

Chapter 1: MANAGERS, PROFITS, AND MARKETS

Multiple Choice

- 1-1* Economic theory is a valuable tool for business decision making because it
- identifies for managers the essential information for making a decision.
 - assumes away the problem.
 - creates a realistic, complex model of the business firm.
 - provides an easy solution to complex business problems.
- 1-2* Economic profit
- is a theoretical measure of a firm's performance and has little value in real world decision making.
 - can be calculated by subtracting implicit costs of using owner-supplied resources from the firm's total revenue.
 - is negative when costs exceed revenues.
 - is generally larger than accounting profit.
- 1-3* Economic profit is
- the difference between total revenue and the opportunity cost of all of the resources used in production.
 - the difference between total revenue and the implicit costs of using owner-supplied resources.
 - the difference between accounting profit and the opportunity cost of the market-supplied resources used by the firm.
 - the difference between accounting profit and explicit costs.
- 1-4* When economic profit is positive,
- total revenue exceeds total economic cost.
 - the firm's owners have successfully solved the principle-agent problem.
 - the firm's owners experience an increase in their wealth.
 - both *a* and *c*
 - all of the above
- 1-5* Consider a firm that employs some resources that are owned by the firm. When accounting profit is zero, economic profit
- must also equal zero.
 - is sure to be positive.
 - must be negative and shareholder wealth is reduced.
 - cannot be computed accurately, but the firm is breaking even nonetheless.
- 1-6* Which of the following statements is false?
- Explicit costs of using market-supplied resources entail an opportunity cost equal to the dollar cost of obtaining the resources in the market.
 - When economic profit is zero, the firm's owners could NOT have done better putting their resources in some other industry of comparable risk.
 - If economic profit is positive, accounting profit must also be positive.
 - If economic profit is negative, accounting profit must also be negative.
 - None of the above statements is false.

- 1-7 The value of a firm is
- smaller the higher is the risk premium used to compute the firm's value.
 - larger the higher is the risk premium used to compute the firm's value.
 - the price for which the firm can be sold minus the present value of the expected future profits.
 - both *b* and *c*
- 1-8 Suppose Marv, the owner-manager of Marv's Hot Dogs, earned \$72,000 in revenue last year. Marv's explicit costs of operation totaled \$36,000. Marv has a Bachelor of Science degree in mechanical engineering and could be earning \$30,000 annually as mechanical engineer.
- Marv's implicit cost of using owner-supplied resources is \$36,000.
 - Marv's economic profit is \$36,000.
 - Marv's implicit cost of using owner-supplied resources is \$30,000.
 - Marv's economic profit is \$6,000.
 - both *c* and *d*.
- 1-9 A risk premium is
- a measure calculated to reflect the riskiness of future profits.
 - subtracted from the discount rate when calculating the present value of a future stream of risky profits.
 - lower the more risky the future stream of profits.
 - an additional compensation paid to the workers of a business enterprise.
- 1-10 Owners of a firm want the managers to make business decisions that will
- maximize the value of the firm.
 - maximize expected profit in each period of operation.
 - maximize the market share of the firm.
 - both *a* and *b* are correct when revenue and cost conditions in one time period are independent of revenues and costs in future time periods.
 - choices *a* and *b* are generally not equivalent, so managers must always seek to maximize market share.
- 1-11 The principal-agent problem arises when
- the principal and the agent have different objectives.
 - the principal cannot enforce the contract with the agent or finds it too costly to monitor the agent.
 - the principal cannot decide whether the firm should seek to maximize the expected future profits of the firm or maximize the price for which the firm can be sold.
 - both *a* and *b*
 - both *a* and *c*
- 1-12 Moral hazard
- occurs when managers pursue maximization of profit without regard to the interests of society in general.
 - exists when either party to a contract has an incentive to cancel the contract.
 - occurs only rarely in modern corporations.
 - is the cause of principle-agent problems.

