

Examination Questions and Answers

Answer true or false to the following questions.

1. Insider trading involves buying or selling securities based on knowledge not available to the general public. True or False
Answer: True
2. The primary reason the Sarbanes-Oxly Act of 2002 was passed was to eliminate insider trading. True or False
Answer: False
3. Federal antitrust laws exist to prevent individual corporations from assuming too much market power such that they can limit their output and raise prices without concern for any significant competitor reaction. True or False
Answer: True
4. A typical consent decree for firms involved in a merger requires the merging parties to divest overlapping businesses or to restrict anticompetitive practices. True or False
Answer: True
5. Foreign competitors are not relevant to antitrust regulators when trying to determine if a merger of two domestic firms would create excessive pricing power. True or False
Answer: False
6. The U.S. Securities Act of 1933 requires that all securities offered to the public must be registered with the government. True or False
Answer: True
7. Mergers and acquisitions are subject to federal regulation only. True or False
Answer: False
8. Whenever either the acquiring or the target firm's stock is publicly traded, the transaction is subject to the substantial reporting requirements of federal securities laws. True or False
Answer: True
9. Antitrust laws exist to prevent individual corporations from assuming too much market power such that they can limit their output and raise prices without concern for how their competitors might react. True or False
Answer: True
10. Unlike the Sherman Act, which contains criminal penalties, the Clayton Act is a civil statute and allows private parties injured by the antitrust violations to sue in federal court for a multiple of their actual damages. True or False
Answer: True
11. The Williams Act of 1968 consists of a series of amendments to the Securities Act of 1933, and it is intended to protect target firm shareholders from lightning fast takeovers in which they would not have enough time to adequately assess the value of an acquirer's offer. True or False
Answer: True
12. Whenever an investor acquires 5% or more of public company, it must disclose its intentions, the identities of all investors, their occupation, sources of financing, and the purpose of the acquisition. True or False
Answer: True

13. Whenever an investor accumulates 5% or more of a public company's stock, it must make a so-called 13(d) filing with the SEC. True or False
Answer: True
14. If an investor initiates a tender offer, it must make a 14(d) filing with the SEC. True or False
Answer: True
15. In the U.S., the Federal Trade Commission has the exclusive right to approve mergers and acquisitions if they are determined to be potentially anti-competitive. True or False
Answer: False
16. In the U.S., the Sherman Act makes illegal all contracts, combinations and conspiracies, which "unreasonably" restrain trade. The Act applies to all transactions and businesses engaging in both interstate and intrastate trade. True or False
Answer: False
17. Acquisitions involving companies of a certain size cannot be completed until certain information is supplied to the federal government and until a specific waiting period has elapsed. True or False
Answer: True
18. If the regulatory authorities suspect that a potential transaction may be anti-competitive, they will file a lawsuit to prevent completion of the transaction. True or False
Answer: True
19. Under a consent decree, the regulatory authorities agree to approve a proposed transaction if the parties involved agree to take certain actions following closing. True or False
Answer: True
20. Negotiated agreements between the buyer and seller rarely have a provision enabling the parties to back out, if the proposed transaction is challenged by the FTC or SEC. True or False
Answer: False
21. About 40% of all proposed M&A transactions are disallowed by the U.S. antitrust regulators, because they are believed to be anti-competitive. True or False
Answer: False
22. The U.S. antitrust regulators are likely to be most concerned about vertical mergers. True or False
Answer: False
23. The market share of the combined firms is rarely an important factor in determining whether a proposed transaction is likely to be considered anti-competitive. True or False
Answer: False
24. A heavily concentrated market is one in which a single or a few firms control a disproportionately large share of the total market. True or False
Answer: True
25. Market share is usually easy to define. True or False
Answer: False
26. U.S. antitrust regulators may approve a horizontal transaction even if it results in the combined firms having substantial market share if it can be shown that significant cost efficiencies would result. True or False
Answer: True

