Chapter 1

The Corporation

1-1. What is the most important difference between a corporation and *all* other organizational forms?

A corporation (or company) is a legal entity separate from its owners. This means ownership shares in the case of public corporations or companies can be freely traded. None of the other organizational forms share this characteristic.

1-2. What does the phrase *limited liability* mean in a corporate context?

Owners' liability is limited to the amount they invested in the firm. Shareholders are not responsible for any encumbrances of the firm; in particular, they cannot be required to pay back any debts incurred by the firm.

1-3. Which organizational forms give their owners limited liability?

Corporations and limited liability companies give owners limited liability. Limited partnerships provide limited liability for the limited partners, but not for the general partners.

1-4. What are the main advantages and disadvantages of organizing a firm as a corporation?

Advantages: Limited liability, liquidity, infinite life

Disadvantages: Double taxation, separation of ownership and control

1-5. Explain the difference between an S corporation and a C corporation in the United States.

C corporations must pay corporate income taxes; S corporations do not pay corporate taxes, but must pass through the income to shareholders to whom it is taxable. S corporations are also limited to 100 shareholders and cannot have corporate or foreign shareholders. .

1-6. You are a shareholder in a C corporation. The corporation earns \$2 per share before taxes. Once it has paid taxes it will distribute the rest of its earnings to you as a dividend. The corporate tax rate is 40% and the personal tax rate on (both dividend and non-dividend) income is 30%. How much is left for you after all taxes are paid?

First, the corporation pays the taxes. After taxes, $\$2 \times (1-0.4) = \$1.20$ is left to pay dividends. Once the dividend is paid, personal tax must be paid, which leaves $\$1.20 \times (1-0.3) = \$0.84$. So, after all the taxes are paid, you are left with 84¢.

1-7. Repeat Problem 6 assuming the corporation is an S corporation.

An S corporation does not pay corporate income tax. So it distributes \$2 to itsshareholders . These shareholders must then pay personal income tax on the distribution. So they are left with $\$2 \times (1-0.3) = \$1.40$.

1-8. You have decided to form a new start-up company developing applications for the iPhone. Give examples of the three distinct types of financial decisions you will need to make.

As the manager of an iPhone applications developer, you will make three types of financial decisions.

i. You will make investment decisions such as determining which type of iPhone application projects will offer your company a positive NPV and that your company, therefore, should develop.

ii. You will make the decision on how to fund your iPhone application investments and what mix of debt and equity your company will have.

iii. You will be responsible for the cash management of your company, ensuring that your company has the necessary funds to make investments, pay interest on loans, and pay your employees.

1-9. When a pharmaceutical company develops a new drug, it often receives patent protection for that medication, allowing it to charge a higher price. Explain how this public policy of providing patent protection might help align the corporation's interests with society's interests.

Without patent protection, the developer of the drug would be forced to lower prices to compete with generic manufacturers. Because this price competition would lower expected future profits, the developer would be willing to spend much less in R&D to develop the drug initially, and drug innovation would be curtailed.

Alternatively, by allowing the drug's developer to earn higher profits that are commensurate with the value of the drug to society, drug developers will find it in their best interests to spend more on R&D, and drug innovation is enhanced. Thus, patent protection can align the corporation's and society's interests and provide for more efficient spending on drug R&D.

1-10. Corporate managers work for the owners of the corporation. Consequently, they should make decisions that are in the interests of the owners, rather than their own. What strategies are available to shareholders to help ensure that managers are motivated to act this way?

Shareholders can do the following.

i. Ensure that employees are paid with company shares and/or share options.

ii. Ensure that underperforming managers are fired.

iii. Write contracts that ensure that the interests of the managers and shareholders are closely aligned.

iv. Mount hostile takeovers.

1-11. Suppose you are considering renting an apartment. You, the renter, can be viewed as an agent while the company that owns the apartment can be viewed as the principal. What principal-agent conflicts do you anticipate? Suppose instead that you work for the apartment company. What features would you put into the lease agreement that would give the renter incentives to take good care of the apartment?

The agent (renter) will not take the same care of the apartment as the principal (owner), because the renter does not share in the costs of repairing damage to the apartment. To mitigate this problem, having the renter pay a deposit should motivate the renter to keep damages to a minimum. The deposit forces the renter to share in the costs of repairing any problems that they cause.

1-12. You are the CEO of a company and you are considering entering into an agreement to have your company buy another company. You think the price might be too high, but you will be the CEO of the combined, much larger, company. You know that when the company gets bigger, your pay and prestige will increase. What is the nature of the agency conflict here and how is it related to ethical considerations?

There is an ethical dilemma when the CEO of a firm has the opposite incentives to those of the shareholders. In this case, you (as the CEO) have an incentive to potentially overpay for another company (which would be damaging to your shareholders) because your pay and prestige will improve.

