

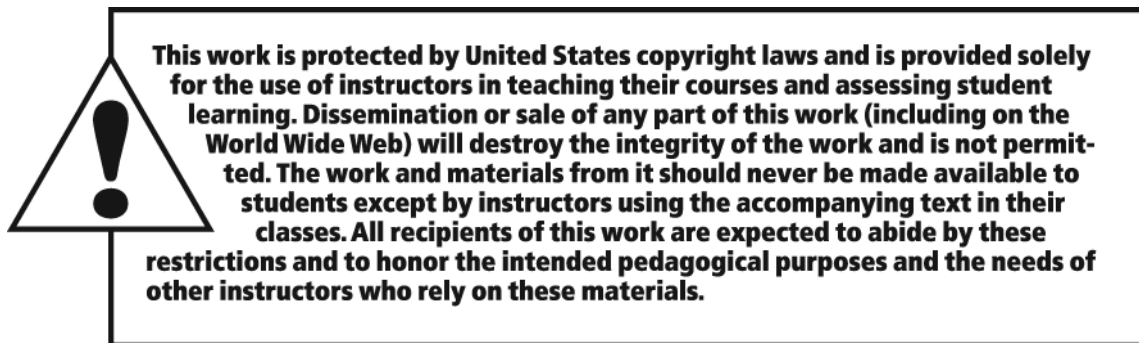
Instructor's Resource Guide
for
Corporate Finance Online (CFO)

By

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Introduction

This Instructors' Resource Manual is meant to be a tool for instructors, to make their teaching less stressful and more effective. The tools & activities contained here are comprehensive in type and scope, and we hope you find them useful as you progress through *Corporate Finance Online* during your semester.

There are several tools in this Instructors' Manual, each geared toward mastery of the learning objectives in their respective sections. They are:

- **Pre-Test** These Pre-Tests come at the beginning of every chapter; they are ten questions long, all multiple choice, focusing on terms and background for the topic covered in that chapter. They will help instructors to ascertain students' incoming level of knowledge, so teaching may be focused on areas where students need more instruction.
- **Overview** Short paragraphs at the beginning of each chapter review learning objectives and main concepts and explain the context of the topics covered in the finance world.
- **Teaching Tools** There are many tools in CFO: videos, Excel templates, Explain it! And Solution Tools. The Teaching Tools section identifies each tool in the chapter, with a brief explanation of its content and purpose.
- **Assessment Tools** CFO also contains many built-in assessments; Teaching Tools identifies the Self-Tests and Homework assignments by section, so instructors may use and evaluate them as needed.
- **Class Application Activities** These applied classroom activities help instructors vary and guide class time. They include Q&A, teaching notes, and a quick summary of the major concept discussed.
- **Post-Test** The Post-Test at the end of each chapter reviews the main concepts and equations from each chapter. It is similar in structure to the Pre-Test, being multiple-choice, but the questions are more detailed and aimed at assessing student mastery.

You will find the tools listed in this order in each chapter of the Instructors' Manual; hyperlinks in the Table of Contents make them easy to reach.

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CHAPTER 1: INTRODUCTION TO FINANCE

I. PRE TEST

These 10 questions can be used to determine the students' understanding of the skills and information covered in the chapter. Use the results of the class pre-test to focus your chapter lecture on the concepts that students have not yet grasped.

LO1-Learn the Features of CFO

1. In the context of this text, CFO is an acronym for;
 - a. Certified Financial Obligations
 - b. Chief Financial Officer
 - c. Corporate Finance Online**
 - d. Credited Fiscal Offering

LO2--Learn about the World of Finance

2. The field of finance covers all of the following areas except;
 - a. corporate finance
 - b. financial markets
 - c. investing
 - d. corporate finance, financial markets, and investing are all topics covered in finance**

LO3- Learn about the Financial System

3. Money market securities
 - a. mature in less than one year.**
 - b. have maturities between one and five years.
 - c. have no maturity date.
 - d. are long-term investments.
4. Capital market securities include;
 - a. T-bills
 - b. banker's acceptances
 - c. common stocks**
 - d. commercial paper
5. When a firm issues stock to the public for the very first time it is known as;
 - a. seasoned equity issue
 - b. initial public offering**
 - c. underwriter's issue

d. over-the-counter offering

6. The most common form of business organization in the United States is the

a. corporation

b. sole proprietorship

c. partnership

d. limited liability company

7. Most of the revenue generated in the United States by businesses comes from

a. corporations

b. sole proprietorships

c. partnerships

d. corporations, sole proprietorships, and partnerships all generate approximately equal shares of revenue annually.