27. In addition to market share, antitrust regulators consider barriers to entry, the number of product substitutes, and the degree of product differentiation. True or False
Answer: True
28. Antitrust authorities may approve a proposed takeover even if the resulting combination will substantially increase market concentration if the target firm would go bankrupt if the takeover does not occur. True or False
Answer: True
29. Alliances and joint ventures are likely to receive more intensive scrutiny by regulators because of their tendency to be more anti-competitive than M&As. True or False
Answer: False
30. U.S. antitrust regulators in determining if a proposed business combination is likely to be anti-competitive consider only domestic competitors or foreign competitors with domestic operations. True or False
Answer: False
31. Antitrust regulators rarely consider the impact of a proposed takeover on product and technical innovation. True or False
Answer: False
32. There are no state statutes affecting proposed takeovers. True or False
Answer: False
33. States are not allowed to pass any laws that impose restrictions on interstate commerce or that conflict in any way with federal laws regulating interstate commerce. True or False
Answer: True
34. Some state anti-takeover laws contain so-called “fair price provisions” requiring that all target shareholders of a successful tender offer receive the same price as those who actually tendered their shares. True or False
Answer: True
35. State antitrust laws are usually quite similar to federal laws. True or False
Answer: True
36. Under federal law, states have the right to sue to block mergers they believe are anti-competitive, even if the FTC or SEC does not challenge them. True or False
Answer: True
37. Federal securities and antitrust laws are the only laws affecting corporate takeovers. Other laws usually have little impact. True or False
Answer: False
38. Employee benefit plans seldom create significant liabilities for buyers. True or False
Answer: False
39. Unlike the European Economic Union, a decision by U.S. antitrust regulators to block a transaction may be appealed in the courts. True or False
Answer: True
40. The primary shortcoming of industry concentration ratios is the frequent inability of antitrust regulators to define accurately what constitutes an industry, the failure to reflect ease of entry or exit, foreign competition, and the distribution of firm size. True or false
Answer: True

41. Antitrust regulators take into account the likelihood that a firm would fail and exit a market if it is not allowed to merge with another firm. True or False
Answer: True
42. Efficiencies rarely are considered by antitrust regulators in determining whether to accept or reject a proposed merger. True or False
Answer: False
43. The Herfindahl-Hirschman Index is a measure of industry concentration used by U.S. antitrust regulators in determining whether to accept or reject a proposed merger. True or False
Answer: True
44. Horizontal mergers are rarely rejected by antitrust regulators. True or False
Answer: False
45. The Sherman Act makes illegal all contracts, combinations, and conspiracies that “unreasonably” restrain trade. True or False
Answer: True
46. The requirements to be listed on most major public exchanges far exceed the auditor independence requirements of the Sarbanes-Oxley Act. True or False
Answer: True
47. U.S. and European Union antitrust law are virtually identical. True or False
Answer: False
48. Transactions involving firms in different countries are complicated by having to deal with multiple regulatory jurisdictions in specific countries or regions. True or False
Answer: True
49. Antitakeover laws do not exist at the state level. True or False
Answer: False
50. Environmental laws in the European Union are generally more restrictive than in the U.S. True or False
Answer: True

Multiple Choice: Circle only one of the alternatives.

1. In determining whether a proposed transaction is anti-competitive, U.S. regulators look at all of the following except for
- a. Market share of the combined businesses
 - b. Potential for price fixing
 - c. Ease of new competitors to enter the market
 - d. Potential for job loss among target firm’s employees
 - e. The potential for the target firm to fail without the takeover
- Answer: D
2. Which of the following is among the least regulated industries in the U.S.?
- a. Defenses
 - b. Communications
 - c. Retailing
 - d. Public utilities

e. Banking

Answer: C

3. All of the following are true of the Williams Act except for

- a. Consists of a series of amendments to the 1934 Securities Exchange Act
- b. Facilitates rapid takeovers over target companies
- c. Requires investors acquiring 5% or more of a public company to file a 13(d) with the SEC
- d. Firms undertaking tender offers are required to file a 14(d)-1 with the SEC
- e. Acquiring firms initiating tender offers must disclose their intentions and business plans

Answer: B

4. The Securities Act of 1933 requires the registration of all securities issued to the public. Such registration requires which of the following disclosures:

- a. Description of the firm's properties and business
- b. Description of the securities
- c. Information about management
- d. Financial statements audited by public accountants
- e. All of the above.

