



51A Middle Street Newburyport MA 01950

Phone: 800-588-7039 Fax: 877-902-4284

contact@bhfe.com

www.bhfe.com

Course Information

Course Title: Financial Analysis: A Business Decision Guide #362620

Number of continuing education credit hours recommended for this course:

CPA: 19 (All states)

In accordance with the standards of the National Registry of CPE Sponsors, CPE credits have been granted based on a 50-minute hour.

National Registry of CPE Sponsors ID Number: 107615.

Sponsor numbers for states requiring sponsor registration

Florida Division of Certified Public Accountancy: 4761 (Ethics #11467)

Hawaii Board of Accountancy: 14003

New York State Board of Accountancy: 002146

Ohio State Board of Accountancy: M0021

Pennsylvania Board of Accountancy: PX178025

Texas State Board of Accountancy: 009349

Course Description:

Nearly every business decision calls for a clear understanding of the underlying numbers. A manager needs this information to understand how well a business unit is performing, whether a new venture can achieve a reasonable profit, how much debt to take on, and so forth. *Financial Analysis* can assist with these decisions by focusing on the key indicators in a business that will drive its future performance. It does so by describing how to extract meaningful information from financial statements. It also delves into a number of analyses that are linked to specific business decisions, such as price optimization, constraint management, and credit granting. Another area addressed is financing, where the course covers financial leverage, capital structure, and foreign exchange risk. Other topics include financial forecasting, discounted cash flow analysis, and the valuation of acquisitions. In short, *Financial Analysis* is the essential desk reference for anyone who wants to make better-informed decisions.

Program Delivery Method: NASBA QAS Self-Study (interactive)

Subject Codes/Field of Study: Finance

Course Level, Prerequisites, and Advance Preparation Requirements

Level: Overview

Prerequisites: None

Advance Preparation: None

Course Content

Publication/Revision date: 10/23/2020.

Author: Steven M. Bragg, CPA.

Final exam (online): Ninety-five questions (multiple-choice).

Instructions for taking this course

Note: Downloading the PDF of this course will enable Bookmarks for easier navigation (on the left side of the document window, open the bookmarks pane). You must complete this course within one year of the date of purchase (if you do not complete the course within one year, contact us to determine whether an updated edition of the course is available, in which case we will provide you with a PDF of the updated course and the online exam at no charge).

A passing grade of at least 70% is required on the final exam for this course. You may retake the exam if you do not pass it on the first attempt (no charge).

Complete the course by following the learning objectives listed on the following page, studying the text, and studying the review questions at the end of each major section (or at the end of the course). Once you have completed studying the course and you are confident that the learning objectives have been met, answer the final exam questions (online).

Instructions for Taking the Final Exam Online

- Login to your account online at www.bhfe.com.
- Go to "My Account" and view your course.
- Select "Take Exam" for this course and follow instructions.

Additional Information

- The exam may be started, stopped, then resumed at a later date.
- The exam is "open book," it is not timed, and it may be retaken if not passed on the first attempt (no charge).
- Results (correct, incorrect answers) and certificate appear immediately upon passing the exam.

Have a question? Call us at 800-588-7039 or email us at contact@bhfe.com.

Learning Assignment & Objectives

Learning Objectives:

- Specify the situations in which different types of financial analysis could be used.
- Specify the issues to consider when making recommendations as the result of financial analysis.
- Identify the financial statements, their contents, and how they are formatted.
- Cite the key accounting concepts that can alter the information presented in the financial statements.
- State the methods used to interpret the information in the financial statements.
- Identify the components of the cost-volume-profit relationship, and how they are used.
- Identify the advantages of the various pricing methodologies.
- Cite the issues that can impact the cost of a cost object, and whether that cost is recognized.
- Identify the key constraint concepts and how they can be used to improve profitability.
- Specify the concepts under which credit is granted to customers, as well as indicators of possible future delinquency.
- Identify the financing choices available to a company.
- Cite the impact and risks of financial leverage on a business, as well as when leverage is more likely to be used.
- State the issues impacting the capital structure of a business, as well as situations in which the capital structure should be reviewed.
- Identify the measurements used by investors to track the adequacy of dividend payments.
- Identify the risks and mitigating actions associated with foreign exchange.
- Cite the risks and mitigating actions associated with interest rates, as well as the terms of the various interest rate hedging instruments.
- State the elements of a system of forecasting and budgeting.
- Identify the issues impacting the rate of growth of a company.
- Identify the elements of the cost of capital, and note how the cost of capital is calculated.
- Cite the basis for the use of discounted cash flows, the types of annuities, and how discounted cash flows can be used.
- State the methods available for analyzing requests for capital projects, and the issues to be reviewed when examining such requests.
- Specify the concepts involved in the lease or buy decision process, the information to include in or exclude from the decision, and the circumstances under which different lease types would be used.
- Identify the techniques used to place a value on a target company.
- Cite the methods used to measure and improve shareholder value, and the situations in which certain methods are more applicable.