1-13. Are hostile takeovers necessarily bad for firms or their investors? Explain.

No. They are a way to discipline managers who are not working in the interests of shareholders.

1-14. What is the difference between a public and a private company ?
The shares of a public company are traded on an exchange (or “over the counter” in an electronic trading system) while the shares of a private company are not traded on a stock exchange.

1-15. Explain why the bid-ask spread is a transaction cost.
Investors always buy at theask and sell at the bid. Since ask prices always exceed bid prices, investors “lose” this difference. It is one of the costs of transacting. Since the market makers take the other side of the trade, they make on this difference.

1-16. The following quote on Yahoo! Stock appeared on July 9, 2012, on Yahoo! Finance:

Yahoo! Inc. (YHOO) - NasdaqGS
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15.79 ↑ 0.01(0.06%) 1:47PM EDT - Nasdaq Real Time Price

Prev Close:	15.78	Day's Range:	15.72 - 15.84
Open:	15.79	52wk Range:	11.09 - 16.79
Bid:	15.77 x 22500	Volume:	6,422,005
Ask:	15.78 x 7200	Avg Vol (3m):	15,867,400
1y Target Est:	17.99	Market Cap:	19.23B
Beta:	0.9	P/E (ttm):	17.91
Next Earnings Date:	17-Jul-12	EPS (ttm):	0.88
		Div & Yield:	N/A (N/A)

If you wanted to buy Yahoo!, what price would you pay? How much would you receive if you wanted to sell Yahoo!?
You would buy at $15.78 and sell for $15.77.

Chapter 1
The Corporation

I. Chapter Outline

The chapter outline below is correlated to the PowerPoint Lecture Slides. The PowerPoint slides are referenced in **bold**.

Alternative Examples to selected textbook examples are available in the PowerPoint Lecture Slides. Alternative Examples are referenced in **bold** in the chapter outline below.

1.1 The ~~Four~~ Types of Firms **(Slide 5)**

- Figure 1.1 Chart showing types of firms **(Slide 6)**
- Sole Proprietorships **(Slide 7)**
- Partnerships **(Slides 8-9)**
- Interview with David Viniar
- Limited Liability Companies **(Slide 10)**
- Corporations **(Slides 11–14)**
  - Formation of a Corporation
  - Ownership of a Corporation
- Tax Implications for Corporate Entities **(Slide 14)**
- ~~S Corporations~~
- Example 1.1 Taxation of Corporate Earnings **(Slides 15–16)**
- ***PowerPoint* Alternative Example 1.1a (Slides 17–18)**
- ***PowerPoint* Alternative Example 1.1b (Slides 19–20)**
- Example 1.2 Taxation of S Corporation Earnings **(Slides 21–22)**
- ***PowerPoint* Alternative Example 1.2a (Slides 23–24)**
- ***PowerPoint* Alternative Example 1.2b (Slides 25–26)**

1.2 Ownership Versus Control of Corporations **(Slide 27)**

- The Corporate Management Team **(Slide 27)**
- Figure 1.2 Organizational Chart **(Slide 28)**
- The Financial Manager **(Slide 29)**
  - Investment Decisions
  - Financing Decisions
  - Cash for Treasury Management
- The Goal of the Firm (**Slide 30**)
- The Firm and Society (**Slide 31)**
- Ethics and Incentives within Corporations (**Slide 32**)
  - Agency Problems
  - The CEO's Performance **(Slide 33)**
  - Corporate Bankruptcy **(Slide 34)**

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1.3 The Stock Market **(Slides 35–36)**
- Primary and Secondary Markets **(Slide 37)**
- The Largest Stock Markets **(Slide 38)**
- NYSE **(Slide 38)**
- NASDAQ **(Slide 38)**
- Figure 1.3 Worldwide Stock Markets (**Slide 39)**

II. Learning Objectives

1-1 List and define the ~~four~~ major types of firms ~~in the U.S.~~; describe major characteristics of each type, including the means for distributing income to owners.

1-2 Distinguish between limited and unlimited liability, and list firm types that are subject to each type of liability.

1-3 Describe the taxation consequences for ~~C and S~~ corporate forms.

1-4 Discuss the division of corporate ownership into shares of stock; evaluate the implications of that division for corporate decision making.

1-5 Explain how corporate bankruptcy can be viewed as a change in firm ownership.

1-6 Compare and contrast the characteristics of shares that are publicly traded and the characteristics of those that are not.

III. Chapter Overview

Chapter 1 begins by discussing the “birth” of the modern corporation. The chapter examines important characteristics of the ~~four~~ major types of firms ~~in the United States~~; however, the focus is on the corporation. Section 1.2 defines the agency relationships that sometimes occur in a corporation. Section 1.3 focuses on the stock market and its advantages in raising capital.