- 1-13 A price-taking firm can exert no control over price because
- the firm's demand curve is downward sloping.
 - of a lack of substitutes for the product.
 - the firm's individual production is insignificant relative to production in the industry.
 - many other firms produce a product that is nearly identical to its product.
 - both *c* and *d*
- 1-14 Which of the following statements is true?
- Shareholders as a group have little or no ability to force managers to pursue maximization of the firm's value.
 - The effectiveness of a board of directors in monitoring managers will be enhanced by appointing members from the firm who are well-informed about the management problems facing the firm.
 - Reducing the amount of debt financing can reduce the divergence between the shareholders' interests and the owner's interests.
 - Equity ownership by managers is thought to be one of the most effective corporate control mechanisms.
 - All of the above are true.
- 1-15 When a firm is a price-taking firm,
- the price of the product it sells is determined by the intersection of the market demand and supply curves for the product.
 - raising the price of the product above the market-determined price will cause sales to fall nearly to zero.
 - many other firms produce a product that is identical to the output produced by the rest of the firms in the industry.
 - all of the above
- 1-16 A price-setting firm
- can lower the price of its product and sell more units.
 - can raise the price of its product and sell fewer units but will not lose all of its sales.
 - possesses market power.
 - sells a product that is somehow differentiated from the product sold by its rivals or sells in a limited geographic market area with only one or a few sellers.
 - all of the above
- 1-17 A market
- lowers the transaction costs of doing business.
 - is any arrangement that brings buyers and sellers together to exchange goods or services.
 - is an institution used exclusively by capitalist nations.
 - both *a* and *b*
 - both *b* and *c*
- 1-18 Which of the following is NOT one of features characterizing market structures?
- the number and size of firms
 - the likelihood of new firm's entering a market
 - the level of capital investment in research and development
 - the degree of product differentiation

- 1-19 In a perfectly competitive market,
- all firms produce and sell a standardized or undifferentiated product.
 - the output sold by a particular firm may be quite different from the output sold by the other firms in the market.
 - firms are price-setters.
 - it is difficult for new firms to enter the market due to barriers to entry.
- 1-20 Which of the following is NOT a characteristic of monopoly market structures?
- A single firm produces the entire market output.
 - The greater the ability of consumers to find imperfect substitutes for the firm's product the lower will be the firm's market power.
 - There are no barriers to entry.
 - No close substitutes for the product are available.
- 1-21 In markets characterized by monopolistic competition,
- a large number of relatively small firms sell a differentiated product.
 - a small number of relatively large firms sell a standardized product.
 - entry into the market is relatively easy so that profit in the long run is zero.
 - entry into the market is restricted so that profit may be positive in the long run.
 - both *a* and *c*
- 1-22 In markets characterized by oligopoly,
- a small number of relatively large firms sell a differentiated product.
 - a small number of relatively large firms sell a standardized product.
 - mutual interdependence of firms means that actions of any one firm in the market will have an effect on the sales of all other firms in the market.
 - entry into the market is restricted so that profit may be positive in the long run.
 - all of the above.
- 1-23 When a firm earns less than a normal profit,
- the revenues generated cannot pay all explicit costs and the opportunity cost of using owner-supplied resources.
 - accounting profit is negative.
 - economic profit is zero.
 - normal profit is negative.
 - all of the above
- 1-24 Economic profit is the best measure of a firm's performance because
- normal profit is generally too difficult to measure.
 - economic profit fully accounts for all sources of revenue.
 - only explicit costs influence managerial decisions since, in general, only explicit costs can be subtracted from revenue for the purposes of computing taxable profit.
 - the opportunity cost of using ALL resources is subtracted from total revenue.
- 1-25 A manager who does not see his or her goal as the maximization of profit
- may nevertheless maximize the value of the firm.
 - represents a principle-agent problem.
 - will likely be replaced either by shareholders or by a takeover of the firm.
 - both *b* and *c*

- 1-26 Which of the following developments encouraged globalization of markets during the 1990s?
- Eleven European countries began using the “euro” as a common currency for all transactions.
 - The ability to buy and sell goods on the Internet.
 - Numerous bilateral and multilateral trade agreements were reached.
 - both *a* and *c*
 - all of the above
- 1-27 Which of the following is an example of an implicit cost for a firm?
- the value of time worked by the owner.
 - any wages and salaries paid to employed.
 - forgone rent on property owned by firm.
 - both *a* and *c*
 - all of the above
- 1-28 St. Charles Hospital, located in an upper-income neighborhood of a large city, recently received a restored mansion as a gift from an appreciative patient. The board of directors decided to remodel the mansion and use it as recuperative quarters for patients willing to pay a premium for luxurious accommodations. The cost to the hospital of using the mansion includes
- nothing because it was a gift.
 - how much the hospital pays for upkeep--taxes, insurance, utilities, maintenance, etc.
 - how much the hospital would receive if it rented or sold the mansion.
 - both *b* and *c*
- 1-29 Until recently you worked as an accountant, earning \$30,000 annually. Then you inherited a piece of commercial real estate bringing in \$12,000 in rent annually. You decided to leave your job and operate a video rental store in the office space you inherited.
- At the end of the first year, your books showed total revenues of \$60,000 and total costs of \$30,000 for video purchases, utilities, taxes, and supplies. What is the total cost of operating the video store?
- \$60,000
 - \$42,000
 - \$30,000
 - \$12,000
 - none of the above