8. One of the key concepts in finance is

a. the SEC enforces the law of one price

b. the time value of money

c. people act irrationally

d. markets are inefficient

9. In order to earn higher returns, you must

a. invest in emerging markets

b. buy AAA rated bonds

c. invest only cash

d. assume a higher level of risk

10. If the price of an asset currently reflects the asset's true value, the market is said to be

a. efficient

b. transactional

c. arbitrated

d. riskless

II. Chapter 1: OVERVIEW

This chapter introduces the features of CFO so that students can take full advantage of all the resources available in this text. Spend some time making sure that students understand how to use each feature. In addition, this chapter observes that the field of finance has a number of

applications in academics, business, and your personal life; and, all of those areas present several career paths where students can find great jobs. The chapter also introduces the financial system, corporate governance issues, the concept of risk and return, the time value of money, and other key financial topics with every day applications.

LO1- Learn the Features of CFO

LO2 – Learn about the World of Finance

LO3 – Learn about the Financial System

LO4 – Learn about the Structure and Governance of Corporations

LO5 – Learn Five Principle Themes of Finance

III. TEACHING TOOLS:

The following list summarizes the concepts covered in the chapter videos and solution tools.

Explain it! 1.1.1–“Explain it!” pop-up text box - LO1: This example shows how this text feature

will be used by introducing some information on the history of interest rates.



Explain it! 1.1.1–“Explain it!” video - LO1: This “Explain it!” video illustrates how this tool will be

used throughout the text.



Explore it! 1.1.1 –“Explore it! Interactive graph – LO1: This example shows how this tool will be used throughout the text to allow students to explore a concept, such as future value, in greater

detail.



Solution Tools 1.1.3 – “Solution Tools” Excel file – LO1: This tool shows students an example of

how Excel files will be used throughout the text to solve various problems.



Solution Tools 1.1.3 – “Solution Tools” problem solution video – LO1 This tool shows students an example of how short videos will be used throughout the text to solve various problems.



Solution Tools 1.1.3 – “Solution Tools” calculator solutions – LO1 This tool shows students an example of how short videos will be used throughout the text to solve various problems using the



Excel template presented earlier.

Solution Tools 1.1.3 – “Solution Tools” calculator solutions – LO1 This tool shows students an example of how short videos will be used throughout the text to solve various problems using a



calculator.

Explain it! 1.2.1 – Four Facets of Finance - LO2: This video shows the student the four different perspectives through which you can view the field of finance; academic finance, business finance,



careers in finance, and personal finance.

Explain it! 1.3.11 – Initial Public Offerings – LO3: This text file provides some specifics on a recent



IPO and also some information on IPO investing.

Explain it! 1.3.13 – The Dealer. Part 1. Bid and Ask Prices – LO3: This video shows how a dealer buys and sells shares of stock and makes a profit on the spread (the difference in the bid and ask



prices).

Explain it! 1.3.13– The Dealer. Part 2. How Trading Affects Prices – LO3: This video shows how buying and selling shares of stock (demand and supply) impacts price determination in the



market.

Explain it! 1.4.6 – Management’s Fiduciary Duty – LO4: This text file provides two examples where managers placed the interest of one stakeholder group over shareholders and the stock

prices responded negatively.



Explain it! 1.4.7 – Principal-Agent Problem – LO4: This video shows illustrates the classic principal agent problem using Tyco’s CEO Dennis Kozlowski’s exorbitant corporate spending practices.



Explain it! 1.4.8 – Examples of Agency Problems – LO4: This text box directs students to conduct an Internet search for information on Tyco, Enron, or WorldCom, since each case represents a

clear example of an agency problem.



Explain it! 1.5.1 – Bernie Madoff and the Risk/Return Tradeoff – LO5: This text box provides some historical information on Bernie Madoff and his Ponzi scheme and how it relates to risk and

return.



Explain it! 1.5.1 – Efficient Markets – LO5: This video provides a humorous introduction to the

concept of market efficiency.



IV. ASSESSMENT TOOLS:

chapter.

Page Number

Description

1.1.4

Self-Test Question 1

1.3.4

Self-Test Question 2

1.3.4

Self-Test Question 3

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Self-Test Question 4

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1.2.2	LO2 Topic Homework 1
1.3.18	LO3 Topic Homework 1
1.4.10	LO4 Topic Homework 1
1.5.5	LO5 Topic Homework 1

V. CLASS APPLICATION ACTIVITIES:

These activities, complete with solutions, provide opportunities to reinforce (either in class or in small groups) students' ability to apply chapter concepts in business contexts.

CLASS APPLICATION ACTIVITIES 1.1

Title: Occupational Outlook Handbook and Finance Careers

LO2 – Learn about the World of Finance

There are numerous career options available to finance graduates. Students can begin careers in government, the non-profit sector, corporate finance, banking, investments and wealth management, education and other fields. However, it is useful to know the expected salaries and the projected job demand for a particular skill set prior to spending years acquiring the expertise to work in that field. One of the ways you can learn more about a particular career is to research that career in the Occupational Outlook Handbook published by the Bureau of Labor Statistics. Go to the following website:

<http://www.bls.gov/ooh/>

Now look under the heading “Occupation Groups” and click on the link “Business and Financial.” Scroll down through the list of job titles and select one that interests you and read all the information posted about that job.

