

Stocks and the Market

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CHAPTER 1

AN INTRODUCTION TO STOCKS AND THE STOCK MARKET

Overview

This chapter explains such basic terms as stock, corporation, dividends, mutual funds, and index funds.

Objectives

Students will:

- become familiar with basic terms needed to understand what stocks and corporations are and how and where stocks are traded
- understand the term indexed and mutual funds.

Strategies

If students have not been assigned this reading, begin class by asking students whether they or their parents own any stocks and what students know about the market. Then take ten minutes or so to explain what they will learn in this unit and describe some of the activities, such as playing the stock market game and choosing stocks to buy. Spend the remaining time allowing students to start reading the chapter in preparation for completing the exercises for the next day.

If instead students had time to do their homework for this chapter, start class by checking whether they have completed it. Then take ten minutes or so to explain what they will learn in this unit, and some of the activities (such as playing the stock market game and choosing stocks to buy) that they probably will enjoy. If there is time, proceed by seating students in groups of no more than four and ask each group to come up with a list of five important things they learned from doing the reading. Spend the remaining time going over their answers to the matching and multiple-choice questions making sure they understand why each right answer is correct.

Answer any questions they may have about stocks and the stock market.

Assignment

Assign Chapter 2, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 1

AN INTRODUCTION TO STOCKS AND THE STOCK MARKET

Introduction

By reading this chapter you will learn some of the basic information you need to know about stocks, bonds, mutual funds, corporations, dividends, and the stock market. In future chapters, you will learn enough about these things to know what goes into making informed decisions about buying stocks and the importance of the stock market to the American economy.

What Is a Stock?

A stock is a share of ownership in a corporation. It entitles its owner to a vote for the corporation's board of directors and to a part of the corporation's earnings, called dividends (see "What Is a Dividend?" below). Most people, however, buy shares of stocks in the hopes that their value will increase over time.



A share of stock issued in 2004 by Google, Inc. Initially sold for \$85, it sold for \$600 by October 2007.

What Is a Corporation?

A corporation is an organization owned by its stockholders and usually established for the purpose of doing business. The advantage of forming a corporation, rather than owning a business by oneself or forming a partnership, is that stockholders are not liable for debts owed by the corporation. In this system of limited liability, they can lose only the money they paid for their stock. This limited liability makes raising capital easier for corporations than other types of businesses.

Another advantage enjoyed by corporations is continued existence. When the owner or a partner in an unincorporated business dies, the business must change its name or be disbanded. When stockholders die, their heirs become part-owners of the corporation.

A corporation is run by a board of directors elected by its stockholders. The directors appoint the head of the corporation, usually called the chief executive officer (CEO). The CEO appoints the heads of various divisions of the corporation, such as the chief financial officer (or CFO, who is responsible for the corporation's financial aspects, including planning and record-keeping), and makes the day-to-day decisions. The board of directors must be consulted in making important decisions such as whether to buy another firm, launch a new product, or begin an advertising campaign.

What Are Dividends?

Dividends are the portions of a corporation's profits that it pays to its shareholders. Corporations have no obligation to pay dividends and may choose to reinvest the profits in the corporation or pay them in the form of bonuses to their executives.

What Is a Bond?

Another way in which a corporation raises capital is by issuing bonds. A bond is a so-called fixed-interest obligation that either pays a yearly dividend or is paid off when it "matures" after a fixed amount of time (usually between ten and 20 years). For instance, a \$100 bond may be sold for \$75, but after it matures in ten (or more) years, its owner is entitled to the bond's full \$100 face value.

What Is the Stock Market?

As you may know, stocks are traded (i.e., bought and sold) on the stock market. Major stock markets can be found in New York, as well as in Boston, Philadelphia, Chicago, Cincinnati, Kansas City, and other American cities, and foreign countries. The records of stocks bought and sold on major American exchanges are reported by the Dow Jones Industrial Average (DJIA, also referred to as the "Dow") and Standard & Poor's index of 500 stocks (S&P 500), as well as the National Association of Security Dealers Automated Quotations network (Nasdaq). There are a large number of other indexes in the U.S. and abroad, but these three are the most popular and closely followed in the U.S. (Differences between the three are explained in Chapter 3.)

What Is a Mutual Fund?

Mutual funds are corporations that buy hundreds of different stocks. People buy mutual funds rather than purchase individual stocks because of mutual funds' lower overall risk. There is considerably more risk that an individual stock may lose its value than if the same investment is spread out over a whole group of stocks. Furthermore, the experts who spend hours each week managing their mutual funds supposedly have much more knowledge of the stock market than the average investor and should be able to make better decisions.

Index Funds

Index funds are similar to mutual funds in that their managers invest money in a large number of different stocks. They differ in that managers of mutual funds study market trends and make informed decisions on which stocks to buy. However, index-fund managers invest in an entire market spectrum, such as all 30 stocks that compose the Dow Jones Industrial Average. During the years 1973 to 1994, index funds actually outperformed mutual funds, 11.2% to 7.3%.

Name: _____

Date: _____

Student Activities

An Introduction to Stocks and the Stock Market

A. Multiple-Choice

1. How do stocks, bonds, and mutual funds differ?
 - a. Stocks and mutual funds are the same thing, while bonds are fixed-income obligations.
 - b. Stocks entitle owners to vote for a board of directors, bonds are fixed-income obligations, and mutual funds are collections of stocks managed by a single corporation.
 - c. Stocks may go up and down in value, bonds pay a fixed amount of interest, and mutual funds never increase or decrease in value.
 - d. Stocks, bonds, and mutual funds are the same thing.
2. Advantages of forming a corporation rather than a partnership include which of the following?
 - a. continued existence
 - b. limited liability
 - c. ability to issue shares of ownership
 - d. ability to sell bonds
 - e. all of the above
3. The members of a corporation's board are elected by:
 - a. other members of the board
 - b. the corporation's bondholders
 - c. the CEO
 - d. the corporation's shareholders

4. The term CEO stands for:
 - a. chief engineering officer
 - b. certain excellent officer
 - c. chief executive officer
 - d. chief elementary opponent
5. A corporation is owned by its:
 - a. board of directors
 - b. CEO
 - c. taxpayers
 - d. stockholders
6. Stocks entitle their owners to all of the following except:
 - a. a share of the corporation's profits
 - b. a vote for the board of directors
 - c. a tour of company headquarters
 - d. a right to sell the stocks when desired
7. The term Nasdaq stands for:
 - a. National Association of Security Dealers Automated Quotations
 - b. Natural Association of Sensitive Dominating Ancient Quakers
 - c. National Association of Stock of Dealers After Quoted
 - d. none of the above
8. What is the safest way that an inexperienced investor can make money on the stock market?
 - a. Buy bonds
 - b. Take the advice of a mutual-funds manager
 - c. Do a great deal of research before buying a stock
 - d. Buy an indexed mutual fund

9. What is the advantage of buying an indexed mutual fund over one that is not indexed?
- a. The investor has a chance to vote for a member of the board of directors.
 - b. There is no certain advantage.
 - c. Indexed mutual funds generally do better than those that are not indexed.
 - d. The dividends tend to be larger.

B. Matching

Match the letters on the right column to the number beside the best answer in the left column.

- | | |
|----------------------|--|
| 1. ____ stock | a. reports stock market averages |
| 2. ____ bond | b. invests in representative stocks |
| 3. ____ mutual fund | c. fixed-interest obligation |
| 4. ____ indexed fund | d. invests in many different stocks |
| 5. ____ DJIA | e. share of ownership in a corporation |

C. Essay

In no fewer than 100 words, list five things you learned in this chapter and explain why you think they are important.

CHAPTER 2

"SELECTING A STOCK" EXERCISE

Overview

Students are provided with important information pertaining to a listing of leading stocks (adapted from CNNMoney.com, on February 2, 2010). They are to pretend they have \$10,000 to invest in the stock market, and they receive a form to record their choices and the reasoning behind them.

Objectives

Students will:

- understand the meaning of the terms employed in listing stocks on the exchange
- learn the meaning of the term "P/E ratio"
- appreciate the difficulties involved in buying a viable stock.

Strategies

Begin class by asking students what they know about stocks, whether any of them or their parents own stocks, and what they know about the stock market's recent performance. Make sure they understand the terms in the reading, especially P/E ratio, and the other headings over the listing of stocks. Ask what they know about the firms listed in the chapter. Make sure students understand the instructions provided, answering questions they might have in deciding what to buy with their imaginary cash. Assign students to research the current prices of the stocks they picked. You may want to offer some form of reward to students who made the best choices.

Assignment

In addition to requiring students to fill out their stock price forms, assign Chapter 3, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 2

"SELECTING A STOCK" EXERCISE

Introduction

Fifty-four million shares of Microsoft and billions of shares of other stock are traded in a single market day. To understand this activity, pretend that you have a total of \$10,000 to invest in three of the stocks listed below. You will be asked to examine the following list and, with your teacher's help, fill out the "Stocks I Chose" form. You will also find out the current selling price for the stocks you chose and tally how much money you "made" or "lost."

Leading Stocks' Prices and Other Information (February 2, 2010)						
Stock	Price	Change	Volume average	52-week range	P/E ratio	Dividend yield %
XOM	66.18	+.78	29,170,110	61.86–80.50	16.82	2.5
INTC	19.91	+.03	63,332,467	12.05–21.55	17.02	3.16
GE	16.85	+.60	71,651,700	5.73–17.25	16.50	2.35
F	11.39	+.27	89,775,300	1.50–12.14	0.00	N/A
WMT	53.4	+0.01	13,120,300	46.29–55.20	15.58	2.02
AAPL	198.05	+2.09	22,182,600	82.33–215.59	19.30	N/A
MSFT	28.23	-0.25	54,280,500	14.87–31.50	15.51	1.84
GOOG	537.41	+6.25	3,059,600	289.5–629.51	26.33	N/A
CSCO	23.05	+0.01	40,134,400	13.61–25.10	23.42	N/A

Guide to Stock Names

XOM: Exxon–Mobile	F: Ford Motor Co.	MSFT: Microsoft Corporation
INTC: Intel Corporation	WMT: Wal-Mart Stores	GOOG: Google, Inc.
GE: General Electric	AAPL: Apple, Inc.	CSCO: Cisco Systems, Inc.

Explanation of Terms

Term	Definition
Stock	Abbreviated name of stock (see previous chart)
Price (share price)	Price at which stock sold
Change	Amount price changed (+ or -) from previous market day
Volume average	Number of shares sold that day
52-week range	Lowest and highest sales price of stock during previous year
P/E ratio	Price of the stock divided by the business's per-share earnings; low number indicates high per-share earnings
Dividend yield percentage	The amount of profit the business pays yearly as dividends, divided by share price

Name: _____

Date: _____

Student Activities

"Selecting a Stock" Exercise

A. Choosing Stocks

Learn as much as you can about the stocks you are considering and the meaning of the terms on top of the chart on the previous page. Then decide which stocks (choose no more than three) and how many of each you will buy with your imaginary \$10,000. Write down your reasons for each stock you picked, the amount spent on each stock, and the total amount of money you spent.

Stocks I Chose			
Stock	# of shares	Total cost	Reasons for choice
1.			
2.			
3.			

B. Homework

- Using a computer search engine, look up the current price for the three stocks you chose by typing the following: *Summary for* [stock symbol] *Yahoo Finance*. Then complete the following chart:

Name of first stock:		No. of shares:	\$ originally invested:	\$ worth today:	\$ profit/loss:
Price on Feb. 2, 2010	Price today				
Name of second stock:		No. of shares	\$ originally invested	\$ worth today	\$ profit/loss:
Price on Feb. 2, 2010	Price today				
Name of third stock:		No. of shares:	\$ originally invested:	\$ worth today:	\$ profit/loss:
Price on Feb. 2, 2010	Price today				
Total profit or loss:					

- Explain what you learned about the stock market from this exercise.

CHAPTER 3

A BRIEF HISTORY OF WALL STREET

Overview

This chapter reviews the exciting history of what we generally refer to as “Wall Street.” It begins with the story of the 24 traders who started what became the New York Stock Exchange (NYSE) under the buttonwood tree in lower Manhattan, and ends with the formation of Nasdaq. It also tells the colorful history of the Curb Exchange, which later moved indoors and was renamed the American Stock Exchange.