1-30 At the beginning of 2014, market analysts expect Atlantis Company, holder of a valuable patent, to earn the following stream of economic profits over the next five years. At the end of five years, Atlantis will lose its patent protection, and analysts expect economic profit to be zero after five years.

| <i>Year</i> | <i>Expected Economic Profit</i> |
|-------------|---------------------------------|
| 2014 | \$ 225,000 |
| 2015 | \$ 325,000 |
| 2016 | \$ 425,000 |
| 2017 | \$ 200,000 |
| 2018 | \$ 100,000 |

If investors apply an annual risk-adjusted discount rate of 15%, the value of Atlantis Company in 2014 is \$ _____, which is also the maximum price investors would be willing to pay for

Atlantis Company.

- a. \$726,916
- b. \$884,912
- c. \$1,275,000
- d. \$2,215,000
- e. \$3,824,318

An annual income statement from Quest Realty, Inc. is shown below:

| | |
|--|----------------------------|
| Revenues | _____ |
| Revenue from sales of goods and services | \$80,000,000 |
| Operating costs and expenses: | |
| Cost of products and services sold | \$30,000,000 |
| Selling expenses | \$3,000,000 |
| Administrative expense | \$4,000,000 |
| Total operating costs and expenses..... | <u>\$37,000,000</u> |
| Income from operations | \$43,000,000 |
| Interest expense (corporate bonds & loans)..... | \$300,000 |
| Non-recurring expense (Legal expenses/fines in settling a federal antitrust suit | \$200,000 |
| Income taxes | <u>\$700,000</u> |
| Net income | <u><u>\$41,800,000</u></u> |

During this year of operation, Quest Realty owned and occupied an office building in downtown Indianapolis. For this year, the building could have been leased to other businesses for \$2,000,000 in lease income. Quest Realty also owned undeveloped land valued at \$15,000,000. Owners of Quest Realty can earn a 14% rate of return annually on funds invested elsewhere.

- 1-31* Total explicit costs of using market-supplied resources for Quest Realty for this year are
- \$23,000,000
 - \$37,000,000
 - \$38,200,000
 - \$41,000,000
 - none of the above
- 1-32* Total implicit costs of using owner-supplied resources for Quest Realty for this year are
- \$4,100,000
 - \$19,000,000
 - \$38,200,000
 - \$41,000,000
 - none of the above
- 1-33* Total economic cost is
- \$17,000,000
 - \$38,200,000
 - \$41,000,000
 - \$42,300,000
- 1-34* Quest's accounting profit is
- \$4,100,000
 - \$9,360,000
 - \$38,200,000
 - \$42,300,000
 - none of the above
- 1-35* Economic profit is
- \$19,000,000
 - \$21,800,000
 - \$38,200,000
 - \$41,000,000
 - none of the above
- 1-36* Firms with market power may try to limit entry of rival firms in the long run by setting the price of their product below the level that maximizes profit. This kind of pricing behavior
- is OK in theory but would not be commonly practiced in the real world because no manager will ever price either above or below the profit-maximizing level.
 - represents a business practice or tactic because pricing decisions are routine decisions made by managers everyday.
 - should always be implemented in order maximize the firm's market share in both the short run and long run periods.
 - represents a strategic pricing decision because the manager is making the pricing decision with the goal of altering the behavior of rival firms to protect its profit in the long run.