Questions to pose:

1. What is the education required for an entry-level position? Does the job require any licensure requirements?

Answer: It varies according to the job selected.

2. What is the expected starting salary for this position?

Answer: It varies according to the job selected.

3. What is the projected job growth in this field for the next several years?

Answer: It varies according to the job selected.

Time on task: This exercise can take between 15 and 30 minutes, depending on how long it takes to find and summarize the findings.

Teaching Notes: This activity pushes students to begin thinking in terms of the market demand for a particular skill set. You can extend this activity by requiring groups to make presentations on two or three jobs or have individuals draft a one page report about a specific job.

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CLASS APPLICATION ACTIVITIES 1.2

Title: IPO Central

LO3 – Learn about the Financial System

An initial public offering (IPO) occurs when corporations sell equity capital to the public for the first time and become listed and publicly traded on an organized stock exchange. Sizes of the IPOs typically fall into the \$50 million to \$500 million range and are relatively unknown companies. Hoover’s Inc. tracks IPOs and maintains an extensive database on IPOs in the pipeline and recent IPOs. Go to the following website and then answer a few questions.

<http://www.hoovers.com/ipo-central/100004160-1.html>

Questions to pose:

1. Click on the link “IPO Performance” and select the most recent time period. How many IPOs came out during that period? What was the size (offer amount) of the largest IPO? What was the size (offer amount) of the smallest? What was the smallest offer price? What was the largest offer price?

Answer: Varies.

2. Click on the link “Best & Worst Returns” and look at the recent winners and losers. What company generated the best returns for investors? What company generated the worst returns for investor? Provide some background information on each firm.

Answer: Varies.

Time on task: This exercise can take between 15 and 30 minutes, depending on how long it takes to find and summarize the findings.

Teaching Notes: This activity allows students to learn about the IPO market at the time they are taking the class. You can ask dozens of questions about the material on this site and IPOs in general.

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CLASS APPLICATION ACTIVITIES 1.3

Title: Charles Ponzi

LO4 – Learn about the Structure and Governance of Corporations

We've all heard of Ponzi schemes but how much do you know about Charles Ponzi? Ponzi schemes are a particular type of financial fraud was named after an Italian immigrant named Charles Ponzi who became famous for his fraudulent activities in the early 1900s. Go to your favorite internet search engine and search for "Charles Ponzi" and then answer a few questions about Ponzi schemes and Charles Ponzi.

Questions to pose:

1. What is a Ponzi scheme?

Answer: A Ponzi scheme promises investors high returns and then delivers those returns by paying existing investors with money flowing in from new investors. Ponzi schemes require a continuous inflow of new money to keep going.

2. Look up some of the other famous financial con artists such as Bernie Madoff, Dona Branca and others. What do most of these schemes have in common?

Answer: They all promise high returns and prey on human greed. A good rule of thumb is illustrated in the old saying, "If it sounds too good to be true, it probably is."

Time on task: This exercise can take between 15 and 30 minutes depending on how long it takes to find and summarize the findings. You can extend this to a full class period or more if you have students do presentations on various con artists and their fraud.

Teaching Notes: This activity is a great example to use to teach students about risk and return and financial ethics. There are always people willing to separate you from your money. This is a great classroom debate and you can assign students various individuals to report on so that everyone reports on a different con artist.

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CLASS APPLICATION ACTIVITIES 1.4

Title: Refund anticipation loans and the time value of money

LO5 – Learn Five Principle Themes of Finance

Refund anticipation loans (RALs) are available from a number of tax preparers and touted as a way to access your tax refund sooner. The tax preparer loans you an amount equal to your anticipated refund, minus interest charges and fees, and then has your refund directed to their account. In the following article it states that in 2009 approximately 7 million taxpayers took advantage of RALs and paid more than \$650 million in interest and fees to receive their refund a few weeks early. Read the following article and then answer a few questions.

<http://www.aarp.org/money/taxes/info-03-2011/ask-sid-tax-refund-loans.html>

Questions to pose:

1. How do RALs relate to the time value of money?

Answer: Individuals are obviously willing to accept a smaller sum today in lieu of a larger sum at some point in the future. This example illustrates the concept of the time value of money, or a dollar today is worth more than a dollar in the future.

2. What makes this practice unethical according to some critics?

Answer: The fees and interest charges can range from 50% to 500% per year if annualized. Charges this high are considered predatory lending practices and prey primarily on the poor.