Objectives

Students will:

- be able to trace the origins of the stock exchanges formed in New York City to their present status
- understand why the Standard & Poor’s index of 500 stocks (S&P 500) provides a better indication of how well the stock market as a whole has performed than the Dow Jones Industrial Average (DJIA, or Dow), but is not cited as often
- explain how shares are traded at the New York Stock Exchange as compared to the Nasdaq.

Strategies

After determining whether all students have done their homework, ask students to share their successes in picking the right stocks. (You can probably hold this review process to less than ten minutes.) Ask why the Dow is considered a less accurate gauge of the market’s performance but is still cited more often when making historical comparisons; make sure that students understand the answer to this question. Repeat this procedure with the first student who can correctly explain how stocks get traded on the New York Stock Exchange as compared to the over-the-counter method used at the Nasdaq. Then review answers to all matching and multiple-choice questions, making sure that all understand why the right answers are correct.

Assignment

End class by telling at least six students to be prepared to play the role of buyer, at least three students to be brokers, and at least two to be bankers in the stock market game; make sure every student has an assignment. Distribute the Chapter 4 student pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 3

A BRIEF HISTORY OF WALL STREET

Introduction

This chapter tells the story of how the New York Stock Exchange started and became the world's largest exchange. The chapter also explains how the American Stock Exchange and Nasdaq got their start and how these stock indexes differ from one another.

The Birth of Wall Street

It has been said that the wall was originally built in the lower part of New Amsterdam to keep the British from taking over the city. In the end, however, the wall was only able to keep cows from wandering into upper Manhattan. The British captured New Amsterdam in 1664 and named it New York, after the king's brother, the duke of York. The road built alongside this ineffective barrier was and still is called Wall Street. Today this name is commonly used when referring to the financial center of the U.S., as well as to the regional exchanges located in other major American cities and the national network of brokers and dealers known as the "over-the-counter" (OTC) market. Together they handle over 300 million stock transactions worth about ten billion dollars every day.



An engraving depicts the transactions carried out under the buttonwood tree

Lower Manhattan Island was already a seat of commerce. Ships sailed in and out of New York Harbor every day carrying cargoes from and to Europe, Asia, and Africa. Longshoremen unloaded the ships and stacked furniture, crates of fine china, fancy clothes, trinkets, and similar goods along the wharves. Merchants set up shops to sell these goods in local markets. Financiers sold shares in companies to pay for future voyages. Those who profited from this lively trade built their sumptuous mansions further inland and attended Trinity Church at the foot of Wall Street.

For a brief time, New York City served as the capitals of both the nation and New York State. In April 1789,

George Washington was inaugurated in New York's remodeled city hall, located at 26 Wall Street. By 1790, the city no longer served as the new nation's capital, but continued as its financial center. When Alexander Hamilton persuaded Congress and President Washington to repay the entire \$75 million dollar national debt, speculators began selling U.S. government bonds to eager customers. At first, transactions were haphazard and disorganized, taking place on the street, in local coffeehouses, and in small shops. Having decided that too many outsiders were getting involved, 24 local merchants assembled in May 1792, under the shade of a buttonwood tree, and agreed to stage sales on certain days, charge uniform commissions, and limit trades to one another.¹ Any outsider wanting to buy or to sell bonds or commercial paper would have to place an order with one of the original 24 brokers. Eventually, as the organization grew, it named itself first the New York Stock and Exchange Board, and finally the New York Stock Exchange (NYSE). The NYSE today has offices just down the street from where the buttonwood tree originally stood.

Founding of the American Stock Exchange

Meanwhile, both New York and the country were growing at a rapid rate. Construction of the Erie Canal started in 1817 and was completed in 1825. The sale of construction bonds proved to be a major source of profit for Wall Street brokers. Completion of the canal made New York City the center of the country's economic life. Beginning in the 1830s, major railroad construction further increased business on Wall Street. With the discovery of gold in California in 1848, speculators began trading mining stocks. Conservative brokers at the New York Stock Exchange were unwilling to trade the stocks of companies they deemed unreliable. Consequently, brokers who were not members of the stock exchange decided to trade these more risky stocks on the streets of New York. A regular market formed in the 1870s, at the corner of William and Beaver Streets, known as the Curb Exchange. Clerks would hand-signal orders from office windows to traders standing on the street.



A photo of the Curb Exchange in action

¹ <http://www.stock-options-made-easy.com/buttonwood-agreement.html>

The Curb Exchange continued to function outdoors for years, through rain, summer heat, and freezing winters. When the exchange finally moved indoors in 1921, its newly enclosed building contained replicas of the streetlights that had served as trading posts in the outdoor market. In 1929, its name was changed to the New York Curb Exchange and 14 years later became the American Stock Exchange. The images of clerks perched on windowsills shouting orders to brokers dressed in bright-colored clothes so they could be readily identified on the street below, is still part of the lively history of Wall Street.

The Stock Market in the 21st Century

The days of hand-signaling orders from windows high above the street are long gone. Modern technology has taken over the stock market, as computers have no problems recording the 300 million orders sent daily to the market from all over the world.

The traditional way of placing an order for a trade has a client get in touch with a broker, who then contacts someone who holds a seat on the exchange (it is still an exclusive club of sorts, with seats now selling for over a million dollars) to actually place the order. The person on the trading floor combines the orders he/she receives into lots of 100 and contacts the broker who specializes in buying and selling that particular stock. That specialist then takes the orders to buy and sell and determines when the “bid price” (what the buyer is willing to pay) and the “ask price” (what the seller is willing to accept) match. Every transaction is posted on computer terminals and is instantly transmitted around the world. Prices generally rise when the quantity demanded of a particular stock exceeds the quantity supplied; prices fall when the quantity supplied exceeds the quantity demanded.

Today, more and more stocks are sold via computer-facilitated transactions, and orders can easily be placed online. The trend toward computer trades began when the National Association of Security Dealers Automatic Quotation (NASDAQ, commonly written as “Nasdaq”) system was formed in 1971. Initially, the Nasdaq listed 100 stocks that could be sold over-the-counter (OTC) via computer, rather than on the market floor. The Nasdaq and the American Stock Exchange merged in 1998; both were acquired by the NYSE in 2009, but the Nasdaq became an independent corporation and then merged with a foreign OTC trading corporation. With a listing of 3000 companies in 2010, the Nasdaq is the largest electronic trading company in the world, and its computers can handle one billion messages a day. Since the late 1990s especially, individual traders have been able to trade stocks for only a few dollars per transaction by setting up online accounts with firms.

Advertisements for online OTC trading services often include inducements such as the following:

- *Buy stocks for \$4 with automatic investing.*
- *Select from our list of over 7000 stocks and ETFs.*
- *Schedule investments on a weekly, biweekly, or monthly basis.*
- *Invest any dollar amount on Tuesdays exclusively online.*

Indexes

People checking stock prices generally consult one of three stock indexes: the Dow Jones Industrial Average, Standard and Poor's 500 (S&P 500), and/or the Nasdaq. You've just read about the Nasdaq index. The remainder of this chapter concerns the Dow and the S&P 500.

The Dow was the brainchild of *Wall Street Journal* editor Charles Dow and his business partner, Edward Jones. Founded in 1896, the Dow originally listed only the closing prices of only 12 stocks. The number of companies increased to 30, although none of the original companies are still listed on the index. Today the Dow includes such respected companies as Exxon-Mobil, Microsoft, and Wal-Mart. The Dow reflects the value of the 30 stocks and is adjusted and weighted according to a complex formula that accounts for many variables.

The S&P 500 index is based on an average of 500 stocks, rather than the Dow's 30. It was founded in 1957 and claims to offer a better picture of economic activity than the Dow not only because it includes more stocks, but also because it takes into account the total value of each company rather than just the trading price of each share. Nevertheless, the Dow is cited more often than the S&P 500 because the former has been in existence decades longer and therefore is more useful in making historical comparisons.

Name: _____

Date: _____

Student Activities

A Brief History of Wall Street

A. Multiple-Choice

1. The term “Wall Street” refers to all of the following except:
 - a. the worldwide system of stock markets
 - b. a street laid out next to a wall in New Amsterdam intended to keep Indians out
 - c. an actual place in New York City housing the New York Stock Exchange
 - d. the financial center of the United States
2. The New York Stock Exchange started when:
 - a. twenty-four New Yorkers began trading under a buttonwood tree
 - b. the capital of the United States was moved to New York City
 - c. the British took New Amsterdam from the Dutch
 - d. all of the above
3. The American Stock Exchange:
 - a. was originally called the Curb Exchange
 - b. later merged with the Nasdaq
 - c. was usually smaller and less important than the New York Stock Exchange
 - d. all of the above
4. The Curb Exchange:
 - a. literally made its transactions on the streets of New York City
 - b. was the first stock exchange in New York
 - c. started in Philadelphia
 - d. is now known as the New York Stock Exchange

5. Electronic trading:
- a. began when Alexander Graham Bell invented the telephone
 - b. began in the early part of the twenty-first century
 - c. was first used by online OTC traders
 - d. was begun by the Nasdaq

B. Matching

Match the letters on the right column to the number beside the best answer in the left column.

- | | |
|-------------------------------------|--|
| 1. ___ Dow Jones Industrial Average | a. met outdoors |
| 2. ___ buttonwood tree | b. first used electronic trading |
| 3. ___ specialist | c. under which the stock market began in New York City |
| 4. ___ Nasdaq | d. first major stock exchange in the United States |
| 5. ___ Curb Exchange | e. person who trades on his own account to match bids to buy and sell stocks |
| 6. ___ S&P 500 | f. index of 30 particular stocks |
| 7. ___ New York Stock Exchange | g. index that takes into account what each company is worth |
| 8. ___ American Stock Exchange | h. started as the Curb Exchange |

C. Short Answer

Why does the S&P 500 provide a more accurate picture of how the stock market performed on a given day than the Dow? Why is it cited less often for purposes of historical comparison?

CHAPTER 4

THE STOCK MARKET GAME

Overview

The purpose of this chapter is to involve students in a simulation to help them understand the reasons for the stock market crash of 1929. The next chapter is devoted to explaining the causes of the real stock market crash of 1929 and will ask students how the causes of both the real and their simulated crashes were similar.

Objectives

Students will:

- understand the role of stock brokers, stock buyers, and bankers in a classroom simulation of the 1929 market crash
- be able to explain the similarities of the causes of the stock market crash in the simulation and in real life
- become more interested in the workings of the stock market and more cautious about buying stocks.

Strategies

Prepare for class:

- a. Duplicate at least three sheets of checks for each of six teams of Buyers (a total of at least 18 sheets).
- b. Duplicate 18 sheets of stocks.
- c. Put a blank chart like the one below on board with names of stocks and dates—March 3, 1928; January 3, 1929; and September 3, 1929. **Do not post prices at this time.** Keep a copy of this chart at hand so you can fill in the prices when the post period for that round starts.

Stock	Dividends	Price of stock (\$) on:			
		3/3/28	1/3/29	9/3/29	7/8/32
U.S. Steel	7	140	200	260	21
Goldman Sachs	0	40	185	180	4
American Can	2	77	130	180	31
AT&T	9	180	240	300	71
Radio (RCA)	0	94	300	505	17
Leading 50 stocks	5	176	240	310	34

In Class

1. Assign students to partner up with one or two other students as needed until everyone is assigned to one of the six Buyer teams or one of the three teams of Brokers, or one of the two teams of Bankers. Have the various groups sit in separate sections of the room.
2. Begin the game by distributing six shares of two stocks to each of the three Broker teams. Give three “Blank Checks” sheets to each Buyer team (supply more if needed). Provide each Banker team with a “Bankers’ Forms” handout.
3. Make sure everyone knows what they are supposed to do, and stress that all buyers who do not purchase at least 25 shares of stock will be fined \$100 for every share short of that number. Remind them that they can sell their stock once they have shown you that they have accumulated 25 shares.
4. Start the bid period for March 3, 1928, and make sure that Buyers bargain with Brokers and shake hands when they agree on a deal. After five minutes or so, post the price for March 3, and tell everyone they have to buy or sell at the posted price. Make sure that Buyers write their checks to Brokers and that Brokers provide the stocks that Buyers purchased. Be sure that the Brokers deposit their checks with Banker team 1, and that this Banker team records the checks as money lent and that Banker team 2 records the check as a deposit.
5. Repeat step 4 for January 2 and September 3.
6. Once you have posted the stock prices for September 3, ask Buyers to tally the value of all the stocks they purchased. Also ask Banker teams to tally the amount they lent to each Buyer team and how much each Broker team deposited in their banks. Post all of the results on the board. Then have Banker team 1 announce that it wants each Buyer to pay back half

of the money it owes the bank. At this point, you'll probably find that no one knows what to do. Bankers won't lend any more money. Buyers can't sell stocks unless they have proven that they possess 25 shares of stock, and brokers are not going to buy shares of stock.

