 Equity Value](#)

[EXHIBIT 2.28 Enterprise Value](#)

[EXHIBIT 2.29 Rosenbaum's Reported Income Statement Section](#)

[EXHIBIT 2.30 Rosenbaum's Adjusted Income Statement Section](#)

[EXHIBIT 2.31 Cash Flow Statement Data Section](#)

[EXHIBIT 2.32 LTM Transaction Multiples Section](#)

[EXHIBIT 2.33 Premiums Paid Section](#)

[EXHIBIT 2.34 Rosenbaum's Annotated Price/Volume Graph](#)

[EXHIBIT 2.35 Precedent Transactions Analysis Output Page](#)

[EXHIBIT 2.36 ValueCo's Implied Valuation Range](#)

[EXHIBIT 2.37 ValueCo Football Field Displaying Comparable Companies and Precedent Transactions](#)

[APPENDIX 2.1 Example of Custom Transaction Search Criteria using Bloomberg M&A Analysis \(MA<GO>\)](#)

[APPENDIX 2.2 List of BuyerCo Acquisitions from 2000-2012, Sorted by Announce Date using Bloomberg M&A Analysis \(MA<GO>\)](#)

Chapter 03: Discounted Cash Flow Analysis

[EXHIBIT 3.1 Discounted Cash Flow Analysis Steps](#)

[EXHIBIT 3.2 DCF Analysis Output Page](#)

[EXHIBIT 3.3 Free Cash Flow Calculation](#)

[EXHIBIT 3.4 EBIT to FCF](#)

[EXHIBIT 3.5 Current Assets and Current Liabilities Components](#)

[EXHIBIT 3.6 Calculation of Net Working Capital](#)

[EXHIBIT 3.7 Calculation of a YoY Change in NWC](#)

[EXHIBIT 3.8 Calculation of DSO](#)

[EXHIBIT 3.9 Calculation of DIH](#)

[EXHIBIT 3.10 Calculation of Inventory Turns](#)

[EXHIBIT 3.11 Calculation of DPO](#)

[EXHIBIT 3.12 Calculation of WACC](#)

[EXHIBIT 3.13 Steps for Calculating WACC](#)

[EXHIBIT 3.14 Optimal Capital Structure](#)

[EXHIBIT 3.15 Calculation of CAPM](#)

[EXHIBIT 3.16 Unlevering Beta](#)

[EXHIBIT 3.17 Relevering Beta](#)

[EXHIBIT 3.18 CAPM Formula Adjusted for Size Premium](#)

[EXHIBIT 3.19 WACC Formula](#)

[EXHIBIT 3.20 Exit Multiple Method](#)

[EXHIBIT 3.21 Perpetuity Growth Method](#)

[EXHIBIT 3.22\(a\) Implied Perpetuity Growth Rate \(End-of-Year Discounting\)](#)

[EXHIBIT 3.22\(b\) Implied Perpetuity Growth Rate \(Mid-Year Discounting, see Exhibit 3.26\)](#)

[EXHIBIT 3.23\(a\) Implied Exit Multiple \(End-of-Year Discounting\)](#)

[EXHIBIT 3.23\(b\) Implied Exit Multiple \(Mid-Year Discounting, see Exhibit 3.26\)](#)

[EXHIBIT 3.24 Discount Factor](#)

[EXHIBIT 3.25 Present Value Calculation Using a Year-End Discount Factor](#)

[EXHIBIT 3.26 Discount Factor Using a Mid-Year Convention](#)

[EXHIBIT 3.27 Enterprise Value Using Mid-Year Discounting](#)

[EXHIBIT 3.28 Equity Value](#)

[EXHIBIT 3.29 Share Price](#)

[EXHIBIT 3.30 Iteration Function in Microsoft Excel](#)

[EXHIBIT 3.31 Calculation of Implied Share Price](#)

[EXHIBIT 3.32 Sensitivity Analysis](#)

[EXHIBIT 3.33 ValueCo Summary Historical Operating and Working Capital Data](#)

[EXHIBIT 3.34 ValueCo Historical and Projected Sales](#)

[EXHIBIT 3.35 ValueCo Historical and Projected COGS and SG&A](#)

[EXHIBIT 3.36 ValueCo Historical and Projected EBITDA](#)