Time on task: This exercise can take between 5 and 15 minutes depending on how long it takes to find and summarize the findings and have a class discussion.

Teaching Notes: This activity is a great example of the time value of money and also allows you to introduce some ethical issues in finance. You can have a lengthy discussion about the morality of this practice.

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VI. POST TEST:

These 10 questions can be used to determine the students' understanding of the skills and information covered in this chapter, and in customizing your chapter lecture or exam review to the concepts that students had difficulty mastering

LO1-Learn the Features of CFO

1. In Corporate Finance Online, you can find additional explanations and details on a particular topic by clicking on;
 - a. Explore it icons
 - b. Explain it icons
 - c. Solution Tools icons
 - d. Explore it!, Explain it!, and Solution Tools all provide additional information about a topic**

LO2 – Learn about the World of Finance

2. Which of the following is not considered to be one of the broad perspectives through which you can view the field of finance?
 - a. automotive finance**

- b. academic finance
- c. careers in finance
- d. personal finance

LO3 – Learn about the Financial System

3. One of the primary functions of the secondary market is;
- a. to provide firms with a place to sell initial equity
 - b. to provide investors with liquidity**
 - c. to monitor illegal activity
 - d. to function as a legal gambling mechanism
4. All of the following are money market securities except;
- a. common stocks**
 - b. commercial paper
 - c. Fed funds
 - d. Negotiable Certificates of Deposit
5. Corporations often prefer to issue debt instead of common stock because;
- a. firms like to borrow money when profits are down
 - b. the interest on debt is tax deductible**
 - c. they can elect to default and therefore not repay the debt
 - d. debt can be issued with no maturity date

LO4 – Learn about the Structure and Governance of Corporations

6. All of the following are advantages of incorporating except;
- a. ownership is easy to transfer
 - b. corporations have an unlimited life
 - c. incorporating makes it easier to raise money
 - d. corporate profits are only taxed at the investor level**
7. Which of the following pieces of legislation attempts to resolve the principal-agent problem that exists between shareholders and managers?
- a. Congressional Accountability Act
 - b. Gramm-Rudman-Hollings Act
 - c. Sarbanes-Oxley Act**
 - d. Securities Exchange Commission Act

LO5 – Learn Five Principle Themes of Finance

8. According to the law of one price, if a stock listed on an international stock exchange is trading for \$45.50 a share;

- a. it will sell for the same price the next day
 - b. arbitrage will ensure it trades at the same price in other markets**
 - c. it will always be available for sale at \$45.50 a share
 - d. none of these options illustrate the law of one price
9. If an investor buys gold contracts in London for \$1,595 an ounce and simultaneously sells it in New York for \$1,610 an ounce then the price of gold in London will;
- a. move lower
 - b. move higher**
 - c. remain stable
 - d. always be \$1,595 an ounce
10. Information asymmetry states that;
- a. everyone has access to the same information
 - b. the Internet has leveled the playing field with regard to access to information
 - c. all companies operate under the same economic assumptions
 - d. information is not distributed evenly**

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CHAPTER 2: FINANCIAL STATEMENT AND RATIO ANALYSIS

I. PRE TEST

These 10 questions can be used to determine the students' extant understanding of the skills and information covered in the chapter. Use the results of the class pre-test to focus your chapter lecture on the concepts that students have not yet grasped.

LO1 - Know the Three Financial Statements Needed for Financial Analysis

1. All of the following are financial statements except;
 - a. income statement
 - b. asset statement**
 - c. balance sheet
 - d. statement of cash flows
2. The basic accounting identity presented in the balance sheet is;
 - a. debt = assets + liabilities
 - b. assets = owner's equity + stock
 - c. assets = liabilities + owner's equity**
 - d. liabilities = assets
3. The income statement is a financial statement that;
 - a. shows a firm's performance over time**
 - b. is a snapshot of a firm's performance on one date
 - c. is irrelevant to managerial decision making
 - d. is only used by accountants

LO2 – Know the Goals of Financial Analysis

4. Financial analysis is;
 - a. a powerful tool to help managers make decisions**
 - b. is considered inside information and therefore illegal for decision-making
 - c. is almost impossible to conduct
 - d. only used for inventory management
5. Ratio analysis can be used for all of the following except;
 - a. identifying company strengths
 - b. focusing attention on problem areas
 - c. to identify stocks to buy and sell
 - d. identifying specific customers**

LO3 – Perform Financial Statement Analysis

6. All of the following are a category of financial ratios except;
- a. profitability ratios
 - b. bankruptcy ratios**
 - c. activity ratios
 - d. market value ratios
7. Liquidity ratios provide lenders with information about;
- a. a firm's ability to meet its financial obligations**
 - b. a firm's ability to manage its assets
 - c. a firm's overall profitability
 - d. a firm's stock price
8. All of the following are considered activity ratios except;
- a. inventory turnover
 - b. average collection period
 - c. leveraged asset ratio**
 - d. accounts receivables turnover
9. To construct a common-sized balance sheet you divide every balance sheet item by _____ so that you can make comparisons with other firms.
- a. 100
 - b. total assets**
 - c. sales
 - d. 72
10. The Du Pont ratio analysis was developed by;
- a. consultants
 - b. the Du Pont Corporation**
 - c. Henry Du Pont
 - d. none of these