About the Author

Steven Bragg, CPA, has been the chief financial officer or controller of four companies, as well as a consulting manager at Ernst & Young. He received a master's degree in finance from Bentley College, an MBA from Babson College, and a Bachelor's degree in Economics from the University of Maine. He has been a two-time president of the Colorado Mountain Club, and is an avid alpine skier, mountain biker, and certified master diver. Mr. Bragg resides in Centennial, Colorado. He has written the following books:

Copyright © 2020 by AccountingTools, Inc. All rights reserved.

Published by AccountingTools, Inc., Centennial, Colorado.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without the prior written permission of the Publisher. Requests to the Publisher for permission should be addressed to Steven M. Bragg, 6727 E. Fremont Place, Centennial, CO 80112.

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 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.

ISBN-13: 978-1-938910-46-3

Printed in the United States of America

Table of Contents

Chapter 1 - Overview of Financial Analysis.....	1
The Purpose of Financial Analysis	1
Key Financial Analysis Concepts	2
Judgment in Financial Analysis.....	3
Precision of Financial Analysis.....	4
Death by a Thousand Cuts	4
Monitoring Analysis	5
Role of the Financial Analyst.....	6
A Conservative Bias.....	6
Chapter 2 - The Financial Statements	9
The Income Statement	9
Income Statement Overview	9
The Single-Step Income Statement	12
The Multi-Step Income Statement.....	12
The Contribution Margin Income Statement.....	13
The Multi-Period Income Statement	14
The Balance Sheet.....	15
Overview of the Balance Sheet	16
The Common Size Balance Sheet	19
The Comparative Balance Sheet.....	20
The Statement of Cash Flows	21
Overview of the Statement of Cash Flows	21
The Direct Method	21
The Indirect Method	23
The Statement of Retained Earnings.....	24
Overview of the Statement of Retained Earnings.....	24
Financial Statement Disclosures	25
Chapter 3 - Accounting Issues Impacting the Financials.....	34
The Basis of Accounting.....	34
Accrual Basis of Accounting.....	34
Cash Basis of Accounting	35
Modified Cash Basis of Accounting.....	35
Effect of the Fiscal Year	36
Recordation of Revenue at Gross or Net.....	36
Bill and Hold Revenue.....	37
Negative Cash	38
Inventory Costing Methods.....	38
Depreciation Methods	39
Current Value Accounting	41
Illusory Profits	41
Financial Statement Reporting Issues	42
Headline Earnings	42
Pro Forma Earnings.....	42
Window Dressing	43
Auditor Certification	43
Chapter 4 - Interpretation of Financial Statements	46
Interpretation of Financial Statements	46
Horizontal Analysis.....	47
Vertical Analysis.....	49
Cash Coverage Ratio.....	50
Current Ratio.....	51
Quick Ratio	52

Liquidity Index.....	53
Accounts Payable Turnover Ratio	54
Accounts Receivable Turnover Ratio	55
Inventory Turnover Ratio.....	56
Fixed Asset Turnover Ratio	56
Sales to Working Capital Ratio.....	57
Debt to Equity Ratio	58
Fixed Charge Coverage.....	59
Breakeven Point	59
Gross Profit Ratio	60
Net Profit Ratio	61
Return on Net Assets.....	61
EBITDA.....	62
NOPAT	63
Limitations of Ratio Analysis	63
Chapter 5 - Cost-Volume-Profit Analysis.....	67
Contribution Margin	67
Breakeven Point	68
Margin of Safety	71
Cost-Volume-Profit Analysis.....	72
Sales Mix	74
Chapter 6 - Pricing Decisions	77
Psychological Pricing.....	77
Cost Plus Pricing.....	78
Dynamic Pricing	79
Freemium Pricing.....	80
High-Low Pricing	81
Premium Pricing	82
Time and Materials Pricing.....	83
Value Based Pricing.....	85
Other Pricing Strategies	86
When to Review Pricing	87
Price Elasticity of Demand.....	88
Cross Price Elasticity of Demand	89
Non-Price Determinants of Demand.....	90
Chapter 7 - Cost Object Analysis.....	93
Factors in Cost Object Analysis.....	93
The Assignability of Costs	94
The Customer Cost Object.....	95
Customer Acquisition Costs	96
Customer Lifetime Value	97
The Employee Cost Object	98
The Product Cost Object	99
The Product Line Cost Object	100
The Sales Channel Cost Object.....	102
Cost Object Termination Issues	102
Which Cost Objects to Track	103
Chapter 8 - Constraint Analysis.....	105
Overview of Constraint Analysis	106
The Cost of the Bottleneck.....	107
Local Optimization	108
Constraint Analysis Financial Terminology	109
Constraint Analysis from a Financial Perspective	110
The Constraint Analysis Model	110
The Decision to Sell at a Lower Price.....	112