[EXHIBIT 3.37 ValueCo Historical and Projected EBIT](#)

[EXHIBIT 3.38 ValueCo Projected Taxes](#)

[EXHIBIT 3.39 ValueCo Historical and Projected Capex](#)

[EXHIBIT 3.40 ValueCo Historical and Projected Net Working Capital](#)

[EXHIBIT 3.41 ValueCo's Projected Changes in Net Working Capital](#)

[EXHIBIT 3.42 ValueCo Projected FCF](#)

[EXHIBIT 3.43 ValueCo Capitalization](#)

[EXHIBIT 3.44 CAPM Formula](#)

[EXHIBIT 3.45 Average Unlevered Beta](#)

[EXHIBIT 3.46 ValueCo Relevered Beta](#)

[EXHIBIT 3.47 ValueCo Cost of Equity](#)

[EXHIBIT 3.48 ValueCo WACC Calculation](#)

[EXHIBIT 3.49 ValueCo Weighted Average Cost of Capital Analysis](#)

[EXHIBIT 3.50 Exit Multiple Method](#)

[EXHIBIT 3.51 Implied Perpetuity Growth Rate](#)

[EXHIBIT 3.52 Perpetuity Growth Rate](#)

[EXHIBIT 3.53 Implied Exit Multiple](#)

[EXHIBIT 3.54 Present Value Calculation](#)

[EXHIBIT 3.55 Enterprise Value](#)

[EXHIBIT 3.56 Equity Value](#)

[EXHIBIT 3.57 ValueCo DCF Analysis Output Page](#)

[EXHIBIT 3.58 ValueCo Sensitivity Analysis](#)

[EXHIBIT 3.59 Sensitivity Analysis on Sales Growth Rates and EBIT Margins](#)

[EXHIBIT 3.60 ValueCo Football Field Displaying Comparable Companies, Precedent Transactions, and DCF Analysis](#)

[APPENDIX 3.1 Reported Historical Figures and Consensus Estimates via Bloomberg Financial Analysis \(FA<GO>\)](#)

[APPENDIX 3.2 Bond Quote and Informational Overview from Bloomberg Bond Description Function \(DES<GO>\)](#)

[APPENDIX 3.3 U.S. Treasury Interpolated Benchmark Monitor \(USTI<GO>\)](#)

[APPENDIX 3.4 Historical Raw Beta and Adjusted Beta as Calculated by Bloomberg \(BETA<GO>\)](#)

[APPENDIX 3.5 Bloomberg WACC Analysis \(WACC<GO>\)](#)

Chapter 04: Leveraged Buyouts

[EXHIBIT 4.1 LBO Fundamentals](#)

[EXHIBIT 4.2 Key Participants](#)

[EXHIBIT 4.3 Characteristics of a Strong LBO Candidate](#)

[EXHIBIT 4.4 IRR Timeline](#)

[EXHIBIT 4.5 IRR Timeline Example](#)

[EXHIBIT 4.6 How LBOs Generate Returns](#)

[EXHIBIT 4.7 How Leverage Is Used to Enhance Returns](#)

[EXHIBIT 4.8 Scenario III Debt Repayment Timeline](#)

[EXHIBIT 4.9 Scenario IV Debt Repayment Timeline](#)

[EXHIBIT 4.10 General Ranking of Financing Sources in an LBO Capital Structure](#)

[EXHIBIT 4.11 Average LBO Purchase Price Breakdown 2003 - 2012](#)

[EXHIBIT 4.12 Average Sources of LBO Proceeds 2003 - 2012](#)

[EXHIBIT 4.13 Global LBO Volume and Number of Closed Deals 2003 - 2012](#)

[EXHIBIT 4.14 Average LBO Credit Statistics 2003 - 2012](#)

[EXHIBIT 4.15 Bank Debt](#)

[EXHIBIT 4.16 ABL Borrowing Base Formula](#)

[EXHIBIT 4.17 High Yield Bonds](#)

[EXHIBIT 4.18 Mezzanine Debt](#)

[EXHIBIT 4.19 Comparison of Bank Debt and High Yield Bonds](#)

[EXHIBIT 4.20 Summary of Selected Key Terms](#)

[EXHIBIT 4.21 Contractual Subordination](#)