Answer: E

5. All of the following is true about proxy contests except for

- a. Proxy materials must be filed with the SEC immediately following their distribution to investors
- b. The names and interests of all parties to the proxy contest must be disclosed in the proxy materials
- c. Proxy materials may be distributed by firms seeking to change the composition of a target firm's board of directors
- d. Proxy materials may be distributed by the target firm seeking to influence how their shareholders vote on a particular proposal
- e. Target firm proxy materials must be filed with the SEC.

Answer: A

6. The purpose of the 1968 Williams Act was to

- a. Give target firm shareholders time to review takeover proposals
- b. Prosecute target firm shareholders who misuse information
- c. Protect target firm employees from layoffs
- d. Prevent tender offers
- e. Promote tender offers

Answer: A

7. Which of the following represent important shortcomings of using industry concentration ratios to determine whether the combination of certain firms will result in an increase in market power?

- a. Frequent inability to define what constitutes an industry
- b. Failure to measure ease of entry or exit for other firms
- c. Failure to account for foreign competition
- d. Failure to account properly for the distribution of firms of different sizes
- e. All of the above

Answer: E

8. In a tender offer, which of the following is true?

- a. Both acquiring and target firms are required to disclose their intentions to the SEC
 - b. The target's management cannot advise its shareholders how to respond to a tender offer until has disclosed certain information to the SEC
 - c. Information must be disclosed only to the SEC and not to the exchanges on which the target's shares are traded
 - d. A and B
 - e. A, B, and C
- Answer: D

9. Which of the following are true about the Sherman Antitrust Act?

- a. Prohibits business combinations that result in monopolies.
- b. Prohibits business combinations resulting in a significant increase in the pricing power of a single firm.
- c. Makes illegal all contracts unreasonably restraining trade.
- d. A and C only
- e. A, B, and C

Answer: E

10. All of the following are true of the Hart-Scott-Rodino Antitrust Improvements Act except for

- a. Acquisitions involving firms of a certain size cannot be completed until certain information is supplied to the FTC
- b. Only the acquiring firm is required to file with the FTC
- c. An acquiring firm may agree to divest certain businesses following the completion of a transaction in order to get regulatory approval.
- d. The Act is intended to give regulators time to determine whether the proposed combination is anti-competitive.
- e. The FTC may file a lawsuit to block a proposed transaction

Answer: B

11. All of the following are true of antitrust lawsuits except for

- a. The FTC files lawsuits in most cases they review.
- b. The FTC reviews complaints that have been recommended by its staff and approved by the FTC
- c. FTC guidelines commit the FTC to make a final decision within 13 months of a complaint
- d. As an alternative to litigation, a company may seek to negotiate a voluntary settlement of its differences with the FTC.
- e. FTC decisions can be appealed in the federal circuit courts.

Answer: A

12. All of the following are true about a consent decree except for

- a. Requires the merging parties to divest overlapping businesses
- b. An acquirer may seek to negotiate a consent decree in advance of consummating a deal.
- c. In the absent of a consent decree, a buyer usually makes the receipt of regulatory approval necessary to closing the deal.
- d. FTC studies indicate that consent decrees have historically been largely ineffectual in promoting competition
- e. Consent decrees tend to be most effective in promoting competition if the divestitures made by the acquiring firms are to competitors.

Answer: D

13. U.S. antitrust regulators are most concerned about what types of transaction?

- a. Vertical mergers
- b. Horizontal mergers
- c. Alliances
- d. Joint ventures
- e. Minority investments

Answer: B

14. Which of the following are used by antitrust regulators to determine whether a proposed transaction will be anti-competitive?