The Decision to Outsource Production	113
The Capital Investment Decision	114
The Decision to Cancel a Product.....	116
Chapter 9 - Credit Decisions.....	119
The Credit Rating.....	119
Internal Credit Rating Systems	119
Third Party Credit Ratings	122
Evaluating Credit Scores.....	123
Use of Credit Ratings.....	123
Credit Rating Errors.....	124
Indicators of Future Payment Delinquency.....	124
Ongoing Credit Monitoring Actions	125
Requests for Credit Increases.....	128
The Riskiest Customers	128
The Demanding Customer	129
Effects of Industry Credit Practices	130
Chapter 10 - Financing Choices	133
Overview of Debt Funding.....	133
The Line of Credit.....	134
The Borrowing Base	134
Early Payment Discounting.....	136
Invoice Discounting.....	137
Factoring	137
Inventory Financing	138
Purchase Order Financing.....	138
Leases.....	138
The Long-Term Loan.....	139
Bonds	140
Agency Financing	141
Deleveraging	141
Overview of Equity Funding.....	142
Restricted Stock	143
Unrestricted Stock.....	143
Warrants	143
Angel Investors and Venture Capital	144
Crowdfunding	145
Private Investment in Public Equity.....	145
Debt for Equity Swaps	146
Chapter 11 - Financial Leverage	149
The Financial Leverage Concept	149
Issues Impacting Leverage.....	153
Leverage Risk	153
Impact of Compensation on Leverage	154
Chapter 12 - Capital Structure Analysis	157
Optimal Capital Structure	157
Capital Structure Analysis	158
Line of Credit Issues	159
Tax Shield Effects.....	159
Future Financing Flexibility.....	160
Loan Covenant Issues	160
Maturity Structure of Debt.....	160
Creditor Position Considerations	161
Debt Paydown.....	162
Cost of Capital Reduction	162
Planning for a Bond Rating.....	162

Capital Structure Measurements	164
Interest Coverage Ratio	164
Debt Service Coverage Ratio	164
Recapitalization.....	165
Timing of Changes to the Capital Structure.....	165
Chapter 13 - Dividend Analysis.....	168
The Investor Viewpoint	168
The Company Viewpoint.....	169
The Stock Buyback Option	170
The Stock Dividend	171
Chapter 14 - Foreign Exchange Risk Analysis.....	174
Foreign Exchange Risk Overview.....	174
Foreign Exchange Risk Management	175
Take No Action	175
Avoid Risk.....	176
Shift Risk.....	176
Time Compression	177
Payment Leading and Lagging.....	178
Build Reserves.....	178
Maintain Local Reserves	178
Hedging	178
Types of Foreign Exchange Hedges.....	179
Loan Denominated in a Foreign Currency	179
The Forward Contract.....	180
The Futures Contract.....	181
The Currency Option.....	181
The Cylinder Option.....	183
Swaps	183
Netting	184
Chapter 15 - Interest Rate Risk Analysis	187
Interest Risk Overview.....	187
Interest Rate Risk Management	187
Take No Action	188
Avoid Risk.....	188
Asset and Liability Matching	188
Hedging	188
Types of Interest Rate Hedges	189
The Forward Rate Agreement	189
The Futures Contract.....	190
The Interest Rate Swap.....	192
Interest Rate Options	193
Interest Rate Swaptions	196
Chapter 16 - Financial Forecasting.....	199
The Differences between a Budget and a Forecast	199
Budget Construction Tools	200
The Run Rate Concept.....	200
The Learning Curve.....	201
Sensitivity Analysis	202
Revenue Forecasting.....	203
The System of Budgets	207
The Number of Budget Scenarios	211
The Rolling Forecast.....	212
The Cash Forecast.....	215
The Short-Term Cash Forecast.....	216
The Medium-Term Cash Forecast.....	219