- 1-37 Microeconomics
- is generally too complex and abstract to be of much use in making real-world business decisions.
 - studies the behavior of individual economic units or segments of the economy.
 - contributes to the understanding of ordinary business practices or tactics.
 - all of the above.
 - both *b* and *c*.
- 1-38 Which of the following is a common mistake managers make?
- Using marginal analysis to make output decisions.
 - Maximizing the value of the firm instead of maximizing the firm's profits.
 - Reducing price to increase the firm's share of total market sales.
 - Treating implicit opportunity costs as part of the total costs of using resources.
 - all of the above.
- 1-39 Which of the following is a common mistake managers make?
- Using marginal analysis to make output decisions.
 - Maximizing the value of the firm instead of maximizing the firm's profits.
 - Treating implicit opportunity costs as part of the total costs of using resources.
 - Increasing the rate of production in order to reduce unit costs of production.
 - all of the above.
- 1-40 Which of the following economic forces promote profitability in the long run?
- Existence of strong barriers to entry.
 - A large number of complementary products
 - A large number of close substitute products.
 - Both a and b
 - All of the above

Fill-in-the-Blank

- 1-1F During a year of operation, a firm collects \$450,000 in revenue and spends \$100,000 on labor expense, raw materials, rent, and utilities. The firm's owner has provided \$750,000 of her own money instead of investing the money and earning a 10% annual rate of return.
- The explicit opportunity costs of using market-supplied resources are \$_____.
The implicit opportunity costs of using owner-supplied resources are \$_____.
Total economic cost is \$_____.
 - The firm earns economic profit of \$_____.
 - The firm's accounting profit is \$_____.
 - If the owner could earn 15% annually on the money she has invested in the firm, the economic profit of the firm would be _____ (when revenue is \$450,000).
- 1-2F Surle Labs produces a single pharmaceutical drug, Zolax, for which the patent expires in four years. After the patent expires, Surle will earn no more economic profits after the fourth year passes because 1) dozens of firms will produce a generic version of Zolax that will drive the price of Zolax down to unit costs, and 2) it has invested nothing in research and development of new drugs and so will have no new sources of profit when the patent on Zolax expires in four years.

You work as a research assistant for an investment-banking firm that specializes in acquisitions of pharmaceutical firms. After examining the financial statements of Surle Labs, you predict that Surle will earn \$23 million in economic profit in EACH of the next four years, after which, it will earn zero economic profit forever. Your job is to advise a potential buyer of the drug firm on the market value of this firm. You believe 12 percent is the appropriate risk-adjusted discount rate for valuing Surle Labs.

- a. You estimate (i.e., compute) the value of Surle to be \$_____.
- b. If conditions in the market deteriorate making investment in drug firms more risky than you had originally anticipated, then you will need to use _____ (a lower, a higher, the same) risk-adjusted discount rate, which will _____ (decrease, increase, not affect) the value of Surle Labs.

1-3F Over the next three years, a firm is expected to earn economic profit of \$200,000 in the first year, \$300,000 in the second year, and \$250,000 in the third year. After the end of the third year, the firm goes out of business.

- a. If the risk-adjusted discount rate is 9 percent for each of the next three years, the value of the firm is \$_____. The firm can be sold today for a price of \$_____.
- b. If the risk-adjusted discount rate is 14 percent for each of the next three years, the value of the firm is \$_____. The firm can be sold today for a price of \$_____.

1-4F Fill in the blanks in the following questions. Some blanks require TWO words.

- a. _____ provides the foundation for understanding strategic decisions through the application of game theory.
- b. The everyday business decisions managers routinely make in running a business are frequently referred to as _____.
- c. Strategic decisions seek to alter the _____ of rival firms in order to protect the long-run _____ of the firm.
- d. When a firm earns zero economic profit, _____ equals total economic cost and _____ profit is positive.
- e. _____ profit best measures the performance of a firm because it considers all the costs to a firm of using resources.
- f. The value of a firm is _____ (larger, smaller) the higher is the risk premium used to compute the firm's value.

- g. In markets characterized by monopolistic competition, a large number of relatively small firms sell a _____ product.
- h. The value of a firm is _____ (larger, smaller) the lower is the risk premium used to compute the firm's value.
- i. The difference between accounting and economic profit is equal to the costs the firm incurs for using _____ resources.
- j. In corporations, the principals are the _____ and the agents are the _____.
- k. Agency problems for firms arise because of moral _____.
- l. Equity ownership is one of the most effective mechanisms for improving corporate _____.
- m. The value of the monitoring service provided by boards of directors is enhanced by appointing _____ and by linking directors' compensation to the _____ of the firm.
- n. Increasing output in order to decrease _____ is a common mistake managers make.
- o. The pursuit of market _____ is not usually going to maximize profit or the value of the firm.
- p. Maximizing profit margin _____ (is, is not) generally consistent with maximizing profit and the value of the firm.
- q. Managers that make pricing and output decisions with the goal of maximizing total revenue _____ (will, will not) be maximizing profit in most circumstances.