- a. Market share
- b. Barriers to entry
- c. Number of substitute products
- d. A and B only
- e. A, B, and C

Answer: E

15. European antitrust policies differ from those in the U.S. in what important way?

- a. They focus on the impact on competitors
- b. They focus on the impact on consumers
- c. They focus on both consumers and competitors
- d. They focus on suppliers
- e. They focus on consumers, suppliers, and competitors

Answer: A

16. Which other types of legislation can have a significant impact on a proposed transaction?

- a. State anti-takeover laws
- b. State antitrust laws
- c. Federal benefits laws
- d. Federal and state environmental laws
- e. All of the above

Answer: E

17. State “blue sky” laws are designed to

- a. Allow states to block M&As deemed as anticompetitive
- b. Protect individual investors from investing in fraudulent securities’ offerings
- c. Restrict foreign investment in individual states
- d. Protect workers’ pensions
- e. Prevent premature announcement of M&As

Answer: B

18. All of the following are examples of antitakeover provisions commonly found in state statutes except for

- a. Fair price provisions
- b. Business combination provisions
- c. Cash-out provisions
- d. Short-form merger provisions
- e. Share control provisions

Answer: D

19. A collaborative arrangement is a term used by regulators to describe agreements among competitors for all of the following except for
- a. Joint ventures
 - b. Strategic alliances
 - c. Mergers and acquisitions
 - d. A & B only
 - e. A & C only
- Answer: C
20. Vertical mergers are likely to be challenged by antitrust regulators for all of the following reasons except for
- a. An acquisition by a supplier of a customer prevents the supplier's competitors from having access to the customer.
 - b. The relevant market has few customers and is highly concentrated
 - c. The relevant market has many suppliers.
 - d. The acquisition by a customer of a supplier could become a concern if it prevents the customer's competitors from having access to the supplier.
 - e. The suppliers' products are critical to a competitor's operations
- Answer: C
21. All of the following are true of the U.S. Foreign Corrupt Practices Act except for which of the following:
- a. The U.S. law carries anti-bribery limitations beyond U.S. political boundaries to within the domestic boundaries of foreign states.
 - b. This Act prohibits individuals, firms, and foreign subsidiaries of U.S. firms from paying anything of value to foreign government officials in exchange for obtaining new business or retaining existing contracts.
 - c. The Act permits so-called facilitation payments to foreign government officials if relatively small amounts of money are required to expedite goods through foreign custom inspections, gain approvals for exports, obtain speedy passport approvals, and related considerations.
 - d. The payments described in c above are considered legal according to U.S. law and the laws of countries in which such payments are considered routine
 - e. Bribery is necessary if a U.S. company is to win a contract that comprises more than 10% of its annual sales.
- Answer: E
22. Foreign direct investment in U.S. companies that may threaten national security is regulated by which of the following:
- a. Hart-Scott-Rodino Antitrust Improvements Act
 - b. Defense Production Act
 - c. Sherman Act
 - d. Federal Trade Commission Act
 - e. Clayton Act
- Answer: B
23. A diligent buyer must ensure that the target is in compliance with the labyrinth of labor and benefit laws, including those covering all of the following except for
- a. Sexual harassment
 - b. Age discrimination,

- c. National security
- d. Drug testing
- e. Wage and hour laws.

Answer: C

24. All of the following factors are considered by U.S. antitrust regulators except for

- a. Market share
- b. Potential adverse competitive effects
- c. Barriers to entry
- d. Purchase price paid for the target firm
- e. Efficiencies created by the combination

Answer: D

25. The Sarbanes-Oxley bill is intended to achieve which of the following:

- a. Auditor independence
- b. Corporate responsibility
- c. Improved financial disclosure
- d. Increased penalties for fraudulent behavior
- e. All of the above

Answer: E

Case Study Short Essay Examination Questions

Regulatory Challenges in Cross-Border Mergers

Key Points

Such mergers entail substantially greater regulatory challenges than domestic M&As.

Realizing potential synergies may be limited by failure to receive support from regulatory agencies in the countries in which the acquirer and target firms have operations.

European Commission antitrust regulators formally blocked the attempted merger between the NYSE Group and Deutsche Borse on February 4, 2012, nearly one year after the exchanges first announced the deal. The stumbling block appeared to be the inability of the parties involved to reach agreement on divesting their derivatives trading markets. The European regulators argued that the proposed merger would result in the combined exchanges obtaining excessive pricing power without the sale of the derivatives trading markets. The disagreement focused on whether the exchange was viewed as primarily a European market or a global market.