II. Chapter 2: OVERVIEW

Financial statements provide financial managers with the information they need to make decisions that contribute to shareholder wealth maximization. This chapter provides the tools necessary to perform analysis using that information. Students will learn how to calculate and interpret ratios that help us make decisions about asset utilization, efficiency, liquidity, financing and market valuation. By the end of this chapter students should:

LO1 - Know the Three Financial Statements Needed for Financial Analysis

LO2 – Know the Goals of Financial Analysis

LO3 –Be Able to Perform Financial Statement Analysis

III. TEACHING TOOLS:

The following list summarizes the concepts covered in the chapter videos and solution tools.

Explain it! 2.1.1 – The Balance Sheet- LO1 - This video shows a sample balance sheet and then provides a concise explanation of the balance sheet; it also shows how a financial manager can glean a tremendous amount of useful information from the raw data.

Explain it! 2.1.4 – The Income Statement - LO1 - This video shows a sample income statement and provides an explanation of the various components such as sales, profits, etc. The author also points out a primary difference between the income statement and the balance sheet. The income statement provides the financial manager with information about operations over one operating cycle, whereas the balance sheet is a snapshot of the firm's assets and liabilities at a point in time.

Explain it! 2.1.5 – Statement of Cash Flows- LO1 - This video provides a brief explanation of the three components of the statement of cash flows. The first section shows whether the firm is generating cash from operations. The other two components of the statement of cash flows show cash flows from investing activities and cash flows from financing activities.

Explain it! 2.3.2 – SIC Codes and Industry Classification - LO1 - This text explains Standard Industrial Classification (SIC) codes and how you can use that information to find peer data to use for comparison with your firm.

TABLE 2.4 – 2.3.5 - Profitability Ratios

Explain it! 2.3.5 – Return on Equity (ROE) (equation 2.1) – LO3 - This video explains how to calculate ROE, shows you where to find the ratio inputs, and then provides information on how to interpret this ratio.

Explain it! 2.3.5 – Return on Assets (ROA) (equation 2.2) – LO3 - This video explains how to calculate the ROA, shows you where to find the ratio inputs, and then provides information on how to interpret this ratio.

Explain it! 2.3.5 – Gross Profit Margin (equation 2.3) – LO3 - This video explains how to calculate the Gross Profit Margin, shows you where to find the ratio inputs, and then provides information on how to interpret this ratio.

Explain it! 2.3.5 – Operating Profit Margin (equation 2.4) – LO3 - This video explains how to calculate the Operating Profit Margin, shows you where to find the ratio inputs, and then provides information on how to interpret this ratio.

Explain it! 2.3.5 – Net Profit Margin (equation 2.5) – LO3 - This video explains how to calculate the Net Profit Margin, shows you where to find the ratio inputs, and then provides information on how to interpret this ratio.

Explain it! 2.3.6 – Summary of Profitability Ratios – LO3: This video provides a detailed explanation about how profitability ratios are used in practice. The video focuses on how each different profitability ratio gives us slightly different useful information that we can use to improve operations, evaluate performance or both.

TABLE 2.5 – 2.3.7 - Liquidity Ratios

Explain it! 2.3.7 – Liquidity Ratios – LO3 - This text explains how lenders use liquidity ratios to evaluate whether a firm has sufficient liquidity to warrant making a loan.

Explain it! 2.3.7 – Current Ratio (equation 2.6) – LO3 - This video explains how to calculate the Current Ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.7 – Quick Ratio (equation 2.7) – LO3 - This video explains how to calculate the Quick Ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.7 – Liquidity Summary – LO3 - This video uses some sample liquidity ratios from industry and explains how these ratios can be interpreted in different ways.

