

## **CHAPTER 1**

### ***Goals and Governance of the Firm***

#### ***Answers to Problem Sets***

1.
  - a. real
  - b. executive airplanes
  - c. brand names
  - d. financial
  - e. bonds
  - f. investment
  - g. capital budgeting
  - h. financing
2. c, d, e, and g are real assets. Others are financial.
3.
  - a. Financial assets, such as stocks or bank loans, are claims held by investors. Corporations sell financial assets to raise the cash to invest in real assets such as plant and equipment. Some real assets are intangible.
  - b. Capital budgeting means investment in real assets. Financing means raising the cash for this investment.
  - c. The shares of public corporations are traded on stock exchanges and can be purchased by a wide range of investors. The shares of closely held corporations are not traded and are not generally available to investors.
  - d. Unlimited liability: investors are responsible for all the firm's debts. A sole proprietor has unlimited liability. Investors in corporations have limited liability. They can lose their investment, but no more.
  - e. A corporation is a separate legal "person" with unlimited life. Its owners hold shares in the business. A partnership is a limited-life agreement to establish and run a business.

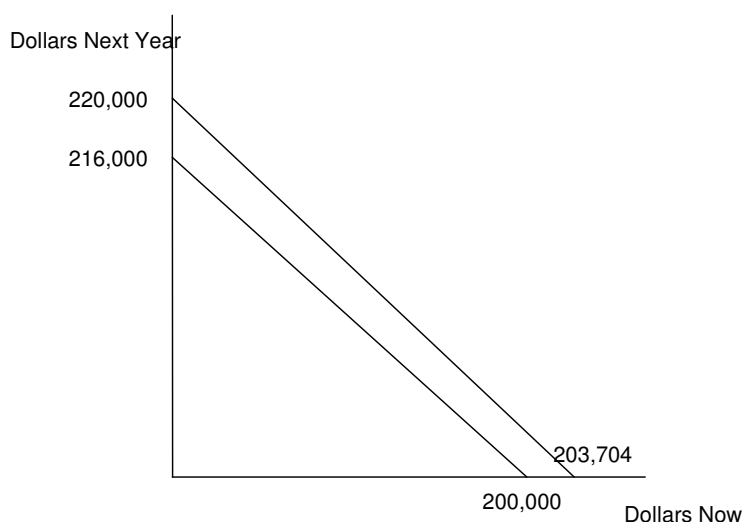
4. c, d.
5. b, c.
6. Separation of ownership and management typically leads to agency problems, where managers prefer to consume private perks or make other decisions for their private benefit -- rather than maximize shareholder wealth.
7.
  - a. Assuming that the encabulator market is risky, an 8% expected return on the F&H encabulator investments may be inferior to a 4% return on U.S. government securities.
  - b. Unless their financial assets are as safe as U.S. government securities, their cost of capital would be higher. The CFO could consider what the expected return is on assets with similar risk.
8. Shareholders will only vote for (a) maximize shareholder wealth. Shareholders can modify their pattern of consumption through borrowing and lending, match risk preferences, and hopefully balance their own checkbooks (or hire a qualified professional to help them with these tasks).
9. If the investment increases the firm's wealth, it will increase the value of the firm's shares. Ms. Espinoza could then sell some or all of these more valuable shares in order to provide for her retirement income.
10. As the Putnam example illustrates, the firm's value typically falls by significantly more than the amount of any fines and settlements. The firm's reputation suffers in a financial scandal, and this can have a much larger effect than the fines levied. Investors may also wonder whether all of the misdeeds have been contained.
11. Managers would act in shareholders' interests because they have a legal duty to act in their interests. Managers may also receive compensation, either bonuses or stock and option payouts whose value is tied (roughly) to firm performance. Managers may fear personal reputational damage that would result from not acting in shareholders' interests. And managers can be fired by the board of directors, which in turn is elected by shareholders. If managers still fail to act in shareholders' interests, shareholders may sell their shares, lowering the stock

price, and potentially creating the possibility of a takeover, which can again lead to changes in the board of directors and senior management.

12. Managers that are insulated from takeovers may be more prone to agency problems and therefore more likely to act in their own interests rather than in shareholders'. If a firm instituted a new takeover defense, we might expect to see the value of its shares decline as agency problems increase and less shareholder value maximization occurs. The counterargument is that defensive measures allow managers to negotiate for a higher purchase price in the face of a takeover bid – to the benefit of shareholder value.

### Appendix Questions:

1. Both would still invest in their friend's business. A invests and receives \$121,000 for his investment at the end of the year (which is greater than the \$120,000 it would receive from lending at 20%). G also invests, but borrows against the \$121,000 payment, and thus receives \$100,833 today.
2. a. He could consume up to \$200,000 now (foregoing all future consumption) or up to \$216,000 next year ( $200,000 \times 1.08$ , foregoing all consumption this year). To choose the same consumption (C) in both years,  $C = (200,000 - C) \times 1.08$  or  $C = \$103,846$ .



- b. He should invest all of his wealth to earn \$220,000 next year. If he consumes all this year, he can now have a total of \$203,703.7 ( $200,000 \times 1.10/1.08$ ) this year or \$220,000 next year. If he consumes C this year, the amount available for next year's consumption is  $(203,703.7 - C) \times 1.08$ . To get equal consumption in both years, set the amount consumed today equal to the amount next year:  

$$C = (203,703.7 - C) \times 1.08$$

$$C = \$105,769.2$$