The NYSE Group is the world's largest stock and derivatives exchange, as measured by market capitalization. A product of the combination of the New York Stock Exchange and Euronext NV (the European exchange operator), the NYSE Group reversed the three-year slide in both its U.S. and European market share in 2011. The slight improvement in market share was due more to an increase in technology spending than any change in the regulatory environment. The key to unlocking the full potential of the international exchange remained the willingness of countries to harmonize the international regulatory environment for trading stocks and derivatives.

Valued at \$11 billion, the mid-2007 merger created the first transatlantic stock and derivatives market. Organizationally, the NYSE Group operates as a holding company, with its U.S. and European operations run largely independently. The combined firms trade stocks and derivatives through the New York Stock Exchange, on the electronic Euronext Liffe Exchange in London, and on the stock exchanges in Paris, Lisbon, Brussels, and Amsterdam.

In recent years, most of the world's major exchanges have gone public and pursued acquisitions. Before this 2007 deal, the NYSE merged with electronic trading firm Archipelago Holdings, while NASDAQ Stock Market Inc. acquired the electronic trading unit of rival Instinet. This consolidation is being driven by declining trading fees, improving trading information technology, and relaxed cross-border restrictions on capital flows and in part by increased regulation in the United States. U.S. regulation, driven by Sarbanes-Oxley, contributed to the transfer of new listings (IPOs) overseas. The strategy chosen by U.S. exchanges for recapturing lost business is to follow these new listings overseas.

Larger companies that operate across multiple continents also promise to attract more investors to trading in specific stocks and derivatives contracts, which could lead to cheaper, faster, and easier trading. As exchange operators become larger, they can more easily cut operating and processing costs by eliminating redundant or overlapping staff and facilities and, in theory, pass the savings along to investors. Moreover, by attracting more buyers and sellers, the gap between prices at which investors are willing to buy and sell any given stock (i.e., the bid and ask prices) should narrow. The presence of more traders means more people are bidding to buy and sell any given stock. This results in prices that more accurately reflect the true underlying value of the security because of more competition. The cross-border mergers also should make it easier and cheaper for individual investors to buy and sell foreign shares.

Before these benefits can be fully realized, numerous regulatory hurdles have to be overcome. Even if exchanges merge, they must still abide by local government rules when trading in the shares of a particular company, depending on where the company is listed. Companies are not eager to list on multiple exchanges worldwide because that subjects them to many countries' securities regulations and a bookkeeping nightmare. At the local level, little has changed in how markets are regulated. European companies list their shares on exchanges owned by the NYSE Group. These exchanges still are overseen by individual national regulators. In the United States, the SEC still oversees the NYSE but does not have a direct say over Europe, except in that it would oversee the parent company, the NYSE Group, since it is headquartered in New York. EU member states continue to set their own rules for clearing and settlement of trades. If the NYSE and Euronext are to achieve a more unified and seamless trading system, regulators must reach agreement on a common set of rules. Achieving this goal seems to remain well in the future. Consequently, it may be years before the anticipated synergies are realized.

Discussion Questions:

1. What are the key challenges facing regulators resulting from the merger of financial exchanges in different countries? How do you see these challenges being resolved?

Answer: Despite the merger, the exchanges are still subject to local government securities' regulations when trading in a particular company's shares. The rules that apply depend on where the company is listed. For example, EU regulators will still have authority over Euronext and the SEC will continue to regulate the NYSE. Moreover, EU member states will continue to set their own rules for clearing and settlement of trades. Assuming the rules are compatible across countries, the process should be relatively transparent for individual trades. However, the various regulators will have to learn to closely coordinate their regulations if this is to happen. This coordination may take some time.

2. In what way are these regulatory issues similar or different from those confronting the SEC and state regulators and the European Union and individual country regulators?