TABLE 2.6 – 2.3.9 - Activity Ratios

Explain it! 2.3.9 – Inventory Turnover (equation 2.8) – LO3 - This video explains how to calculate the Inventory Turnover ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.9 – Accounts Receivables Turnover (equation 2.9) – LO3 - This video explains how to calculate the Accounts Receivables Turnover ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.9 – Total Asset Turnover (equation 2.10) – LO3 - This video explains how to calculate the Total Asset Turnover ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.9 – Average Collection Period (equation 2.11) – LO3 - This video explains how to calculate the Average Collection Period, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

TABLE 2.7 – 2.3.11 – Financing Ratios

Explain it! 2.3.11 – Debt Ratio (equation 2.12) – LO3 - This video explains how to calculate the Debt Ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.11 – Debt Equity Ratio (equation 2.13) – LO3 - This video explains how to calculate the Debt to Equity Ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.11 – Times Interest Earned Ratio (equation 2.14) – LO3 - This video explains how to calculate the Times Interest Earned, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

TABLE 2.8 – 2.3.13 – Market Ratios

Explain it! 2.3.13 – Earnings Per Share (equation 2.15) – LO3 - This video explains how to calculate Earnings Per Share, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.13 – Price Earnings (PE) (equation 2.16) – LO3 - This video explains how to calculate the Price Earnings ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.13 – Market to Book (equation 2.17) – LO3 - This video explains how to calculate the Market to Book ratio, shows you where to find the ratio inputs, and also provides information on how to interpret this ratio.

Explain it! 2.3.14 – Common-Sized Financial Statements – LO3 - This video explains how to create common-sized balance sheets using spreadsheet software and then how to use this information for trend analysis. The video then shows how to create common-sized income statements and how to interpret the information contained in this statement.

Explain it! 2.3.17 – DuPont Analysis – LO3 – This video explains how to perform analysis using the DuPont analysis method.

Explain it! 2.3.18 – DuPont Analysis – LO3 - This video explains how to perform analysis using the DuPont analysis method.

IV. ASSESSMENT TOOLS:

Here is a listing (by page number) and description of all the assessments provided in this chapter.

<u>Page Number</u> (Chapter: Learning Objective: Page)	<u>Description</u>
2.3.6	Self-Test Question 1
2.3.6	Self-Test Question 2
2.3.6	Self-Test Question 3
2.3.6	Self-Test Question 4
2.3.6	Self-Test Question 5
2.3.6	Self-Test Question 6
2.3.8	Self-Test Question 7
2.3.8	Self-Test Question 8
2.3.8	Self-Test Question 9
2.3.10	Self-Test Question 10
2.3.10	Self-Test Question 11
2.3.10	Self-Test Question 12
2.3.12	Self-Test Question 13
2.3.12	Self-Test Question 14
2.3.12	Self-Test Question 15
2.3.13	Self-Test Question 16
2.3.13	Self-Test Question 17
2.3.13	Self-Test Question 18

2.1.7	LO1 Topic Homework 1
2.2.3	LO2 Topic Homework 1
2.3.21	LO3 Topic Homework 1
2.3.28	Chapter 2 Homework

V. CLASS APPLICATION ACTIVITIES:

These activities, complete with solutions, provide opportunities to reinforce (either in class or in small groups) students' ability to apply chapter concepts in business contexts.

CLASS APPLICATION ACTIVITIES 2.1

Wal-Mart's Income Statement

LO1 - Know the Three Financial Statements Needed for Financial Analysis

Wal-Mart Stores Inc. (WMT) is one of the largest companies in the world and has over two million employees. The company operates retail outlets in various formats in all 50 U.S. states and 26 countries other than the United States. Wal-Mart also has online retail operations.

Go to your favorite financial site and type in the ticker symbol for Wal-Mart Stores Inc. (WMT). Find a button labeled as "Financial Statements" or "Financials" and then navigate to the income statement and look at the last three years.

Questions to pose:

1. What was WMT's revenue trend for the past three years?

Answer: Varies depending on the time period.

2. Has WMT's net income been increasing or decreasing?

Answer: Varies depending on the time period.

3. Briefly summarize the information you can rapidly glean from WMT's income statement. Does anything surprise you?

Answer: Varies.

Time on task: This exercise can take between 10 and 20 minutes depending on how long it takes to find and summarize the findings.

Teaching Notes: This activity is a current example of the types of information you can glean from an income statement. In addition it provides an opportunity to discuss how some firms continue to perform well even during poor economic conditions.

CLASS APPLICATION ACTIVITIES 2.2

Benchmarking and Peer Comparison

LO2 – Know the Goals of Financial Analysis

Benchmarking is the process of comparing some aspect of firm performance with industry peers that are performing at a high level. A financial ratio may not provide much information in isolation but when compared with other firms in the same industry it allows a financial manager to see whether they are performing at an average, below average, or above average level. This comparison can then be used to focus attention only on areas in need of improvement. So where do you find peer data? RMA's annual statement studies are one source of peer information.

Go to the following website;

<http://www.rmahq.org/tools-publications/publications/annual-statement-studies/annual-statement-studies>

Now open the PDF file entitled "Sample Financial Ratio Benchmarks" and look over this sample data. Next open the PDF file entitled "Financial Ratio Benchmarks: Definition of Ratios." Use the information in these two files to answer the following questions.

Questions to pose:

1. Which liquidity ratios are available for comparison?

Answer: Both the current ratio and the quick ratio are reported.