7. Now post prices for July 7, 1932. (See below for assignment.)

Assignment

Assign Chapter 5, passing out the student reading and activities pages. Have students answer the questions at the end of the next chapter, asking them to be prepared to explain the similarities between the causes of the classroom market crash and the one that really happened. They may complete their assignment on their own paper if they run out of room on the handouts.

Blank Checks

<div style="text-align: right; margin-bottom: 10px;">Date _____</div> <div> Pay to the order of broker team # _____ (played by): _____ and _____ _____ dollars [amt] _____ \$ Signed by buyer team # _____ (played by): _____ and _____ </div>
<div style="text-align: right; margin-bottom: 10px;">Date _____</div> <div> Pay to the order of broker team # _____ (played by): _____ and _____ _____ dollars [amt] _____ \$ Signed by buyer team # _____ (played by): _____ and _____ </div>
<div style="text-align: right; margin-bottom: 10px;">Date _____</div> <div> Pay to the order of broker team # _____ (played by): _____ and _____ _____ dollars [amt] _____ \$ Signed by buyer team # _____ (played by): _____ and _____ </div>
<div style="text-align: right; margin-bottom: 10px;">Date _____</div> <div> Pay to the order of broker team # _____ (played by): _____ and _____ _____ dollars [amt] _____ \$ Signed by buyer team # _____ (played by): _____ and _____ </div>

Shares of Stock

<p><i>One Share</i></p> <p>GOLDMAN SACHS</p> <p>“Good as Gold”</p>	<p><i>One Share</i></p> <p>U.S. STEEL</p> <p>“At This Price, It’s a Steal”</p>
<p><i>One Share</i></p> <p>AMERICAN CAN</p> <p>“America Can”</p>	<p><i>One Share</i></p> <p>AMERICAN TELEPHONE & TELEGRAPH</p> <p>“Call a Friend in Hawaii”</p>
<p><i>One Share</i></p> <p>RADIO (RCA)</p> <p>“You First Heard It on Radio”</p>	<p><i>One Share</i></p> <p>50 LEADING STOCKS</p> <p>“Share in America’s Wealth”</p>

Banker's Forms

Banker team 1: (played by) _____

Money lent to Buyers	\$ lent in round 1	\$ lent in round 2	\$ lent in round 3	Total \$ lent
Buyer team 1: (played by)				
Buyer team 2: (played by)				
Buyer team 3: (played by)				
Buyer team 4: (played by)				
Buyer team 5: (played by)				
Buyer team 6: (played by)				

Banker team 2: (played by) _____

Money deposited by Brokers	\$ deposited in round 1	\$ deposited in round 2	\$ deposited in round 3	Total \$ deposited
Buyer team 1: (played by)				
Buyer team 2: (played by)				
Buyer team 3: (played by)				

CHAPTER 4

THE STOCK MARKET GAME

Introduction

This chapter allows you to play a game specially designed for this unit. The game is fun to play and it allows you to apply what you know about the stock market and learn what caused the crash of 1929.

The Three Roles

1. Buyers, who borrow money from the Bankers to buy stocks from the Brokers. There are six teams of buyers.
2. Brokers, who sell stocks to the Buyers and are paid by check, which they deposit in a bank. There are three teams of Brokers.
3. Bankers, who lend money to the Buyers, record checks from the Brokers, and keep track of loans and deposits. There are two teams of Bankers.

How the Game Is Played

At the beginning of class, six teams of Buyers, three teams of Brokers, and two teams of Bankers should sit in different parts of the room.

Brokers: The game itself begins when the teacher gives 12 shares of stock to each team of Brokers, to be divided as follows:

- Broker team 1 gets six shares of Radio and of the Leading 50 Stocks index.
- Broker team 2 gets six shares of American Can and of AT&T.
- Broker team 3 gets six shares of U.S. Steel and of Goldman Sachs.

Each team of Brokers will try to sell its stocks for the highest possible price in each of three rounds. Each round is divided into two parts: bid and post. During the bid period, Brokers can sell stocks for whatever Buyers offer. During the post period, which starts when the teacher posts the prices for that stock on the board, Buyers must pay the posted prices. All Buyers pay

by check; Brokers write their names on the back of the checks and deposit them in a bank.

Buyers: The job of each team is to buy 25 shares of stock for as little money as possible. After the team has bought 25 shares, the team may sell its stock. To buy stocks, Buyers borrow money from Bankers; this entails writing a check to a Broker for the price of the stock. Unless the Buyer pays a ridiculous amount of money for their stocks, the Banker will approve the loan.

At the beginning of each round, each team of Buyers will go to Brokers and bid for the stock they wish to buy. To pay for the stock, Buyers must simply write out checks (provided by your teacher). Brokers should not forget to endorse the checks by signing their and their teammates' names on the back.

How Much Should Players Pay/Ask For?

Smart Buyers will purchase stocks for less than they are worth and sell them for more. But Buyers have to know how much each stock is going to be worth. Buyers and Brokers can find out what each stock in the game is worth on January 3, 1929, by examining the chart below:

Stock	Dividends	Price of stock (\$) on:			
		3/3/28	1/3/29	9/3/29	7/8/32
U.S. Steel	7	?	200	?	?
Goldman Sachs	0	?	185	?	?
American Can	2	?	130	?	?
AT&T	9	?	240	?	?
Radio (RCA)	0	?	300	?	?
Leading 50 stocks	5	?	240	?	?

The game begins with round 1, on March 3, 1928. Round 2 takes place on January 3, 1929, and round 3, on September 3, 1929. There is a fourth round, but the prices involved are not provided for you here.

One More Word about Buying and Selling

Each round is divided into two parts. During the first, the bid period, Brokers and Buyers can bargain as much as they want. Any deal can be made for that round and can be settled by a handshake. After that, both parties must honor the deal. In the second part, the post period, your teacher posts the prices of the stock on the blackboard. During that period, everyone buys or sells at the posted price.

Each round ends when the last Broker team sells its shares of stock for that round. Buyers may

sell their stock but must let the teacher count the stocks to determine they have the required 25 shares.

For Brokers

Brokers should understand how much their shares of stock are worth during the bid period. They may try to get more money by telling the buyers that prices are going to go up. Whatever they do, they could be charged for each stock they sell according to the price posted on the board during that round's post period.

Brokers should make sure they deposit their checks in the bank after all partners sign their names on the back of the check.

For Bankers

The Bankers in this game must keep up-to-date records, as they are the scorekeepers:

- Banker team 1 keeps records for all six teams of Buyers by recording the money they lend them.
- Banker team 2 records the amount of money each Broker team deposits.

Student Activities

The Stock Market Game

Prepare to play the role of:

1. **Buyers:** Decide which stocks you plan to buy and how much you wish to pay for them. Remember, they will all be worth more in the second and third rounds than in the first. Also remember that Buyers can purchase stocks during both bid and post periods, but during the post period, you may only buy the stock at the price your teacher posts on the board. The team of Buyers that end up with the most money wins the game.
2. **Brokers:** Figure out a way of selling your stocks at a profit. You can do this only if you sell them for more than the posted price at the end of each round. The prices of your stocks for March 3, 1928, and January 3, 1929, are given. You might make an educated guess as to prices on September 3, 1929.
3. **Bankers:** Set up the appropriate accounting sheet for your group (see below for sheets): Team 1 records the money borrowed by Buyers in order to purchase stock. Team 2 records the amount of money deposited by Brokers.

Reminders

Buyer teams

- Buy a total of 25 shares of stock.
- Pay by check; do not pay too much.
- Once you prove you have 25 shares you can sell your stocks.
- Get paid by check.
- Deposit checks in bank.
- You win the game by having more value in stocks than any other team after you subtract what you paid for them.

Broker teams

- Sell all your stocks each round; get as much money as you can.
- Deposit check in bank immediately.
- Once the bid period is over you have to sell at posted price.
- You win the game by getting more money for stocks than they are worth at the time you sell them.

Banker teams

- One team handles credits (deposits); the other handles debits (amount borrowed.)
- If check seems unreasonably high, do not permit loan.
- Keep a running tally (i.e., add value of next check to previous total each time).

CHAPTER 5

RISE AND CRASH

Overview

This chapter tells the tragic story of the Great Bull Market that began on March 3, 1928 when Michael Meehan and friends formed a pool which drove up the price of the shares in Radio stock they sold to one another and helped stimulate popular interest in the stock market. The narrative continues by showing how the price of stock was driven up during the next 18 months by stock buyers' "irrational exuberance" leveraged with borrowed money. The chapter explains how a purchase of Radio at \$100 a share with a 25% down payment in March 1928 could result in a 1200% profit after the stock was sold at \$500 a share in September 1929. Students learn that a slight dip in the market forced speculators to heed margin calls by selling their stock. The forced sales and the panic that they caused led to a rapid decline in the stock market. Optional questions in the activities section ask students to point out how the outcome of the stock market game was similar to what actually happened in the 1920s (if students have participated in the stock market game).

Objectives

Students will:

- understand how Michael Meehan's pool stimulated the stock market in March 1928 and helped lead to the rapid rise of the price of stocks
- understand how the practice of buying "on margin" helped fuel the market's rise
- explain how the need to cover their debts forced over leveraged stockholders to sell their stocks, and how this contributed to the crash of 1929
- realize how far the prices of stocks fell from their September 1929 highs
- explain how their stock market game simulated the Crash of October 1929 and why (if applicable).

Strategies

If students have participated in the previous chapter's stock market game, ask them to share their experiences with it. Then ask them what similarities they saw in what happened during the 1920's and what happened in their game. Note in particular how:

- a. buyers in life and in the game paid for their stocks
- b. how the market in both cases could rise so quickly
- c. what caused the market to fall so rapidly
- d. how buyers in real life and in the game could have come out ahead.

Proceed by explaining what buying "on margin" meant and why it caused the market to go up so quickly and come down so fast. Show in particular how buying shares of Radio stock on the margin requirement of 25% in 1928 could result in a 1200% profit in 1929. Have students explain how Michael Meehan's pool worked and why it would have attracted so many investors.

Spend some time during class reviewing students' answers to the matching questions. Finally, ask students what regulations they might have made to prevent another stock market disaster like the one in the 1920s.

Assignment

Assign Chapter 6, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 5

RISE AND CRASH

Introduction

The period between March 1928 and September 1929 is famous in America's economic history. It was the time of a "bull market" (one characterized by rising prices), and Americans were obsessed with the idea of buying stocks. Certain stocks went up by as much as 700%. Some people invested their life's savings in the market; others borrowed huge sums of money in the hope of getting rich quick. A great deal of "average" people—cab drivers, housewives, construction workers, waiters, etc.—as well as millionaires and brokers, had heavily invested in the stock market.

What made people so interested in buying and selling stocks? Why did the stock market rise so rapidly during that period? What caused it to collapse so suddenly 18 months later? These are some of the questions that this chapter will help you answer.

March 3, 1928

The Great Bull Market began on March 3, 1928. That was the day Michael J. Meehan and a group of friends decided to make money by fooling a lot of people. They formed a plan to buy and sell shares of Radio stock to each other in an arrangement called a "pool." The idea behind their scheme was to cause the price of the stock to rise, sell it to people who did not know what Meehan and others were up to, and emerge with a great profit. Here is how it worked:

At the start of the business day, Meehan sold 200 shares of Radio stock to a friend at its opening price of \$94.50. His friend sold the same 200 shares to another friend at \$95 a share.¹ The next sale of the same shares was at \$96, then again at \$97.50, before Meehan bought back his original shares at \$98.25.