[EXHIBIT 4.22 Structural Subordination](#)

[EXHIBIT 4.23 Call Schedules](#)

[EXHIBIT 4.24 Bank Debt Covenants](#)

[EXHIBIT 4.25 High Yield Bond Covenants](#)

[EXHIBIT 4.26 Bank Debt Term Sheet](#)

[EXHIBIT 4.27 Explanation of Bank Debt Term Sheet](#)

[EXHIBIT 4.28 High Yield Bond Term Sheet](#)

[EXHIBIT 4.29 Explanation of High Yield Bond Term Sheet](#)

[EXHIBIT 4.30 Illustrative Sector Leverage Dynamics](#)

[EXHIBIT 4.31 Recent LBO Transactions > \\$1 Billion Purchase Price](#)

[EXHIBIT 4.32 Leveraged Loan New Issue Volume 2003 - 2012](#)

[EXHIBIT 4.33 High Yield New Issue Volume 2003 - 2012](#)

[EXHIBIT 4.34 Leveraged Loan Spreads by Ratings Category 2010 - 2012](#)

[EXHIBIT 4.35 High Yield Index by Ratings Index 2010 - 2012](#)

[APPENDIX 4.1 Bloomberg Screening Tool for LBO Candidates—Transaction Ideas \(IBTI<GO>\)](#)

Chapter 05: LBO Analysis

[EXHIBIT 5.1 LBO Analysis Steps](#)

[EXHIBIT 5.2 LBO Model Transaction Summary Page](#)

[EXHIBIT 5.3 Pre-LBO Model Steps](#)

[EXHIBIT 5.4 ValueCo Pre-LBO Income Statement](#)

[EXHIBIT 5.5 ValueCo Pre-LBO Balance Sheet](#)

[EXHIBIT 5.6 Income Statement Links](#)

[EXHIBIT 5.7 Balance Sheet Links](#)

[EXHIBIT 5.8 Investing Activities](#)

[EXHIBIT 5.9 Financing Activities](#)

[EXHIBIT 5.10 Cash Flow Statement Links to Balance Sheet](#)

[EXHIBIT 5.11 Steps to Input the Transaction Structure](#)

[EXHIBIT 5.12 Purchase Price Input Section of Assumptions Page 3 \(see Exhibit 5.54\) – Multiple of EBITDA](#)

[EXHIBIT 5.13 Purchase Price Assumptions – Offer Price per Share](#)

[EXHIBIT 5.14 Financing Structures Input Section of Assumptions Page 3 \(see Exhibit 5.54\)](#)

[EXHIBIT 5.15 Sources and Uses Links to Balance Sheet](#)

[EXHIBIT 5.16 Balance Sheet Adjustments](#)

[EXHIBIT 5.17 Term Loan B, Senior Notes, and Equity Contribution](#)

[EXHIBIT 5.18 Cash on Hand](#)

[EXHIBIT 5.19 Purchase ValueCo Equity](#)

[EXHIBIT 5.20 Goodwill Created](#)

[EXHIBIT 5.21 Repay Existing Debt](#)

[EXHIBIT 5.22 Financing Fees](#)

[EXHIBIT 5.23 Steps to Complete the Post-LBO Model](#)

[EXHIBIT 5.24 Forward LIBOR Curve](#)

[EXHIBIT 5.25 Cash Available for Debt Repayment \(Free Cash Flow\)](#)

[EXHIBIT 5.26 Revolving Credit Facility Section of Debt Schedule](#)

[EXHIBIT 5.27 Term Loan Facility Section of Debt Schedule](#)

[EXHIBIT 5.28 Senior Notes Section of Debt Schedule](#)

[EXHIBIT 5.29 Debt Schedule](#)

[EXHIBIT 5.30 Pro Forma Projected Income Statement
—EBIT to Net Income](#)

[EXHIBIT 5.31 Pro Forma ValueCo Income Statement](#)

[EXHIBIT 5.32 Pro Forma Total Liabilities Section of
Balance Sheet](#)

[EXHIBIT 5.33 Pro Forma Total Shareholders' Equity
Section of Balance Sheet](#)

[EXHIBIT 5.34 Pro Forma ValueCo Balance Sheet](#)