2. Why does RMA report 3 different current ratios for each size firm?

Answer: The top ratio is the cutoff for the upper quartile of firms where 25% of the firms have ratios higher than that reported number. The middle ratio is the median current ratio which means 50% of the firms have current ratios higher than this number and 50% have current ratios lower than this

number. The bottom number is the cutoff for the lower quartile where 25% of the firms have ratios lower than this reported number.

Time on task: This exercise can take between 15 and 30 minutes depending on how long it takes to find and summarize the findings.

Teaching Notes: This activity is a current example how ratios can be used for peer group comparison and benchmarking. You can spend more time on this exercise and look at more financial data and also have a discussion about the importance of selecting the appropriate peers for your firm.

CLASS APPLICATION ACTIVITIES 2.3

Altman's Z-Score

LO3 – Perform Financial Statement Analysis

Edward Altman published the following seminal paper in finance on predicting firm bankruptcy:

"Financial Ratios, Discriminant Analysis, and the Prediction of Corporate Bankruptcy". *Journal of Finance*: 189–209, (September, 1968).

In the paper, Altman used a statistical method known as discriminant analysis to calculate a single score, known as a Z-score, that was useful in predicting whether a firm was in danger of filing bankruptcy. Altman used publicly available information and calculated several ratios from the financial data that were good predictors of bankruptcy. Spend some time looking up information on Altman's paper, or find a copy of Altman's paper, and then answer the following questions.

Questions to pose:

1. What specific ratios did Altman include in his bankruptcy prediction model? Why do you think these ratios provide information about bankruptcy?

Answer: Ratio 1 = Working Capital / Total Assets. This ratio is a good measure of liquidity which tells us whether a firm has enough liquid assets to pay its debt.

Ratio 2 = Retained Earnings / Total Assets. This ratio is a measure of profitability over time relative to a firm's size.

Ratio 3 = Earnings Before Interest and Taxes / Total Assets. This ratio tells us whether the firm is generating profits from current operations.

Ratio 4 = Market Value of Equity / Book Value of Total Liabilities. This ratio gives some indication of investor awareness of high debt levels. Investors concerned that a firm's debt is too high will sell shares and push the stock price down.

Ratio 5 = Sales/ Total Assets. (Total asset turnover) This asset utilization ratio tells us how well the firm is doing generating sales with the current level of assets.

These ratios all provide indications of profitability, cash flows, leverage, and a firm's ability to service debt. Since firms file bankruptcy when cash flows are not sufficient to meet current obligations, these ratios are a good indicator of financial problems over time.

Time on task: This exercise can take between 25 and 40 minutes depending on how long it takes to find and summarize the findings.

Teaching Notes: This activity is a good example of how ratio analysis can provide external users with important information about the overall health of a firm. Note that most of these ratios are not the ones covered in the text. This illustrates how financial ratios can be created that focus on specific components of a firm where either an internal user or external user may be interested in learning more information.

CLASS APPLICATION ACTIVITIES 2.4

Ratio Analysis in Practice

LO3 – Perform Financial Statement Analysis

Ratio analysis can provide both internal and external users with a tremendous amount of information about firm performance. Select a publicly traded manufacturing firm in the manufacturing sector and have the students conduct a ratio analysis of this firm and report their findings.

Questions to pose:

1. Does the firm have any problem areas that you would investigate further if you were a manager?

Answer: Varies depending on the firm selected.

2. Are there any other specific pieces of information that you would request from your management team with regards to this firm? If so, why?

Answer: Varies depending on the firm selected.

3. Would you invest money in this firm based on your analysis?

Answer: Varies depending on the firm selected.

Time on task: This exercise can take between 45 and 60 minutes depending on how long it takes to find and summarize the findings. Often the interpretation can take more time.

Teaching Notes: This activity gives the students the ability to practice ratio analysis. This activity is also a very good team project. Team members can split the analysis into ratio groups and each member do a ratio group (liquidity ratios, profitability ratios, etc.) and then have a discussion of their findings. Short group presentations can then be given that enable other students to provide input on interpretation. This gives the instructor opportunity to show why a ratio can often be interpreted as “good” or “bad” and often we need additional information to make a more informed decision.

VI. POST TEST:

These 10 questions can be used to determine the students’ understanding of the skills and information covered in this chapter, and in customizing your chapter lecture or exam review to the concepts that students had difficulty mastering.

LO1 - Know the Three Financial Statements Needed for Financial Analysis

1. Assets are used by the firm to;

a. generate income

Answer: Correct. A firm uses assets to generate income.

b. provide financing

Answer: Incorrect. A firm uses assets to generate income.

c. increase costs

Answer: Incorrect. A firm uses assets to generate income.

d. reduce efficiency

Answer: Incorrect. A firm uses assets to generate income.