The ticker tape recording these trades displayed them as follows:

...R.2.941/2; R.2.95; R.2.96; R.2.971/2; R.2.981/4...



1. Numbers are given only as an illustration, though the text gives an accurate portrayal of what actually happened.

People who read the ticker did not know that all the buying and selling was done between a group of friends intending to fool the public. Buyers interested in getting rich quickly saw the price of Radio going up and began to buy large amounts of this stock. On March 12, 1928, Radio went up by \$12 a share. The next day the price rose by \$18. By the end of March, Radio was selling for \$195—a gain of more than \$100 from the opening price of March 3. At this point, Meehan and his friends sold their shares and split a profit of around \$10 million between them. Had they held on to their shares of Radio, they would have realized far more profit. Before the Crash of 1929 ended the Great Bull Market, Radio was selling for \$505 a share. It should be noted that the market at the time had little regulation of schemes such as Meehan's pool, so while his actions were probably dishonest and unethical, they were legal.

Michael Meehan and his friends helped stoke the public's interest in the stock market. As the dramatic gains in the market became front-page news, a speculative fever swept the country. Radio stock, of course, was not the only game in town. Other popular stocks at the time included GM (General Motors), U.S. Steel, and Goldman Sachs. Some performed as well as Radio, and others did even better, but all attracted people who thought they could get rich quickly.

Buying "On Margin"

Once people became interested in the stock market, they wanted to invest as much money as possible, even what they did not have. Money managers came up with a means of helping people borrow money in order to invest in the market—buying the stock on credit (then called buying "on margin"). It worked like this: You put a certain amount of money down, usually about 25% of the stock price, sometimes less, to buy a stock; this amount was the margin. Your broker would borrow the rest from a bank at interest. Since the bank could "call in" the loan (i.e., demand that your broker repay it) at any time, the borrowed money was referred to as "call money." If the market went up, this plan could help you grow the money you invested by many times and therefore increase your profits.

Suppose you bought a share of Radio stock for \$100 in March 1928. Your margin requirement of 25% means that you would have to invest \$25 of your own money, while your broker would borrow \$75 in your name.² If you managed to keep this stock until September 1929, you could sell it then for \$500. Out of this difference of \$400 ($500 - 100 = 400$), you'd still have to pay back the loan of \$75, leaving you with \$325 ($400 - 75 = 325$). Minus your initial investment, you'd have made \$300 profit ($325 - 25 = 300$). This amounts to a 1,200% return on your investment ($300 / 25 = 12$; $12 \times 100\% = 1,200\%$).

If you had purchased the stock entirely with your own money, you would have made \$400 ($500 - 100 = 400$) in profit. However, this represents only a 400% return on your investment ($400 / 100 = 4$; $4 \times 100\% = 400\%$), as opposed to the 1,200% made from buying the stock on margin. This effect of magnifying the buying power of a initial investment is what made buying on margin so attractive—as well as dangerous.

2. For purposes of illustration, the examples leave out the interest that must be paid on the loan.

The Other Side of Buying On Margin

While buying on margin worked its magic when the market went up, it could do a great deal of damage when the market went down. People who bought stocks at the height of the stock market would be forced to sell when the market started declining because bankers and brokers would need more money to cover their own loans and would call in outstanding debts. When more and more people sell, prices come down. Declining prices cause more people to sell their stocks to cover their loans, and this in turn causes prices to fall even further. Thus, buying on margin was in effect a bomb waiting to go off if something started the market on a serious downward course.

Imagine buying a stock for \$100, with 25% paid out-of-pocket (\$25) and a loan for the rest (\$75). Should the stock go down to \$50, you would have lost \$125 ($50 - 100 = -50$; $-50 - 75 = -125$), five times your initial investment.

The Market Heads Down

By September 1929, the stock market was like a sponge saturated with water. It could not soak up any more stocks. People were no longer buying new stocks—investors were a little jittery. Prices were too high. No new money was coming into the market. The stock market started falling when British investors began selling their stocks; they were having their own problems in England and needed the money at home.

In October 1929, the banks began to get worried. Too much money had been lent out on margin, so they began to call in loans. People were forced to sell their stocks just to repay their loans, and prices began to fall. Even people in more secure positions became nervous and began thinking about selling before prices dropped too much. After all, the good times couldn't last forever.

On October 23, 1929, so many people tried to sell their stocks that the ticker tape ran two hours late. This caused even more panic-induced sales. Brokers spent hours in the morning trying to balance their books. In account after account, their clients had used up their margin and needed to raise more money.

October 24 was even worse. Investors were forced to put blocks of stocks on sale, sometimes totaling 10,000 shares at a time. There was absolute chaos on the floor of the New York Stock Exchange. Goldman Sachs, for example, lost \$30 per share in just two hours. Other stocks seemed headed for even greater losses.

At this point, a pool of bankers got together to temporarily save the stock market. They bought up thousands of shares of stocks to stop the fall in prices and restore people's confidence. However, their actions resulted in only a short-lived halt to the approaching crash, as even they (quietly) sold their stock before the market collapsed completely. Too many margin accounts were exhausted by the fall in prices on October 24. On October 29, a huge volume of sales orders flooded the stock market. One writer described the scene on the floor of the NYSE that day:

The big gong had hardly sounded in the great hall of the Exchange at ten o'clock Tuesday morning before the storm broke in full force. Huge blocks of stock were thrown upon the market for what they would bring. Five thousand shares; ten thousand shares appeared at a time on the laboring ticker at fearful recessions in price. Not only were innumerable small traders being sold out, but big ones, too ... who a few weeks before had counted themselves millionaires. Again and again the specialist in a stock would find himself surrounded by brokers fighting to sell—and nobody at all even thinking of buying.³

With the near-absence of buyers, one stock that had earlier sold for \$48 a share was bought for one dollar. Even the best stocks dropped as much as \$60.00 a share.

As to the cause of the collapse, an observer speculated:

It seems probable that the principle cause of the break in prices...was forced selling. It was the dumping on the market of hundreds of thousands shares of stock held in the name of miserable traders whose margins were exhausted or about to be exhausted. The gigantic edifice of prices was honeycombed with speculative credit and was now breaking down under its own weight. All in all, stocks lost \$40 billion of their value. [A comparable loss today would be far more than 1 trillion dollars.]⁴

October 29 was a nightmare. Fortunes were lost; people who had been rich that morning found themselves penniless that night. Dreams and hopes died as life savings disappeared. Expensive stocks turned into worthless pieces of paper. Some dejected investors jumped out of their office windows; some others went home, put their heads in the oven, and turned on the gas.

October 29 marked the end of an era. The stock market crash erased most of the prosperity of the 1920s. In the following years, unemployment jumped from one to 13 million. Industrial production was practically cut in half. Millions lost their businesses, their homes, and their farms. America entered into the greatest economic crisis it had ever faced.

Just as the stock market had climbed during the prosperity of the 1920s, it fell during the depression that followed. The accompanying charts show just how far prices collapsed. Note, in particular, the average for the 50 leading stocks.

Stock	Dividends paid	Prices (\$) as of:		
	1927	March 3, 1928	Sept. 3, 1929	July 8, 1932
U.S. Steel	7	138	261	21
Goldman Sachs	0	—	110	1
American Can	2	77	181	31
AT&T	9	179	304	71
Radio	0	94	505	17
Avg. 50 leaders	n/a	176	307	34

3. Allen, Frederick Louis. *Only Yesterday*. (New York: Harper & Row, 1957), p. 333.

4. Op. cit.

Name: _____

Date: _____

Student Activities

Rise and Crash

A. Multiple-Choice

1. What does buying “on margin” mean?
 - a. Going to a bank to get a loan and using the money to buy stocks
 - b. Buying stocks that are of marginal value at best
 - c. Paying for a stock with a down payment and a promise to pay for the rest at a later time
 - d. Both b and c
2. What is a “pool”?
 - a. A group of friends who play water polo
 - b. A way of getting stocks cheap
 - c. A way of causing outsiders to think that many people are interested in a stock
 - d. Both b and c
3. How did Michael Meehan and his friends help cause the rise of the Great Bull Market?
 - a. By forming a pool and selling Radio stock to one another
 - b. By buying on margin
 - c. By using inside information
 - d. By advertising on radio
4. What Meehan and his confederates did was:
 - a. illegal at the time
 - b. a good way to make money without hurting other people
 - c. something that should probably have been illegal
 - d. none of the above

5. What was the underlying cause for the rise of the stock market in the 1920s?
 - a. Michael Meehan's pool
 - b. The high dividends paid by stocks
 - c. An overall optimism that the price of stocks would continue to rise
 - d. All of the above
6. What is the best definition of a "bull market"?
 - a. A consistently rising market
 - b. A fluke
 - c. The opposite of a bear market
 - d. A sign of a coming economic depression
7. Why were a large number of stockholders forced to sell their stocks?
 - a. They faced bad business conditions.
 - b. They wanted the money to buy luxury goods.
 - c. They lost faith in the stock market as a way of making money.
 - d. They could not cover their margins.
8. According to the table in the reading, which two stocks lost the greatest percentage of their total value?
 - a. U.S. Steel and Radio
 - b. Radio and American Can
 - c. American Can and Goldman Sachs
 - d. Goldman Sachs and Radio
9. Which stock from the table in the reading best indicated what happened to the stock market overall between 1928 and 1932?
 - a. Radio
 - b. Average of 50 leading shares
 - c. Goldman Sachs
 - d. U.S. Steel

10. Which do you think is the best lesson to take away from the story of what happened in the stock market?
- a. Be the first to get the inside track in a pool.
 - b. Buy low, sell high.
 - c. Never buy stocks with money you can't afford to lose.
 - d. Never play the market.

B. Matching

Match the letters in the right column to the number beside the best answer in the left column.

- | | |
|-----------------------|--|
| 1. ____ Radio | a. down payment on purchased stock |
| 2. ____ margin | b. date the Great Bull Market began its rise |
| 3. ____ bull market | c. when the market hit bottom |
| 4. ____ March 3, 1928 | d. the stock in Meehan's pool |
| 5. ____ July 8, 1932 | e. one that is rising |

C. Short Essay

1. How did buying on margin cause the price of stocks to rise far beyond what they were worth (according to their P/E ratios)? How did not meeting margin requirements cause the price of stocks to fall?
2. What did the pool of bankers (not Meehan's Radio pool) do to try to rescue the stock market between October 24 and 29? Did it work? Why or why not?

CHAPTER 6

THE SUBPRIME CRISIS OF 2008

Overview

This chapter explains the reasons for the subprime mortgage crisis that started in late 2008. It begins by telling the story of a fictional, but not untypical, individual who bought a house that he could not afford by obtaining an adjustable-rate mortgage with almost no down payment. The bank assumed that he could refinance in a couple of years by using the increased value of his house as collateral. Students are told that the decline in home prices, coupled with the unplanned increase in interest on mortgages, leading this fictional individual and millions of real unsuspecting buyers to default. Meanwhile, these risky mortgages were packaged into mortgage-backed securities and sold with triple-A ratings to banks and investment houses, even as those who packaged these securities sold them short in options markets.

Objectives

Students will:

- understand the damage that the subprime mortgage crisis caused to the global economy
- learn the meaning of the terms “adjustable-rate mortgage” and “unsecured loan”
- understand that over optimistic home buyers, reckless bankers, bundlers of mortgage-backed securities into collateralized debt obligations, and laissez-faire regulators contributed to the subprime mortgage disaster.

Strategies

After determining whether students have done their homework, start class by asking in what ways the subprime mortgage crisis was similar to the events leading to the crash of 1929. Put points of similarity on the board. (Alternatively, you may want to precede this exercise by first breaking students into groups and asking them to discuss the answer among themselves before volunteering.) Answers may include: the mortgage-backed securities were similar to the stocks in the 1920s that paid no or little dividends and were bought for speculative purposes and not as real investments.