[EXHIBIT 5.35 Pro Forma Financing Activities Section
of Cash Flow Statement](#)

[EXHIBIT 5.36 Pro Forma ValueCo Cash Flow
Statement](#)

[EXHIBIT 5.37 Steps to Perform LBO Analysis](#)

[EXHIBIT 5.38 Summary Financial Data,
Capitalization, and Credit Statistics](#)

[EXHIBIT 5.39 Calculation of Enterprise Value and
Equity Value at Exit](#)

[EXHIBIT 5.40 Investment Timeline](#)

[EXHIBIT 5.41 Returns at Various Exit Years](#)

[EXHIBIT 5.42 IRR Sensitivity Analysis - Entry and
Exit Multiples](#)

[EXHIBIT 5.43 IRR Sensitivity Analysis - Exit Multiple
and Exit Year](#)

[EXHIBIT 5.44 ValueCo Football Field Displaying
Comparable Companies, Precedent Transactions,
DCF Analysis, and LBO Analysis](#)

[EXHIBIT 5.45 LBO Model Pages](#)

[EXHIBIT 5.46 ValueCo LBO Transaction Summary](#)

[EXHIBIT 5.47 ValueCo LBO Income Statement](#)

[EXHIBIT 5.48 ValueCo LBO Balance Sheet](#)

[EXHIBIT 5.49 ValueCo LBO Cash Flow Statement](#)

[EXHIBIT 5.50 ValueCo LBO Debt Schedule](#)

[EXHIBIT 5.51 ValueCo LBO Returns Analysis](#)

[EXHIBIT 5.52 ValueCo LBO Assumptions Page 1](#)

[EXHIBIT 5.53 ValueCo LBO Assumptions Page 2](#)

[EXHIBIT 5.54 ValueCo LBO Assumptions Page 3](#)

[APPENDIX 5.1 Bloomberg Forward Analysis of 3 Month Libor Projections \(FWCV<GO>\)](#)

Chapter 06: Sell-Side M&

[EXHIBIT 6.1 Valuation Paradigm](#)

[EXHIBIT 6.2 Advantages and Disadvantages of Broad and Targeted Auctions](#)

[EXHIBIT 6.3 Stages of an Auction Process](#)

[EXHIBIT 6.4 Sample Teaser](#)

[EXHIBIT 6.5 Confidential Information Memorandum Table of Contents](#)

[EXHIBIT 6.6 Sample Management Presentation Outline](#)

[EXHIBIT 6.7 Intralinks Data Room Document Index](#)

[EXHIBIT 6.8 First Round Bids Summary](#)

[EXHIBIT 6.9 Key Sections of a Definitive Agreement](#)

[EXHIBIT 6.10 Advantages and Disadvantages of a Negotiated Sale](#)

[APPENDIX 6.1 Bloomberg Private Company Screening \(PSCR<GO>\)](#)

[APPENDIX 6.2 Bloomberg Private Equity Fund Search \(PEFS<GO>\)](#)

Chapter 07: Buy-Side M&A

[EXHIBIT 7.1 Supply Chain Structure](#)

[EXHIBIT 7.2 Debt vs. Equity Financing Summary—Acquirer Perspective](#)

[EXHIBIT 7.3 Calculation of Deferred Tax Liability](#)

[EXHIBIT 7.4 Calculation of Goodwill](#)

[EXHIBIT 7.5 Present Value of Annual Tax Savings for Asset Write-Up for Buyer](#)

[EXHIBIT 7.6 Deal Structures—Stock Sale vs. Asset Sale](#)

[EXHIBIT 7.7 Comparison of Subsidiary Acquisition Structures](#)

[EXHIBIT 7.8 Summary of Primary Deal Structures](#)

[EXHIBIT 7.9 ValueCo Football Field for Enterprise Value](#)

[EXHIBIT 7.10 DCF Analysis—Present Value of Expected Synergies](#)

[EXHIBIT 7.11 ValueCo Football Field for Share Price](#)

[EXHIBIT 7.12 Analysis at Various Prices](#)

[EXHIBIT 7.13 Contribution Analysis](#)

[EXHIBIT 7.14 Merger Consequences Analysis Transaction Summary Page](#)

[EXHIBIT 7.15 Purchase Price Assumptions](#)