The Long-Term Cash Forecast.....	220
The Use of Averages	220
The Use of Clearing Dates in a Forecast	221
Chapter 17 - Managing the Rate of Growth.....	224
The Funding of Growth.....	224
Contribution Margins and Sustainable Growth.....	226
Organic Growth	226
Step Costs and Sales Growth	227
Other Constraints on Growth	228
Negative Effects of Excessive Growth.....	229
The Ideal Rate of Growth.....	229
Chapter 18 - The Cost of Capital	232
Cost of Capital Derivation	232
Cost of Debt.....	232
Cost of Preferred Stock	233
Cost of Common Stock	233
Weighted Average Cost of Capital.....	234
Variations in the Cost of Capital.....	234
Adjustments to the Cost of Capital	236
Cost of Capital as a Threshold Value.....	237
Chapter 19 - Discounted Cash Flow Techniques	240
Time Value of Money	240
Present and Future Value Tables.....	241
Net Present Value.....	243
Internal Rate of Return.....	244
Incremental Internal Rate of Return.....	245
Terminal Value	246
Inclusions in Cash Flow Analysis	246
Chapter 20 - Capital Budgeting.....	249
Overview of Capital Budgeting	249
The Capital Request Form	250
The Payback Method	251
Real Options.....	253
Capital Budget Proposal Analysis.....	254
Complex Systems Analysis.....	256
Research and Development Funding Analysis.....	256
The Outsourcing Decision	257
The Post Installation Review	258
Chapter 21 - The Lease or Buy Decision	261
The Lease Arrangement.....	261
The Lease or Buy Decision	261
Leasing Concerns.....	262
Leasing Advantages	263
Chapter 22 - Acquisition Valuation	266
Liquidation Value	266
Real Estate Value.....	267
Relief-from-Royalty Method	267
Book Value	268
Enterprise Value.....	269
Multiples Analysis	270
Discounted Cash Flows.....	273
Post Five-Year Cash Flows	273
Negotiation of DCF Contents	274
Replication Value.....	276

Comparison Analysis	277
The Comparison of Sales Multiples	277
The Comparison of Cash Flows	278
The Comparison of Contract Revenues.....	278
52-Week High.....	279
Influencer Price Point.....	279
The Initial Public Offering Valuation	279
The Strategic Purchase.....	280
Intellectual Property Valuation	280
Extraneous Valuation Factors	281
The Control Premium.....	281
The Earnout.....	281
Synergy Analysis	283
The Valuation Floor and Ceiling.....	285
Chapter 23 - The Enhancement of Shareholder Value	288
Return on Equity	288
Economic Value Added	290
Cash Flow Analysis	292
Opportunity Cost of Capital.....	293
Key Success Factors.....	293
Stock Price Enhancement.....	294
Long-Term and Short-Term Value Considerations.....	294
The Industry Setting.....	295
Answers to Chapter Questions	298
Glossary	318
Index	323

Preface

A company is constantly confronted with situations that require a detailed review of available options and a decision to proceed in a certain direction. These decisions can be supported by different types of analysis tools. In *Financial Analysis: A Business Decision Guide*, we explore many of the decision tools available to management, and how they can be employed to improve operations and financial results. The topics covered include the general areas of financial statement analysis, operational analysis, financing analysis, forecasting, and investment analysis. As examples of the topics covered, *Financial Analysis* provides answers to the following questions:

- How do inventory costing methods impact the reported results of a business?
- Which ratios should I use to interpret the information in financial statements?
- Which pricing methods would work best in my company?
- Which costs should I include when examining the profitability of customers?
- How can bottlenecks impact profitability?
- How can I employ financial leverage to enhance the return on equity?
- How can I design the optimal capital structure for my business?
- How can I reduce the risk of holding foreign exchange?
- Which issues should I consider when arriving at a reasonable rate of growth?
- When should I use discounted cash flow methods?
- Which methods should I use to value a potential acquisition?

Financial Analysis: A Business Decision Guide is intended for managers, analysts, accountants, consultants, and students, who can benefit from its broad range of analysis topics. The book also provides references to the author's popular Accounting Best Practices podcast, which provides additional coverage of many analysis topics. As such, it may earn a place on your book shelf as a reference tool for years to come.

Centennial, Colorado
October 2020