2. The statement of cash flows is split into three sections that include all of the following except;

a. cash flows from operations

Answer: Incorrect: This is one of the sections of the statement of cash flows.

b. cash flows from financing

Answer: Incorrect: This is one of the sections of the statement of cash flows.

c. cash flows from salaries

Answer: the sections of the statement of cash flows include cash flows from operations, cash flows from financing, and cash flows from investments.

d. cash flows from investments

Answer: Incorrect: This is one of the sections of the statement of cash flows.

3. All of the following are assets except;
a. new building

Answer: Incorrect: a building is an asset.

- b. a metal lathe

Answer: Incorrect: a metal lathe is a piece of equipment that is an asset.

- c. a short-term bank loan**

Answer: Correct: A short-term bank loan is a liability.

- d. a fleet of company trucks

Answer: Incorrect: trucks are assets.

LO2 – Know the Goals of Financial Analysis

4. Financial managers can use ratio analysis to;

- a. improve performance

Answer: Incorrect because all of the answers are possible uses of ratio analysis.

- b. identify areas of weakness

Answer: Incorrect because all of the answers are possible uses of ratio analysis.

- c. create greater efficiencies in operations

Answer: Incorrect because all of the answers are possible uses of ratio analysis.

- d. improve performance, identify areas of weakness and create greater efficiencies in operations**

Answer: Correct because all of the answers are possible uses of ratio analysis.

LO3 – Perform Financial Statement Analysis

5. The current ratio for a firm with current assets of 2,000, inventories of 300 and current liabilities of 800 is;

- a. 0.400

Answer: Incorrect: Because current ratio = CA/CL so is $2,000/800 = 2.5$

- b. 2.125

Answer: Incorrect: Because current ratio = CA/CL so is $2,000/800 = 2.5$

- c. 2.875

Answer: Incorrect: Because current ratio = CA/CL so is $2,000/800 = 2.5$

- d. 2.500**

Answer: Current ratio = CA/CL , so is $2,000/800 = 2.5$

6. A firm with an inventory turnover of 6 times, an average inventory of 1,200, and current liabilities of 1,000 should have a cost of goods sold equal to;

- a. 7,200**

Answer: Correct: $6 \times \text{average inventory} = \text{COGS}$, so $\text{COGS} = 6 \times 1,200 = 7,200$

- b. 2,200

Answer: Incorrect: $6 \times \text{average inventory} = \text{COGS}$ so $\text{COGS} = 6 \times 1,200 = 7,200$

c. 6,000

Answer: Incorrect: $6 \times \text{average inventory} = \text{COGS}$ so $\text{COGS} = 6 \times 1,200 = 7,200$

d. 1,200,000

Answer: Incorrect: $6 \times \text{average inventory} = \text{COGS}$ so $\text{COGS} = 6 \times 1,200 = 7,200$

7. A firm with a debt ratio that exceeds 1 means;

a. the firm is insolvent

Answer: Incorrect: Some firms can operate highly levered and may be in good financial condition even if the debt ratio exceeds one.

b. the firm's liabilities are larger than its assets

Answer: Correct: Since debt ratio = total liabilities/ total assets then the total liabilities must be larger than the total assets if this ratio exceeds one.

c. the firm's assets are larger than its liabilities

Answer: Incorrect: Since debt ratio = total liabilities/ total assets then the total liabilities must be larger than the total assets if this ratio exceeds one.

d. the firm is not using enough debt

Answer: Incorrect: The firm has a high debt level but this ratio does not indicate where the firm is using too much debt unless paired with other peer group data.

8. When the times interest earned ratio is less than one;

a. lenders will likely not loan the firm additional money

Answer: Correct: the firm's current interest is greater than cash available to pay that interest so lenders will likely not be willing to loan additional money to this firm.

b. the firm is in good shape financially

Answer: Incorrect: the firm's current interest payments exceed the firm's ability to pay at this time.

c. the firm's inventory level is too high

Answer: Incorrect: this ratio does not provide information about inventory levels.

d. the firm's interest costs are too low

Answer: Incorrect: The firm's interest costs are too high for its current cash flows.

9. A firm with a P/E ratio of 12 and a stock price of \$32.50 had recent earnings of;

a. \$32.50

Answer: Incorrect: Current stock price divided by P/E is $\$32.50/12 = \2.71 earnings

b. \$2.71

Answer: Correct: $\$32.50/12 = \2.71 earnings

c. \$390

Answer: Incorrect: Current stock price divided by P/E is $\$32.50/12 = \2.71 earnings

d. \$0.37

Answer: Incorrect: Current stock price divided by P/E is $\$32.50/12 = \2.71 earnings

10. Ratio analysis is useful for evaluating firm performance;

a. one year only

b. several years

c. relative to comparable peers

d. for one year, multiple years, and relative to comparable peers

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