[EXHIBIT 7.16 Sources and Uses of Funds](#)

[EXHIBIT 7.17 Calculation of Goodwill Created](#)

[EXHIBIT 7.18 Annual Depreciation and Amortization from Write-Ups](#)

[EXHIBIT 7.19 Deferred Tax Liability \(DTL\) Amortization](#)

[EXHIBIT 7.20 Links to Balance Sheet](#)

[EXHIBIT 7.21 Balance Sheet Adjustments](#)

[EXHIBIT 7.22 Capitalization and Credit Statistics Analysis](#)

[EXHIBIT 7.23 Accretion/\(Dilution\) Calculation from EBIT to EPS](#)

[EXHIBIT 7.24 Scenario I: 50% Stock / 50% Cash Consideration](#)

[EXHIBIT 7.25 Scenario II: 100% Cash Consideration](#)

[EXHIBIT 7.26 Scenario III: 100% Stock Consideration](#)

[EXHIBIT 7.27 Accretion / \(Dilution\) Sensitivity Analysis](#)

[EXHIBIT 7.28 M&A Model Pages](#)

[EXHIBIT 7.29 Merger Consequences Analysis Transaction Summary Page](#)

[EXHIBIT 7.30 Pro Forma Income Statement](#)

[EXHIBIT 7.31 Pro Forma Balance Sheet](#)

[EXHIBIT 7.32 Pro Forma Cash Flow Statement](#)

[EXHIBIT 7.33 Pro Forma Debt Schedule](#)

[EXHIBIT 7.34 Pro Forma Capitalization and Credit Statistics](#)

[EXHIBIT 7.35 Accretion / \(Dilution\) Analysis](#)

[EXHIBIT 7.36 Assumptions Page](#)

[EXHIBIT 7.37 BuyerCo Standalone Income Statement](#)

[EXHIBIT 7.38 BuyerCo Standalone Balance Sheet](#)

[EXHIBIT 7.39 BuyerCo Standalone Cash Flow Statement](#)

[EXHIBIT 7.40 BuyerCo Standalone Debt Schedule](#)

[EXHIBIT 7.41 BuyerCo Standalone Assumptions Page 1](#)

[EXHIBIT 7.42 BuyerCo Standalone Assumptions Page 2](#)

[EXHIBIT 7.43 ValueCo Standalone Income Statement](#)

[EXHIBIT 7.44 ValueCo Standalone Balance Sheet](#)

[EXHIBIT 7.45 ValueCo Standalone Cash Flow Statement](#)

[EXHIBIT 7.46 ValueCo Standalone Debt Schedule](#)

[EXHIBIT 7.47 ValueCo Standalone Assumptions Page 1](#)

[EXHIBIT 7.48 ValueCo Standalone Assumptions Page 2](#)

[APPENDIX 7.1 Bloomberg Supply Chain Analysis \(SPLC<GO>\)](#)

Founded in 1807, John Wiley & Sons is the oldest independent publishing company in the United States. With offices in North America, Europe, Australia and Asia, Wiley is globally committed to developing and marketing print and electronic products and services for our customers' professional and personal knowledge and understanding.

The Wiley Finance series contains books written specifically for finance and investment professionals as well as sophisticated individual investors and their financial advisors. Book topics range from portfolio management to e-commerce, risk management, financial engineering, valuation and financial instrument analysis, as well as much more.

For a list of available titles, visit our Web site at www.WileyFinance.com.

Investment Banking

***Valuation, Leveraged Buyouts, and
Mergers & Acquisitions***

SECOND EDITION

JOSHUA ROSENBAUM

JOSHUA PEARL

FOREWORD BY JOSEPH R. PERELLA

AFTERWORD BY JOSHUA HARRIS

WILEY

Cover design: Wiley

Cover image: (Stock Board) © David Pollack / Corbis; (Gold Texture) © Gyro Photography / amanaimagesRF / Jupiter Images; (Arrow) © arahan-Fotolia.com

Copyright © 2013 by Joshua Rosenbaum and Joshua Pearl. All rights reserved.

Published by John Wiley & Sons, Inc., Hoboken, New Jersey.

First Edition published by John Wiley & Sons, Inc. in 2009.