Having warmed up the class with a discussion of the big-picture exercise, spend enough time reviewing students' answers to matching questions. Then review what "selling short" and what "taking an option" mean. Ask whether knowingly selling toxic assets should be made illegal. Ask students to explain how each party to the crisis was partially responsible, and whether anyone was primarily responsible or only barely responsible.

Assignment

Assign Chapter 7, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

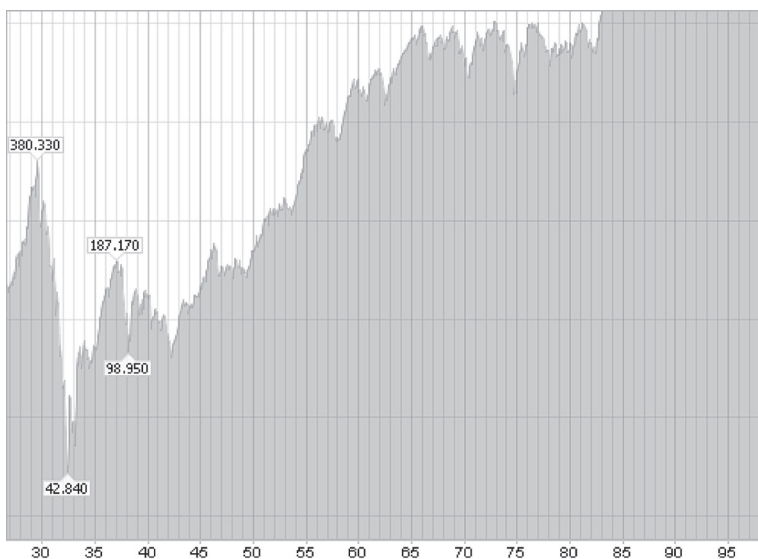
CHAPTER 6

THE SUBPRIME CRISIS OF 2008

Introduction

As you can see by examining the chart on the right,¹ the Dow Jones Industrial Average did not return to its 1929 high until the mid-1950s. It continued its climb into the mid-1960s, and remained level until the early 1980s. With several notable exceptions,² market averages continued a spectacular climb from 1982, when it broke 1,000, until 2007, when it peaked at over 14,000.

In March 2009, the Dow dipped down to 6,440, a fall of nearly 50% from its 2007 high. This chapter explains the reasons for the amazing collapse of stock prices.



We are going through a financial crisis more severe and unpredictable than any in our lifetimes. We have seen the failures, or the equivalent of failures, of Bear Stearns, IndyMac, Lehman Brothers, Washington Mutual, Wachovia, Fannie Mae, Freddie Mac, and the American International Group. Each of these failures would be tremendously consequential in its own right. But we faced them in succession, as our financial system seized up and severely damaged the economy.³

—U.S. Treasury Secretary Henry Paulson, on the financial crisis of 2008

To understand the cause of this crisis, look at the case of a typical but fictional buyer:

Like many Americans, Mr. Senteris dreamed of owning a home for his wife and three children.

1. http://www.absoluteastronomy.com/topics/Dow_Jones_Industrial_Average

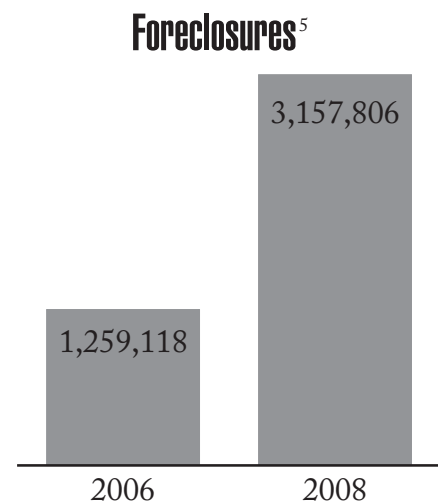
2. <http://www.churchofcowherd.com/2009/02/>

3. <http://www.nytimes.com/2008/11/18/opinion/18paulson.html>

He found something that would meet the needs of his family, but at a price he never thought he could afford—\$300,000. Senteris's income was \$54,000 yearly, and at 4% interest, his mortgage payments of \$12,000 yearly would consume much of his take-home pay of about \$45,000. Don't worry, his broker told him, "I can fix you up with an ARM [adjustable-rate mortgage] and you won't even have to come up with a down payment. You'll start at 4%, and the rate won't go up for two years. After two years, you can borrow money using your house as collateral because its value is bound to increase."

Two years later, Senteris was sitting in his dream house with a debt of \$325,000 and an 8% mortgage that cost him over half his yearly take-home pay. Moreover, in a declining housing market, the value of his house had decreased. He had paid back very little of the mortgage and had almost no equity in his home, meaning he could not use it as collateral on another loan; he would have to empty his savings account and still face foreclosure in a year or two.

What was a private tragedy for Senteris was a public catastrophe for the investment houses and banks that had contracted what are known as "subprime" loans with adjustable-rate mortgages (ARMs). Millions of these types of loans were packaged into bundles called mortgage-backed securities (MBS) and sold to investors based on the assumption that the loans would be paid or that the foreclosed properties would be worth more than was owed.⁴ In November 2008, 7.5 million homeowners owed more on their houses than they could sell them for. Due to the downturn in the housing market, these securities were not worth anywhere near what investors had paid for them.



President Bush Explains the Causes of the Crisis

Addressing the American people about the problems caused by optimistic and predatory lenders, over-optimistic and often misinformed borrowers, and foolish as well as greedy financiers, President George W. Bush explained:

Many mortgage lenders approved loans for borrowers without carefully examining their ability to pay. Many borrowers took out loans larger than they could afford, assuming that they could sell or refinance their homes at a higher price later on. Both individuals and financial institutions increased their debt levels significantly relative to historical norms during the past decade.

Optimism about housing values also led to a boom in home construction. Eventually the number of new houses exceeded the number of people willing to buy them. And with supply exceeding demand, housing prices fell. And this created a problem: Borrowers

4. In 2005, the median down payment for first-time homebuyers was two percent, with 43 percent of those buyers making no down payment whatsoever.

5. Chart from Thomas Ladenburg, *The Twenties and the Depression* (Social Studies School Service, 2009).

with adjustable-rate mortgages [i.e., those with initially low rates that later rise] who had been planning to sell or refinance their homes before the adjustments occurred were unable to refinance. As a result, many mortgage holders began to default as the adjustments began.

These widespread defaults [and related foreclosures] had effects far beyond the housing market. Home loans are often packaged together, and converted into financial products called “mortgage-backed securities.” These securities were sold to investors around the world. Many investors assumed these securities were trustworthy, and asked few questions about their actual value. Credit rating agencies gave them high-grade, safe ratings...

The decline in the housing market set off a domino effect across the U.S. economy. When home values declined, borrowers defaulted on their mortgages, and investors globally holding mortgage-backed securities...began to incur serious losses. Before long, these securities became so unreliable that they were not being bought or sold. Investment banks such as [a company whose stock selling for \$70 a share soon fell to \$2 a share]...found themselves saddled with large amounts of assets they could not sell. They ran out of the money needed to meet their immediate obligations...⁶

Thomas Friedman wrote in the *New York Times*:

So many people were in on it: People who had no business buying a home, with nothing down and nothing to pay for two years; people who had no business pushing such mortgages, but made fortunes doing so; people who had no business bundling those loans into securities and selling them to third parties, as if they were AAA bonds, but made fortunes doing so; people who had no business rating those loans as AAA, but made a fortunes doing so; and people who had no business buying those bonds and putting them on their balance sheets so they could earn a little better yield, but made fortunes doing so.⁷

The Results

Eventually, Wall Street firms and private investors were left holding securities based on loans to homeowners that the homeowners could not repay. The once-revered investment bank Lehman Brothers went bankrupt and folded, its stock losing 93% of its value. Soon other major firms, including Bear Stearns, IndyMac, Washington Mutual, Wachovia, Fannie Mae, Freddie Mac, and American International Group (AIG), were on the verge of collapse. Only the federal government’s infusion of billions of dollars in cash prevented the collapse of other major U.S. banks and investment houses. The U.S. government allocated nearly a trillion dollars to bail out the institutions that gambled on mortgages which could not be repaid. And despite this federal assistance, the deep recession that followed is considered the worst economic downturn since the Great Depression.

6. *The New York Times*, September 25, 2008

7. <http://www.nytimes.com/2008/11/26/opinion/26iht-edfriedman.1.18173018.html>

Name: _____

Date: _____

Student Activities

The Subprime Crisis of 2008

A. Matching

Match the letters in the right column to the number beside the best answer in the left column.

- | | |
|------------------------------------|--|
| 1. ____ mortgage | a. rate of interest less than charged by Federal Reserve banks |
| 2. ____ default | b. packaged loans based on money owed to banks through mortgages |
| 3. ____ foreclosure | c. when bank takes control of property |
| 4. ____ mortgage-backed securities | d. when homeowner can't pay mortgage |
| 5. ____ subprime mortgage | e. allows bank to raise interest rate later |
| 6. ____ adjustable-rate mortgage | f. amount borrowed from bank after making a down payment on property |

B. Essay

In no fewer than 150 of your own words, describe the causes of the subprime mortgage crisis.

CHAPTER 7

SHREWD MARKET PRACTICES

Overview

This chapter explains three different market strategies, two that are legal and one that is not. The legal strategies are selling short and trading in options and other derivatives. The illegal strategy is insider trading and the sad tale of what happened to home-making guru Martha Stewart is cited as an example of what not to do. After answering multiple-choice questions, students are asked to write an essay on whether these practices should be allowed.

Objectives

Students will:

- learn how selling short and placing options can be used by wily investors to reap large profits at others' expense
- understand insider trading and why the practice is illegal.

Strategies

After determining whether students have done their homework, review their answers to the chapter's multiple-choice questions. Then spend as long as it takes to help all students understand how investors (or should I say, speculators) can make money by selling stocks short and by taking out options to buy stocks by a specified date. You should point out that no one has to use the option that they have paid for. You might ask students to role play the process of borrowing a stock, selling it on the market, and paying the loan back with shares of the same stock purchased at a lower price. Other students could be asked to demonstrate a situation where buying an option could pay big dividends or result in big losses. You might start a discussion on the reasons that insider trading is illegal and whether Martha Stewart should have had to spend five months in jail for acting on privileged knowledge and lying to investigators about it. You could also ask students to share their answers on whether attempts should be made to prevent short sales and/or options.

Finally, remind students to prepare to take a quiz on the next chapter and inform them that answering some of the questions will require use of a computer.

Assignment

Assign Chapter 8, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 7

SHREWD MARKET PRACTICES

Introduction

When there is money to be made, shrewd men and women use a number of ways to make easy money. Some of these are legal, and some are not. This chapter describes one way that professional traders have used to make themselves rich, often at other people's expense. The legal ways are to sell short and to buy options. The illegal way is insider trading.

Short Selling

Basically, short selling involves the sale of borrowed stock in the hope of profiting by buying the securities later at a lower price and returning them to the shareholder. If you think that the price of a certain stock is on the way down, you may want to borrow several shares from a person who owns that stock (for example, Ford Motor Company stock). You promise your friend that you will return the stock in three months. You borrow ten shares while Ford is listed at \$60 per share. You sell your borrowed stock for \$600 ($60 \times 10 = 600$) and wait for the stock price to drop. When the stock has fallen to \$50 per share, and you don't want to wait to see if the price will continue to drop, you buy ten shares for \$500 ($50 \times 10 = 500$) and return the stock to who lent them to you. Your hunch netted you \$100 ($600 - 500 = 100$).

Other Means of Gambling on Stocks You Do Not Own

Purchasing stock options: A stock option is simply the right to buy or sell a stock within a certain period of time. Again, let's use Ford stock as an example. The stock is selling at \$60 per share, but you think it will go up to \$80. You then pay \$10 per share for the right to buy ten shares within three months. The price goes up to \$80, and you then "exercise your option" to buy the ten shares. However, if the price does not reach \$80, you don't exercise your option and lose the \$100 you paid for it ($10 \times 10 = 100$).