1.1 The ~~Four~~ Types of Firms

The ~~four~~ major types of firm ~~in the United States~~ are the sole proprietorship, partnership, limited liability company ~~, and~~or corporation. The section begins by defining each type~~,~~ and then highlights the differences among them. Particular emphasis is placed on the following areas that distinguish the four types:

1. Ease of formation.
2. Separation between the firm and the owner from the perspective of the owner’s personal liability.
3. Lifespan of the firm.
4. Ease of transference of ownership.

The text emphasizes the corporate form. In this chapter, the authors focus on the fact that, although corporations take a great deal of effort to form, they have some distinct advantages. The life of the firm is not limited by the life of any particular individual. Ownership in the corporation is very easy to transfer either via purchase, or sale of shares ~~of stock~~. However, there are some disadvantages as well. Each shareholder is likely to own only a small percentage of the ~~stock~~shares; agency problems can be pretty serious (see Section 1.3). There is extreme separation between the firm and its owner.

Corporations are taxed in a very different way than other types of firms. Example 1.1 shows the double taxation of corporate earnings when dividends are paid. Example 1.2 shows how taxation

differs under the imputation system which, for example, applies to ~~of~~ S corporations in the U.S.~~differs from that of C corporations.~~

1.2 Ownership Versus Control of Corporations.

Section 1.2 highlights the separation of ownership and control in the corporation, with particular emphasis on principal-agent problems and the firm's relationship with society. The chapter emphasizes the market for corporate control as the primary means for encouraging managers and boards of directors to act in the best interest of shareholders.

One further stakeholder in a corporation is debt holders. If the corporation fails to repay the debt holders, it will be forced into bankruptcy.

1.3 The Stock Market

An important feature of equity investment is its liquidity. Stock markets improve liquidity for investors by enabling investors to trade shares of public corporations. The NYSE is the world's largest stock market. It has a physical location, where market makers match buyers to sellers. The NASDAQ is an electronic network, where prices are posted so that they can be viewed by all participants.

IV. Spreadsheet Solutions in Excel

The following Problems for Chapter 1 have spreadsheet versions of the problems available: 1-6 and 1-7.

These spreadsheets are available on the Instructor's Resource CD-ROM or can be downloaded from the Instructor's Resource Center at: www.~~pearsonhighered~~pearsonglobaleditions.com/berk~~-demarzo~~. If you do not have a login and password for this Web site, contact your ~~Prentice Hall~~ sales representative.

	Dec-11 (TTM)	Dec-10 (TTM)	Dec-09 (TTM)	Dec-08 (TTM)
Total Revenue	136,260.00	128,950.00	118,310.00	146,277.00
Cost of Sales with Depre	108,050.00	99,450.00	101,420.00	121,260.00
Cost of Sales	102,670.00	93,550.00	93,310.00	108,340.00
Gross Operating Profit	28,220.00	29,500.00	16,890.00	25,010.00
SG&A	16,850.00	16,910.00	14,220.00	19,620.00
R&D	5,300	5,000	4,900	7,300
Other SG&A	11,550	11,910	9,320	12,320
Other Operating Expense	-33	-216	1,030	1,870
Operating Profit before D	11,403.00	12,806.00	1,640.00	3,520.00
Depreciation	5,360.00	5,800.00	8,020.00	12,830.00
Amortization	0	0	0	0
Amortization of Intangib	12	97	86	99
Operating Income After I	6,031.00	6,909.00	-6,466.00	-9,409.00
Interest Income	471	348.00	316.00	0.00
Earnings from Equity Inte	0	0	0	0
Unusual Expense	222.00	836.00	-7,510.00	7,320.00
Total Income Avail for In	12,610.00	12,760.00	9,850.00	-4,890.00
Interest Expense	4,430.00	6,150.00	6,830.00	9,680.00
Income Before Tax (EBT)	8,180.00	6,610.00	3,020.00	-14,570.00
Income Taxes	-11540	592.00	69.00	63
Minority Interest	9	-4	245	214
Preferred Securities of Su	0	0	0	0
Net Income from Contin	20,210.00	6,560.00	2,960.00	-14,470.00
Net Income from Discont	0	0	5	9
Net Income from Total O	20,210.00	6,560.00	2,965.00	-14,461.00
Total Net Income	20,210.00	6,560.00	2,965.00	-14,461.00
Normalized Income	20,210.00	6,560.00	2,965.00	-14,461.00
Net Income Available for	20,210.00	6,560.00	2,965.00	-14,461.00
Preferred Dividends	0	0	0	0
Excise Taxes	0	0	0	0
Per Share Data				
Diluted EPS Total	4.94	1.66	0.86	-6.5
Additional Data				
Basic Weighted Shares O	3,790.00	3,450.00	2,990.00	2,270.00
Diluted Weighted Shares	4,110.00	4,180.00	3,310.00	2,270.00