Published simultaneously in Canada.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the Web at www.copyright.com. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at www.wiley.com/go/permissions.

Limit of Liability/Disclaimer of Warranty: While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor author shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages.

For general information on our other products and services or for technical support, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit www.wiley.com.

ISBN 978-1-118-65621-1 (cloth); ISBN 978-1-118-28125-3 (cloth + models);

ISBN 978-1-118-47220-0 (paper); ISBN 978-1-118-41985-4 (ebk);

ISBN 978-1-118-42161-1 (ebk); ISBN 978-1-118-69505-0 (ebk)

*In loving memory of Ronie Rosenbaum, an inspiration
for strength and selflessness.*

—J.R.

*To the memory of my grandfather, Joseph Pearl, a
Holocaust*

*survivor, for his inspiration to persevere and succeed.**

—J.P.

* A portion of the authors' royalties will be donated to The
Blue Card Fund aiding destitute Holocaust survivors—
www.bluecardfund.org.

Instructor and Student Resources

Written to reflect today's dynamic market conditions, *Investment Banking, University Edition* skillfully:

- Introduces students to the primary valuation methodologies currently used on Wall Street
- Uses a step-by-step how-to approach for each methodology and builds a chronological knowledge base
- Defines key terms, financial concepts, and processes throughout
- Provides a comprehensive overview of the fundamentals of LBOs and an organized M&A sale process
- Presents new coverage of M&A buy-side analytical tools—which includes both qualitative aspects, such as buyer motivations and strategies, along with technical financial and valuation assessment tools
- Includes a comprehensive merger consequences analysis, including accretion/(dilution) and balance sheet effects
- Contains challenging end-of-chapter questions to reinforce concepts covered

INSTRUCTOR RESOURCES

An extensive support package, including print and online tools, helps instructors maximize their teaching effectiveness. It offers useful supplements for instructors with varying levels of experience and different instructional circumstances. These resources can be accessed at Wiley's

Global Education website by searching the book title or by visiting

<http://www.wiley.com/WileyCDA/WileyTitle/productCd-1118472209.html>.

Instructor resources include:

- **Lecture Notes.** Full PowerPoint presentation for each chapter to help guide classroom instruction, including key topics, equations, and exhibits—over 325 slides in total.
- **Test Bank.** Over 500 questions and answers available in Microsoft Word and as a computerized test bank. The computerized test bank is available through Respondus (Respondus.com) and is a powerful tool for creating and managing exams. It can be printed or published directly to ANGEL, Blackboard, Desire2Learn, eCollege, WebCT, and other eLearning systems. Questions are presented in multiple choice and true/false format.
- **Solutions Manual.** The solutions manual includes detailed solutions to end of chapter questions.
- **Case Studies with Video Commentary.** 14 University of Virginia, Darden School of Business case studies complete with companion video commentary by the authors. The video commentary presents an overview of the case material and key issues to address.
- **Image Gallery.** Each exhibit in the *University Edition* is available for instructors in PowerPoint format.
- **Valuation Models.** Five templates and five completed models, along with user guides for the valuation methodologies discussed in the book, including:
 - Comparable Companies
 - Precedent Transactions

- DCF Analysis
- LBO Analysis
- Merger Consequences Analysis

STUDENT RESOURCES AVAILABLE FOR PURCHASE

Workbook

The *Investment Banking Workbook* is designed for use both as a companion to *Investment Banking, Second Edition*, as well as on a standalone basis. The workbook provides a mix of multi-step problem set exercises, as well as multiple choice and essay questions—over 400 questions in total. It also provides a comprehensive answer key that aims to truly teach and explain as opposed to simply identify the correct answer. Therefore, the answers themselves are an effective learning tool. The completion of this comprehensive guide will help ensure the achievement of your professional and educational milestones.

Focus Notes

Investment Banking Focus Notes provides a comprehensive, yet streamlined, review of the basic skills and concepts discussed in *Investment Banking, Second Edition*. The *Focus Notes* are designed for use as a companion to the main book as well as a standalone study program. This text serves as a one-stop resource in an easy-to-read-and-carry format that serves as a perfect reference material for a quick refresher.

Focus Notes seeks to help solidify knowledge of these core financial topics as true mastery must be tested, honed, and retested over time. It is the ultimate self-help tool for