Derivatives: Short selling and purchasing options are two ways of betting on the price of stocks you don't own. Contracts of this kind are called "derivatives." One can make contracts to buy or sell such things as futures on any number of commodity markets (e.g., corn, wheat, beef), on

stocks and bonds, and on foreign currencies. Securitized home mortgages (hundreds of mortgages bundled into packages) have been issued and subject to bets that they are good or bad investments by this willing to take a risk in buying or selling them. These high-stakes agreements are virtually unregulated by the U.S. government and can earn billions of dollars for the canny investor. They can also cost others billions.

Trading on Inside Information

One way of beating the stock market is to make trades based on information that is not publicly available. As the homemaking guru Martha Stewart learned to her regret, this behavior is illegal and can result in severe punishment.

In December 2001, Stewart's broker told her that a pharmaceutical company in which she held 4000 shares of stock had just received some news that would negatively affect the value of its stock. Stewart sold her shares the day before this news became public knowledge, at which point their market value fell by 16%. Stewart was convicted of lying to investigators about her alleged trading on illegally obtained information, fined \$30,000, and spent five months in jail.

Name: _____

Date: _____

Student Activities

Shrewd Market Practices

A. Multiple-Choice

1. If you were short-selling a stock, you would:
 - a. borrow the money you need to buy the stock
 - b. expect the price of that stock to go down
 - c. take an option on that stock
 - d. pray for divine guidance
2. If you had borrowed a stock that was selling for \$60, you would:
 - a. hope the market would crash
 - b. get as much insider information that you could
 - c. expect that the price of that stock would fall
 - d. hope the stock you borrowed would go down in value before you bought it back
3. If you were to buy an option on a stock, you would:
 - a. be breaking a law
 - b. taking a risk
 - c. have a good idea what that stock would sell for in the future
 - d. both b and c
4. The mistakes made by Martha Stewart were:
 - a. being in the home-decorating business and buying stocks
 - b. trading on inside information and lying about it
 - c. selling short and making a profit
 - d. buying options in her own company and lying about it

5. Of the ways of playing the market described in this chapter:
- a. only trading on inside information is illegal
 - b. only buying stocks on margin is illegal
 - c. only buying stocks on options is illegal
 - d. all of the above are illegal

B. Essay

Write an essay of no fewer than 100 words making a case for continuing the ban on insider trading, but allowing short selling, purchasing options, and permitting traders to buy and sell derivatives.

CHAPTER 8

A CHALLENGE

Overview

This chapter explains several important terms, such as P/E ratio, PB, and EPS, and asks students to come to class prepared to take a quiz on these terms. The chapter provides students with the statistics as examples of each term for Coca-Cola (KO) and Wal-Mart (WMT) stock. Students are asked to decide which of these stocks they would buy based on the data for April 8, 2010, and explain how they used the information provided to make their decision. After they have made the decision on these stocks, students are asked to research the current numbers for these stocks online and fill in the current statistics.

Objectives

Students will:

- review basic terms that will help them understand whether a stock is worth the asking price
- analyze the data provided in this chapter to decide whether they should hypothetically buy Wal-Mart or Coca-Cola stock
- use the Internet to look up current price and data on the above stocks.

Strategies

Start class by passing out paper for a quiz on stock market terms. Give students about ten minutes to identify the five abbreviations listed in the reading. After the quiz, ask students to explain the basis on which they made their decision to buy Coca-Cola or Wal-Mart. During class, have a student go online to find the current statistics on those two stocks. Ask students to explain whether any of the statistics they used could have predicted what happened to the stocks, and what they learned from this exercise.

Optional activity: Have students in small groups analyze the following stocks and make a decision based on available information on which stock (if any) they would buy.

Stock (April 23, 2010)	Price	P/E (price-to-earnings ratio)	P/B (price-to-book value)	ROE (return on equity)	RG (real growth for 3 years)	EPS (earnings per share)
AAR Corporation (AIR)	25.50	16.0	1.4	10.0	17.2	n/a
Am RR Cars Industries (ARII)	18.61	28.7	1.2	4.78	n/a	.73

Have them make a chart like the following and elaborate on each reason for:

Reasons for buying AIR	Reasons for not buying AIR	Reasons for buying ARII	Reasons for not buying ARII

Assignment

Assign Chapter 9, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 8

A CHALLENGE

Introduction

In this chapter, you are asked to make a decision based on information gathered on two stocks on a single day (April 8, 2010). Based on the provided information and no other knowledge, you will choose which of two stocks to buy, and explain why.

Coca-Cola or Wal-Mart?

Stock (April 8, 2010)	Price (\$)	P/E	PB	ROE	RG (3-year)	EPS
Coca-Cola (KO)	53.78	5.03	5.0	30.2	8.8	10.7
Wal-Mart (WMT)	54.96	6.54	2.9	21.8	5.4	8.4
DJIA	10,927.07					

What the Abbreviations and Numbers Mean

- Price: stock market price on April 8, 2010, in dollars
- P/E (price-to-earnings) ratio: price of the stock divided by earnings per share. A figure of 10 would mean that the stock price is ten times the earnings per share of stock. The number 20 would mean the stock sells for 20 times the earnings per share. Higher numbers therefore reflect lower per-share earnings.
- P/B (price-to-book) ratio: price of the stock divided by the assessed book value of the company. For Coca-Cola, the stock price is five times the company's book value. In other words, its stock sells for much more than the value of the company the stock represents. Wal-Mart's P/B is 2.9 times its book value.
- ROE (return on equity): the value of the company's stock. The return for Coca-Cola is 30.2% of the value of its stock, indicating it's a good investment. For Wal-Mart, the return is slightly less than 22%.

- RG (revenue growth): the rate at which profits have increased over the past three years. Coca-Cola has the advantage in this case.
- EPS (earnings per share): total profits divided by the number of shares issued by the corporation.

Name: _____

Date: _____

Student Activities

A Challenge

A. Prepare for an in-class quiz on the abbreviations in this chapter.

B. Analysis

Choose three indicators that might lead you to buy one stock over the other, as well as one indicator that you don't consider as important as the others.

- Explain why the three favorable indicators led you to choose one of the stocks.
- Explain why you did not give as much significance to the indicator that could have led you to buy the other stock.

C. In class

Fill the blank spaces on the chart based on the information for the two stocks as of today (or very recently). Your teacher will give you the information or have someone conduct research in class to find it. Based on this new information:

- explain whether you think you made the right or the wrong decision about the stock you chose.
- explain what you learned from this exercise.

Stock on 4/23/10	Price	P/E (price-to- earnings ratio)	P/B (price-to- book value)	ROE (return on equity)	RG (real growth for 3 years)	EPS (earnings per share)
Coca-Cola(KO)	53.78	18.4	5.0	30.2	8.8%	10.7
Wal-Mart (WMT)	54.96	14.9	2.9	21.8	5.4%	8.4
DJIA	10927					
Stock on ____/____/____						
Coca-Cola(KO)						
Wal-Mart (WMT)						
DJIA						

CHAPTER 9

STOCK MARKET INVESTMENT THEORIES

Overview

This chapter explains the two most frequently advocated stock market investment theories: fundamental and technical analysis. It explains that the former relies primarily on investing based on value and stresses checking on such statistics as P/E, EPS, dividends, and company history and how well it is managed. Technical analysis, on the other hand, examines trends in the market itself and in the stock in question. Pure technicians are not interested in what the company in question does. In general, they subscribe to the theory that the “efficient market” reflects the thoughtful conclusions of wise and informed people. Readers are told that few advisors depend solely on one theory or the other, but use information that fits in either camp.

The chapter also warns students against relying on stock market “gurus” like the Gardner brothers of the famous Motley Fool investment-advice company and the overoptimistic views of those who predicted the Dow would reach 36,000 around the time it collapsed in 2008. Students are also advised not to follow the example of Martha Stewart whose reliance on inside information earned her a hefty fine and several months in jail.

The activities ask students to show their understanding of the different theories used to predict changes in the market price of any particular stock.

Objectives

Students will:

- understand the meaning of the terms “fundamental analysis” and “technical analysis” as they apply to the stock market
- consider the drawbacks of relying on the advice of stock gurus and those with inside information.

Strategies

After determining whether students did their homework, spend about 20 minutes helping them understand the reasons for the answers to matching questions. Use the rest of the class to preview the next assignment and make sure that they know they will need to have access to the Internet to complete it.

Assignment

Assign Chapter 10, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 9

STOCK MARKET INVESTMENT THEORIES

Introduction

There are widely different theories about how best to make money by investing in the stock market. In this chapter, you learn about two of the most popular theories. You also learn about the belief held by some that having monkeys throw darts at a list of stocks would pick winners just as well as many professionals in the business.

Fundamental Analysis

Believers in fundamental analysis claim that the way to choose a good stock is to know as much about it as possible. Investors should keep themselves informed about the industry, domestic and global economic conditions, and how well the company does as compared to others supplying the same goods and services.

To learn all of the above would require an investor to read dozens of annual reports, immersing themselves in the history of the industry, the track record of the company's managers, and global economic news. This is not a task that the average investor is up to—leave that to the professionals.

Fortunately, statistics are available about most of the thousands of stocks bought and sold in the world's markets. Before the Internet, you could look at any major newspaper's financial pages and read lists of statistics to get some inkling of which stocks were in play. Now, you need only to find the nearest available computer to learn some very important prepackaged information. First, find out how the market is doing in general. You can find the stock market report by simply going to a search engine such as Google or Yahoo and typing "stock market quotes." By opening any one of a number of windows you can get a picture of the market as a whole. If it seems that the market is in a period of increasing prices or is beginning to recover from a bad run, you could return to your search engine and find a site such as *Businessweek's* "Stock Markets & Sectors in the US." Under the heading "Sectors," you can find a list of the ten major industrial sectors of the country in order of how they performed over the past three months and for the year. You can see which industry has outperformed all others in that group. From there you can click on the top-performing industry in the most successful sector to learn how much each company earned

for each share of stock it issued (earnings per share, or EPS), the price-to-earnings (P/E) ratio, and the dividends paid. By clicking on “Chart,” “Financials,” and “Earnings,” you can learn of their revenues, profits, and interest expenses during a four-year period. You can also learn even more information about these companies by clicking “Details.”

Most of the information you can learn from this exercise comes under the heading of fundamental analysis. Basically, you want to know what the company does, how well it’s doing, whether it is making a profit, and if so, how much. You should also take into account how much the company is worth (the book value of its assets, minus its debts) and how that figure compares to the market value of all the stocks that it has issued (stock price times number of shares.)¹

Technical Analysis

Advocates of technical analysis tend not to care about which industry the stock is in, or its P/E ratio, dividends, profits, or losses. All that matters is tracing the progress of the stock and the direction of the market as a whole. Technical traders assume that:

- the market as a whole has already taken the real value of the stocks in account in its judgments (i.e., the market is rational and no amount of research will lead to better assessment of the real value of any stock than its market price) and
- prices of stocks move in trends that can be analyzed and whose future movements can be predicted.

Technicians examine three kinds of market trends: upward, downward, and horizontal. Prices tend to move in one of these directions and stay on that path. Once the path is altered, the stock is likely to continue to move in the new direction. For example, if a stock selling for more than \$50 suddenly drops down to \$45, you can expect it to continue its decline.

The Monkeys-with-Darts Theory

It has been asserted that blindfolded monkeys throwing darts at a list of stocks would have as good a chance of picking a stock that beats the market average as an experienced Wall Street broker. The sophisticated explanation for why this could work is that past performance is no guarantee of future behavior. In other words, something having happened a number of times, as in flipping a quarter five times and having it come up heads each time, is no indicator that it will continue to happen. Markets are influenced by unpredictable events, such as a rise in interest rates, a crisis in the subprime mortgage market, or the attacks in New York City on 9/11. In 1999, James Glassman and Kevin Hassett published a book predicting that the Dow Jones Industrial Average was on its way to reaching a high of 36,000. At the time, the Dow was around 11,750. Two years later, the index fell to 7,286. By 2008, the Dow had rebounded to over 14,000, only to collapse 18 months later, to around 6,500.