Ratios

Stock Price

Valuation

Price-Earnings

Market to Book

Enterprise / EBITDA

Profitability

Operating Margin

Net Profit Margin

Return on Equity

Financial Strength

Current Ratio

Book Debt-Equity

Mkt Debt-Equity

Interest Coverage

Enterprise Value

	Dec-11 (TTM)	Dec-10 (TTM)	Dec-09 (TTM)	Dec-08 (TTM)
Assets				
Cash and Equivalents	17.15	14,810.00	21,440.00	22,050.00
Marketable Securities	18,620.00	20,770.00	22,030.00	17,900.00

Accounts Receivable	78,540.00	77,460.00	59,090.00	64,430.00
Finished Goods	3,980.00	3,970.00	3,470.00	6,490.00
Work In Progress	0	0	0	0
Raw Materials	2,850.00	2,810.00	2,780.00	3,020.00
Inventories -Adj Allowan	-928	-865	-798	-891
Inventories	5,900.00	5,920.00	5,450.00	5,620.00
Other Current Assets	0	0	3360	4330
Total Current Assets	120,210.00	118,950.00	111,370.00	117,330.00
Gross Fixed Assets (Plant	70,840.00	73,160.00	60,000.00	66,590.00
Accumulated Depreciatic	35,630.00	38,310.00	35,400.00	38,240.00
Net Fixed Assets	35,210.00	34,850.00	24,600.00	28,350.00
Intangibles	100	102	209	1590
Other Assets	3,940.00	8,120.00	16,520.00	6,520.00
Total Non Current Assets	58,140.00	47,740.00	92,180.00	105,650.00
Total Assets	178,350.00	166,690.00	203,550.00	222,980.00
Liabilities				
Accounts Payable	14,020.00	13,470.00	11,210.00	10,640.00
Short Term Debt	40,310.00	41,660.00	43,370.00	63970
Accrued Expenses	0	0	0	0
Accrued Liabilities	28,728.00	23,579.00	22,443.00	28,728.00
Deferred Revenues	3,667.00	4,093.00	4,558.00	3667
Income Tax Payable	0	0	3120	2790
Other Current Liabilities	18710	19960	20610	34560
Total Current Liabilities	73,040.00	75,090.00	78,310.00	11,960.00
Long Term Debt	59,180.00	62,320.00	89,070.00	90,220.00
Capital Lease Obligations	0	0	0	0
Deferred Income Taxes	-14,430.00	-868.00	-3,370.00	-3,310.00
Other Non-Current Liabil	8,420.00	10,540.00	22,600.00	15700
Total Non-Current Liabili	90,240.00	92,240.00	131,760.00	227,130.00
Total Liabilities	163,280.00	167,330.00	210,070.00	239,090.00
Stockholder's Equity				
Preferred Stock Equity	0	0	0	0
Common Stock Equity	15,030.00	-673.00	-7,820.00	-17,310.00
Common Par	38	38	34	24
Retained Earnings	12,990.00	-7,040.00	-13600	-16,150.00
Treasury Stock	-166	-163	-177	-181
Total Equity	15,070.00	-642.00	-6,520.00	-16,120.00
Total Liabilities & Stock E	178,350.00	166,690.00	203,550.00	222,980.00

Share Data

Shares Outstanding Com	3,816.00	3,778.00	3,337.00	2,412.00
Preferred Shares	0	0	0	0
Total Ordinary Shares	0	0	0	0
Total Common Shares Ou	3,816.00	3,778.00	3,337.00	2,412.00
Treasury Shares	0	0	0	0

Dec-11	Dec-10	Dec-09	Dec-08	Industry
11.13	16.79	10	2.29	
2.2530364	10.11445783	11.62790698	-0.352307692	11.27
2.8183198	-98.80470405	-5.11809816	-0.342647643	1.15
10.789753	9.864555677	72.48170732	33.93133523	
4.43%	5.36%	-5.47%	-6.43%	10.14%
14.83%	5.09%	2.51%	-9.89%	9.77%
134.11%	-1021.81%	-45.40%	89.76%	15.08%
1.6458105	1.584099081	1.422168305	9.810200669	1.42
6.601858	-161.9626168	-20.31288344	-9.565136476	100.21
2.3585498	1.79506435	4.429431438	29.66162015	
2.8465011	2.074796748	1.442166911	-0.505165289	1.14
123,035.6	126,325.5	118,870.0	119,438.3	