1. Obtaining book value and value of stock requires doing more research. Look up the name of stock, for example: “Wal-Mart stock quote”

Over a period of 50 years, most mutual funds traded by professionals have averaged a rate of return of 7.5%. On the other hand, mutual funds invested equally in an index such as the Dow or Standard and Poor's index of 500 stocks (S&P 500) averaged 11.2%. Could it be that monkeys with darts would have done as well as the professionals?

Following the Advice of Gurus

There are some traders who consistently outperform the market: Warren Buffet is one, as was the legendary Peter Lynch. Tom and David Gardner (founders of the Motley Fool investment-services company) for years had a system for choosing stocks that they claimed outperformed the Dow average by between 300 and 400 percent. But in 2000, the four stocks that the Gardners advised their readers to buy fell an average of 14%, while the Dow dropped by only 4.7%

Many people seek the advice of others who can interpret publically available information to help them beat the market. The problem, of course, is that not all the advice one receives, such as that provided by the Gardners, results in successful investment decisions.

But for the next 48 hours, we'll give you our most valuable and sought-after stock picks simply for clicking a link. *Have we lost our minds?!?* Possibly...

Yes! Give me [investment-advice book] absolutely FREE—no strings attached!

Introducing [investment-advice book]... featuring those hard-to-find “one decision” stocks. I'm talking about the stocks you buy (the only decision you need to make) and hold for years and years for a long string of substantial gains...

A not untypical online advertisement promising stock market heaven with a click of the mouse.

Name: _____

Date: _____

Student Activities

Stock Market Investment Theories

A. Fundamental or Technical Analysis?

Identify whether each of the following would pertain more to, or be of more interest to, an investor who trades based on fundamental analysis, an investor who relies on technical analysis, both, or neither.

	Fundamental/technical/ both/neither
1. A stock's P/E ratio	
2. How a stock performed on the previous market day	
3. The abilities of a company's CEO	
4. Belief that the company's market price represents its real value	
5. The value represented by each share of stock	
6. Likely to make frequent trades in the market	
7. Likely to keep a stock for the long run despite ups and downs of the market in general	
8. Willing to take the advice of investment gurus	
9. Being a successful trader	

B. Matching

Match the letters on the right column to the number beside the best answer in the left column.

- | | |
|--------------------------------------|--|
| 1. ____ EPS | a. amount a company earns, divided by quantity of stock issued |
| 2. ____ P/E ratio | b. believer in the quality of a company |
| 3. ____ market trend | c. When this number is low, be prepared to buy. |
| 4. ____ rational or efficient market | d. believed by technical analysts |
| 5. ____ monkeys-with-darts theory | e. of interest to a broker applying technical analysis |
| 6. ____ fundamental analyst | f. belief that the market is unpredictable |

C. Short essay

In no fewer than 50 words answer the following question:

Which approach to choosing stocks do you think is the most effective? The least effective? Explain your reasons.

- a. fundamental analysis
- b. following the advice of (for example) the Gardners
- c. insider trading
- d. technical analysis

CHAPTER 10

PICKING A STOCK PRIMARILY THROUGH FUNDAMENTAL ANALYSIS

Overview

This chapter describes a method of selecting a stock independent of influence from stock market gurus or insider tips. The purpose of the chapter is to give students practice in choosing a stock based on their own original research. It instructs students how to use the Internet to find the best performing economic sectors and industries. Students select two firms, each from a different sector, and write a report on their fundamentals and compose a recommendation on whether to purchase stock in one of these firms.

Objectives

Students will:

- apply technical but primarily fundamental analysis to choose a stock they recommend purchasing
- obtain detailed information on the issuing corporation's fundamentals and select visuals to compose a brochure advocating buying this stock rather another firm's.

Strategies

Determine which students have completed their assigned homework and ask them to help and advise those who were unable to. Remind students to have their brochures recommending stocks ready to present the next day.

Also remind students that they will have a test on the unit after they have a chance to use Chapter 11 as a means of reviewing their work.

Assignment

Assign Chapter 11, passing out the student reading and activities pages. Ask students to complete their assignment on their own paper if they run out of room on the handouts.

CHAPTER 10

PICKING A STOCK PRIMARILY THROUGH FUNDAMENTAL ANALYSIS

Introduction

In previous chapters you learned something about the stock market. You now should be familiar with key terms used to talk about stocks and be aware of the disastrous possibilities of incautious speculation. You also studied some theories about how to invest money in the market. It is time that you train yourself in market research primarily by using the tools of fundamental analysis. This might prepare you to advise yourself and others on what stocks to buy and not to buy (keeping in mind, however, that it doesn't necessarily qualify you to act on it).

Practicing Fundamental Analysis

To begin with, you should take yourself to the nearest available computer and be prepared to spend about an hour attempting fundamental analysis. Use a search engine to locate "Stock Market and Sectors in the US-Businessweek." Then scroll down to and click the word "Sectors." You should see an updated version of the following chart:

Sector	Performance (May 3, 2010)			Price per earnings (TTM)	Price to sales (TTM)	Dividend yield
	1 Month	3 Month	YTD			
Consumer Discretionary 5 Industries	+5.45%	+21.80%	+17.69%	26.4x	1.0x	1.08%
Consumer Staples 3 Industries	+2.04%	+5.06%	+2.67%	17.9x	0.9x	2.68%
Energy 1 Industry	+5.26%	+10.01%	+2.07%	35.8x	1.2x	1.89%
Financials 4 Industries	+2.10%	+14.61%	+12.04%	-35.0x	0.0x	1.36%
Health Care 2 Industries	-3.07%	+1.26%	-0.05%	17.8x	1.3x	1.59%
Industrials 3 Industries	+3.86%	+18.67%	+13.81%	24.8x	1.1x	1.74%
Information Technology 3 Industries	+1.47%	+13.66%	+2.72%	26.3x	2.3x	0.77%
Materials 1 Industry	+0.68%	+14.59%	+2.15%	32.0x	1.2x	1.53%
Telecommunication Services 1 Industry	-1.52%	+3.70%	-7.32%	22.0x	1.1x	3.32%
Picking a Stock Primarily Through Fundamental Analysis 1 Industry	+2.38%	+4.08%	-1.33%	13.4x	1.1x	4.16%

Abbreviations:

- YTD = Year-to-date (so far this year)
- TTM = Trailing 12 months (last 12 months)

Now take the following steps:

1. Select a sector that promises the best returns. This should not be a difficult task, since the sectors are listed on the basis of market performance. The example involves “Consumer Discretionary” because its performance over the past three months and for the year (as of May 3, 2010) was very high.
2. Choose one of the three top-rated corporations in the “Top 30-Day United States Industry in the Consumer Discretionary Sector.”

Top three performing companies in this industry:

Company	Market cap	One-month performance
CPI Corp.	\$185.9M	103.0%
Blyth Inc.	\$512.9M	86.9%
Hovnanian Enterprises Inc. A	\$550.8M	60.2%

(From May 3, 2010)

(After examining Blyth and Hovnanian, we chose CPI Corporation. Hovnanian had a loss in EPS, and Blyth's P/E ratio was 20.4, compared to 10.4 for CPI.

Snapshot of CPI Corp (CPY)

Open \$27.90	Previous close \$28.15
Day high \$28.06	Day low \$26.35
52-week high 04/28/10—\$29.63	52-week low 05/6/09—\$9.58
Market cap 256.6M	Average volume 248.9K
EPS TTM \$2.54	Shares outstanding 9.7M
Ex-date 02/18/10	P/E TTM 10.4x
Dividend \$0.64	Dividend yield 2.42%

K = thousands; M = millions; B = billions

1. Gather information on your stock, most notably the EPS (earnings per share), P/E (price-to-earnings) ratio, and dividend yield (dividends actually paid, per share).
2. Click on “Advanced Stock Chart,” and get information on how well this stock has done over the past five years or more.
3. Click on “Detailed Description” of the stock and take down relevant information.
4. Return to the search engine and look up more information on your company.
5. Repeat steps 1–6 using another sector, industry, and stock.

Name: _____

Date: _____

Student Activities

Picking a Stock Primarily through Fundamental Analysis

A. Stock Analysis

Complete all information in the chart below. Be sure to choose stocks from two different sectors.

	Stock A	Stock B
Sector		
Sector (3-month performance)		
Industry		
Industry (3-month performance)		
Industry P/E		
Name of company		
Company EPS		
Company P/E		
(Duplicate chart of company stock profile over past five years.)		

B. Short Essay

After selecting important details on the stocks you chose to recommend, write a report of no fewer than 100 words advising potential investors why they should buy one of the two stocks and not the other.

C. Presentation

Create a brochure or PowerPoint® presentation using images you find online to promote your company and entice people to buy its stock. Include pictures of what it produces, disparaging words about its competitors, and reasons why it is good to buy stocks now. Be prepared to give your presentation to the class.

CHAPTER 11

UNIT REVIEW

Overview

This chapter provides students with a review of the basic ideas and concepts presented in this unit.

Objectives

Students will be prepared to take a test on this unit by reviewing basic ideas, terms, and concepts.

Strategies

Provide students with the following list of questions that may be on the test. Allow them to work in groups of two or three while preparing answers to each. Circulate around the room, helping students who need assistance. Most students will probably have time to answer four or five of the nine questions during a 45-minute classroom test.

CHAPTER 11

UNIT REVIEW

Introduction

In this unit, you learned how the stock market evolved, how the stock market works, and how to make informed decisions about buying stocks. This chapter helps you prepare to take a test based on the materials in this unit and to remember what you've learned.

An Introduction to Stocks and the Stock Market

A stock is a share of ownership in a corporation, a business, or other organization owned by its shareholders. Stocks entitle their owners to vote for the board of directors in the corporation and often to a share (called a dividend), of the corporation's profits. The advantages of forming a corporation include unlimited life and limited liability. In addition, corporations can raise money by issuing and selling shares of ownership while unincorporated businesses cannot issue stock.

Corporations, as well as other types of companies and governments, can issue bonds, which are fixed-interest obligations that guarantee their owners a certain percent of its original price either annually or after a set number of years.

Most stocks are bought and sold in one of the 20 major stock markets located in financial capitals scattered throughout the world. The major stock indexes in the U.S. are the Dow Jones Industrial Average (DJIA, or the "Dow"), which reports the (weighted) averaged prices of 30 major industrial companies; Standard and Poor's index, which reports the averaged prices of 500 corporations (S&P 500); and the National Association of Security Dealers Automated Quotation network (Nasdaq), which initiated computerized trading.

Mutual funds are owned and managed by corporations and purchase a diversified portfolio of stocks and bonds in various enterprises. Each fund's value changes in proportion to the value of its holdings. Mutual funds are less likely to lose money because managers hedge their bets by investing in a number of different stocks. To keep up with the market as a whole, some mutual-fund managers buy the slate of stocks on the Dow or S&P 500 indexes. Such mutual funds are called "index funds."

"Selecting a Stock" Exercise

You picked a stock by examining its P/E ratios and dividend yields, learning what information you should have before deciding what stocks to buy in the real world.

A Brief History of Wall Street

The first permanent site for a stock market in the U.S. was in New York City, near the southern tip of Manhattan Island. It began when 24 businessmen/merchants met under the shade of a buttonwood tree and began trading securities with one another. The street on which this trading took place was named after a wall built to keep the Indians out of southern Manhattan. The trading group moved to a nearby coffeehouse within a year and stayed there for 70 more before moving to its present location at 11 Wall Street. As economic life got more hectic in New York, brokers of a more-speculative bent began trading stocks on the street, in a market known as the Curb Exchange. It did not move indoors until 1929 and changed its name to the American Stock Exchange 24 years later.

For most of the 20th century, the usual way to purchase stock was to have a broker bid to buy it on the New York Stock Exchange. A specialist in that stock would pair this order with an order to sell and would make the transaction on the floor of the exchange. Since the mid-1960s, however, computers have generated more and more purchase and sales agreements. This led to the founding of the National Association of Securities Dealers Automated Quotations (Nasdaq) system, which specializes in making electronic trades. The Nasdaq and the American Stock Exchange merged in 1998; both were acquired by the NYSE in 2009, but the Nasdaq became an independent corporation and then merged with a foreign OTC trading corporation.

One of the reasons the S&P 500 makes for a better indicator of how the market is doing is that it lists 500 stocks, as opposed to the Dow's 30 stocks.

The Stock Market Game/Rise and Crash

The stock market game was designed to give you a better understanding of why the market rose to such giddy heights before experiencing a catastrophic decline. The Great Bull Market of the 1920s began its rise when Michael Meehan and his friends formed a pool to sell stock to one another. The ticker tape, which reported stock transactions in those days, gave the impression that the stock was headed skyward. Soon speculators began buying this stock for themselves and then turned their attention to other bellwether stocks, buying without regard to P/E ratios or dividends. The rapid rise in the price of stocks was stimulated by people only paying a fraction of the cost of a stock in cash and the rest with borrowed money, called buying "on margin." After about 18 months of speculative fury, the market peaked, British investors began selling their stocks, and many American investors, faced with margin calls to repay the borrowed money, were forced to sell, which in turn lowered prices further and spurred more margin calls. This

downward spiral culminated in “Black Tuesday”—September 29, 1929. The market as a whole continued its descent until July 1932, when it bottomed out at \$34 for the average share, from a high of \$310. The market did not fully recover for approximately 25 years.

The Subprime Mortgage Crisis

In 2007, the Dow surpassed 14,000 points; less than a year later, the Dow showed that stocks, on average, were selling at one-half of their former highs. Most of this decline was attributed to the collapse of the housing market. During the preceding years, real estate brokers pressured gullible buyers into assuming home mortgages that they could barely afford. These mortgages were then packaged into securities (usually bonds) that were dubious at best but which credit-rating companies gave high ratings. The government looked the other way until the birds came home to roost, and prestigious investment firms now loaded with these “toxic” assets tumbled into bankruptcy. As in 1929, the economy in 2008 plunged into a serious economic decline that, fortunately, stopped with an unemployment rate less than half of that suffered during the Great Depression.

Shrewd Market Practices

When an investor thinks the price of a stock is going to go down, he or she can borrow the stock from a broker, sell it at about the same price, and buy the same stock for less money in order to pay back the person from whom the stock was borrowed. This is known as “short selling.” An investor can also buy the right to buy a stock within an agreed-upon amount of time and exercise that right only if the price of that stock has gone up. The right to buy the stock is called an “option.” An illegal way of making money in the market is to buy or sell based on information about a stock that is not publically available. This is called “insider trading.”

Basic Terms for Understanding the Performance of Stocks

In order to decide whether a stock is a good investment, an investor should understand the following terms and how well a stock has performed according to these metrics:

- Price: price of stock
- P/E (price-to-earnings) ratio: price per share of stock, divided by annual earnings per share
- P/B (price-to-book) ratio: price of the stock divided by the assessed book value of the company
- ROE (return on equity): the value of the company’s stock
- RG (revenue growth): the rate at which profits have grown over the past three years.
- EPS (earnings per share): total profits divided by the number of shares issued by the corporation.

Stock Investment Theories

The sophisticated name for this basic information concerning a corporation's market performance is "fundamental analysis" (analyzing the company's fundamental information). To be successful in choosing a stock may also involve "technical analysis"—i.e., considering how the market has performed in recent times, how the particular sector of that market has fared, and finally how the stock has done in recent weeks.

Picking a Stock to Buy

Advice on picking stocks comes from a number of sources, including the many firms and "gurus" willing to give advice. You should always remember the famous financial caveat: past performance is no indicator of future behavior. Therefore, you should do some stock research of your own, one means of which is described in the chapter.

Name: _____

Date: _____

Student Activities

Unit Review

1. Introduction to Stocks and the Stock Market

Explain:

- what a stock is and three reasons you might want to own one
- how a corporation is organized
- why mutual funds are safer buys than stocks
- why index funds outperform mutual funds
- how bonds differ from stocks
- what the P/E ratio tells you about a stock
- what dividends are.

2. “Selecting a Stock” Exercise

Explain what information you should have before buying a stock.

3. A Brief History of Wall Street

- Trace the development of the New York Stock Exchange and the American Stock Exchange from their earliest days, to the American Stock Exchange’s merger with Nasdaq.
- Explain the differences between the DJIA and S&P 500.

4/5. The Stock Market Game/Rise and Crash

- Explain Michael Meehan’s role in starting the great Bull Market of the 1920s.
- How did buying on margin cause the market to rise so quickly?
- How did panic and buying on margin affect its decline?

6. The Subprime Crisis of 2008

How did subprime mortgages, and other factors help lead to the bankruptcy of so many investment houses between 2005-2009?

7. Deceptive Stock Practices

Explain:

- a. how shrewd investors can make money by selling short?
- b. why people can make money after they purchase an option
- c. why Martha Stewart spent several months in jail.

8. A Challenge

Explain:

- a. why you chose to buy either KO or WMT based on which information from April 2010
- b. how you learned whether you made the right decision
- c. what you learned from this exercise.

9. Stock Market Investment Theories

a. Identify:

- ROE
- EPS
- P/B
- R/G
- fundamental analysis
- technical analysis

b. Explain why dart-throwing monkeys might make as good a decision on what stocks to buy as professional traders.

10. Picking a Stock to Buy

Write a prospectus for a real stock in the present time with positive statistics and compare it to a competing firm in the same industry.

ANSWER KEY

Chapter 1

An Introduction to Stocks and the Stock Market

A. Multiple-Choice Answers, pp. 6–8

1. Stocks, bonds, and mutual funds differ in that **(b)** stocks entitle owners to vote for a board of directors, bonds are fixed income obligations, and mutual funds are collections of stocks managed by a single corporation.
2. The advantages of forming a corporation rather than a partnership include **(e)** continued existence, limited liability, the ability to issue shares of ownership, and the ability to sell bonds.
3. The members of a corporation's board are elected by **(d)** the corporation's shareholders.
4. The term CEO stands for **(c)** the chief executive officer.
5. A corporation is owned by **(d)** stockholders.
6. Stocks do not entitle their owners to **(c)** a tour of the company's headquarters.
7. The term Nasdaq stands for **(a)** National Association of Security Dealers Automated Quotations.
8. The safest way for an inexperienced investor to make money on the market is to **(d)** buy an indexed mutual fund.

9. There is **(b)** no certain advantage in buying an indexed mutual fund instead of one that is not indexed.

B. Matching Answers, p. 8

Term	Definition
1. stock	e. share of ownership in a corporation
2. bond	c. fixed-interest obligation
3. mutual fund	d. invests in many different stocks
4. indexed fund	b. invests in representative stocks
5. DJIA	a. reports stock market averages

Chapter 2

"Selecting a Stock" Exercise

Questions in this chapter do not have specific answers.

Chapter 3

A Brief History of Wall Street

A. Multiple-Choice Answers, pp. 21–22

1. The phrase "Wall Street" does not refer to **(a)** the worldwide system of stock markets.
2. The New York Stock Exchange started when **(a)** twenty-four New Yorkers began trading under a buttonwood tree.
3. The American Stock Exchange **(d)** was originally called the Curb Exchange, later merged with Nasdaq, and was usually smaller and less important than the New York Stock Exchange.
4. The Curb Exchange **(a)** literally made its transactions on the streets of New York City.
5. Electronic trading **(d)** was begun by the Nasdaq.

B. Matching Answers, p. 22

- | | |
|---------------------------------|--|
| 1. Dow Jones Industrial Average | f. index of 30 particular stocks |
| 2. buttonwood tree | c. under which the stock market began in New York City |
| 3. specialist | e. person who trades on his own account to match bids to buy and sell stocks |
| 4. Nasdaq | b. first used electronic trading |
| 5. Curb Exchange | a. met outdoors |
| 6. S&P 500 | g. index that takes into account what each company is worth |
| 7. New York Stock Exchange | d. first major stock exchange in the United States |
| 8. American Stock Exchange | h. started as the Curb Exchange |

Chapter 4

The Stock Market Game

Questions in this chapter do not have specific answers.

Chapter 5

Rise and Crash

A. Multiple-Choice Answers, pp. 39–41

1. Buying “on margin” means **(c)** paying for a stock with a down payment and a promise to pay for the rest of it at a later time.
2. A “pool” is **(c)** way of causing outsiders to think that many people are interested in a stock.
3. Michael Meehan and his friends helped cause the Great Bull Market by **(a)** forming a pool and selling Radio stocks to one another.

4. What Meehan and his confederates did **(c)** probably should have been illegal.
5. The underlying cause of the rise of the stock market in the 1920s was **(c)** an overall optimism that the price of stocks would continue to rise.
6. The best definition of a “bull market” is **(a)** a consistently rising market.
7. A large number of stockholders were forced to sell their stocks because **(d)** they could not cover their margins.
8. The two stocks that lost the greatest percentage of their value were **(d)** Goldman Sachs and Radio.
9. The stock from the table in the reading that best indicated what happened in the stock market between 1928 and 1932 was **(b)** the average of 50 leading shares, which lost almost 90% of its value, an indication of overall market losses.
10. The best lesson from the story of what happened in the stock market is **(c)**, never buy stocks with money you can’t afford to lose, but accept whatever answers students can support.

B. Matching Answers, p. 41

Term

1. Radio
2. margin
3. bull market
4. March 3, 1928
5. July 8, 1932

Definition

- d. the stock in Meehan’s pool
- a. down payment on purchased stock
- e. one that is rising
- b. date the Great Bull Market began its rise
- c. when the market hit bottom

Chapter 6

The Subprime Crisis of 2008

A. Matching Answers, p. 48

Term	Definition
1. mortgage	f. amount borrowed from bank after buyer makes a down payment on property
2. default	d. when homeowner can't pay mortgage
3. foreclosure	c. when a bank takes control of property
4. mortgage-backed securities	b. packaged loans based on money owed to banks through mortgages
5. subprime mortgage	a. rate of interest less than charged by Federal Reserve banks
6. adjustable-rate mortgage	e. allows bank to raise interest rate later

Chapter 7

Shrewd Market Practices

A. Multiple-Choice Answers, pp. 53–54

1. If you were short-selling a stock, you would **(b)** expect that the price of that stock would go down.
2. If you had borrowed a stock that was selling for \$60, you would either **(c)** expect that the price of that stock would fall or **(d)** hope the price of that stock would go down before you paid it back. Both answers refer to the same reasoning, and both should be accepted.
3. If you were to buy an option on a stock, you would **(d)** be taking a risk and have a good idea of what that stock would sell for in the future.
4. The mistakes made by Martha Stewart were **(b)** trading on inside information and lying about it.

5. Of the ways of playing the market described in this chapter, **(a)** only trading on inside information is illegal.

Chapter 8

A Challenge

Questions in this chapter do not have specific answers.

Chapter 9

Stock Market Investment Theories

A. Fundamental or Technical Analysis Answers, p. 66

Identify whether each of the following would pertain more to, or be of more interest to, an investor who trades based on fundamental analysis, an investor who relies on technical analysis, or both, or neither.

	Fundamental/technical/ both/neither
1. A stock's P/E ratio	<i>Fundamental</i>
2. How a stock performed on the previous market day	<i>Technical</i>
3. The abilities of a company's CEO	<i>Fundamental</i>
4. Belief that the company's market price represents its real value	<i>Technical</i>
5. The value represented by each share of stock	<i>Fundamental</i>
6. Likely to make frequent trades in the market	<i>Technical</i>
7. Likely to keep a stock for the long run despite ups and downs of the market in general	<i>Fundamental</i>

8. Willing to take the advice of investment gurus	<i>Both or neither</i>
9. Being a successful trader	<i>Both or neither</i>

B. Matching Answers, p. 67

Terms

1. EPS
2. P/E ratio
3. market trend
4. rational or efficient market
5. monkey-with-darts theory
6. fundamental analyst

Definitions

- a. amount a company earns, divided by quantity of stock issued
- c. when this number is low, be prepared to buy
- e. of interest to a broker applying technical analysis
- d. believed by technical analysts
- f. belief that the market is unpredictable
- b. believer in the quality of a company

Chapter 10

Picking a Stock Primarily through Fundamental Analysis

Questions in this chapter do not have specific answers.

Chapter 11

Unit Review

Questions in this chapter do not have specific answers.