Answer: In the U.S., state securities' laws can be more onerous than federal laws. Moreover, they may differ from state to state. Consequently, an issuer seeking exemption from federal registration will not be exempt from all relevant registration requirements until a state-by-state exemption has been received from all states in which the issuer and offerees reside. State restrictions can be more onerous than federal ones. Compliance with all applicable regulations (including federal) can become a major challenge. The same logic applies to the relationship between the EU and its member countries.

3. Who should or could regulate global financial markets?

Answer: The potential for rivalry exists among regulatory bodies within a country. This potential often is compounded when markets cross national boundaries as nationalistic concerns emerge. In the abstract, it may seem that a global body needs to be formed to regulate such markets. However, the more likely case is that international protocols will be established among countries' regulatory bodies as the issues arise. If the perceived benefits of the merging of the exchanges are accepted by the various national regulatory agencies, accommodations will be made.

4. In your opinion, will the merging of financial exchanges increase or decrease international financial stability?

Answer: Disparate regulations and trading expenses inhibit the free flow of capital internationally. To the extent the merging of the exchanges harmonize applicable national regulations and reduce transactions costs, capital is likely to flow more easily across borders and contribute to the reduction in the cost of capital in developed countries for multinational firms. The easier flow of capital would pressure governments to better coordinate their monetary and fiscal policy, thereby contributing to global financial stability. Historically, developed countries have made great strides in coordinating monetary policies through the so-called "group of eight" country meetings.

The Importance of Timing: The Express Scripts and Medco Merger

Key Points

- While important, industry concentration is only one of many factors antitrust regulators use in investigating proposed M&As.
 - The timing of the proposed Express Scripts–Medco merger could have been the determining factor in its receiving regulatory approval.
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Following their rejection of two of the largest M&As announced in 2011 over concern about increased industry concentration, U.S. antitrust regulators approved on April 2, 2012, the proposed takeover of pharmacy benefits manager Medco Health Solutions Inc. (Medco) by Express Scripts Inc., despite similar misgivings by critics. Pharmacy benefit managers (PBMs) are third-party administrators of prescription drug programs responsible for processing and paying prescription drug claims. More than 210 million Americans receive drug benefits through PBMs. Their customers include participants in plans offered by Fortune 500 employers, Medicare Part D participants, and the Federal Employees Health Benefits Program.

The \$29.1 billion Express Scripts–Medco merger created the nation's largest pharmacy benefits manager administering drug coverage for employers and insurers through its mail order operations, which could exert substantial influence on both how and where patients buy their prescription drugs. The combined firms will be called Express Scripts Holding Company and will have \$91 billion in annual revenue and \$2.5 billion in after-tax profits. Including debt, the deal is valued at \$34.3 billion. Together the two firms controlled 34% of the prescription drug market in the first quarter of 2012, processing more than 1.4 billion prescriptions; CVS-Caremark is the next largest, with 17% market share. The combined firms also will represent the nation's third-largest pharmacy operator, trailing only CVS Caremark and Walgreen Co.

The Federal Trade Commission's approval followed an intensive eight-month investigation and did not include any of the customary structural or behavioral remedies that accompany approval of mergers resulting in substantial increases in industry concentration. FTC antitrust regulators voting for approval argued that the Express Scripts–Medco deal did not present significant anticompetitive concerns, since the PBM market is more susceptible to new entrants and current competitors provide customers significant alternatives. Furthermore, the FTC concluded that Express Scripts and Medco did not represent particularly

close competitors and that the merged firms would not result in monopolistic pricing power. In addition, approval may have reflected the belief that the merged firms could help reduce escalating U.S. medical costs because of their greater leverage in negotiating drug prices with manufacturers and their ability to cut operating expenses by eliminating overlapping mail-handling operations. The FTC investigation also found that most of the large private health insurance plans offer PBM services, as do other private operators. Big private employers are the major customers of PBMs and have proven to be willing to switch PBMs if another has a better offer. For example, Medco lost one-third of its business during 2011, primarily to CVS Caremark.

In addition, to CVS Caremark Corp, PBM competitors include UnitedHealth, which has emerged as a recent entrant into the business. Having been one of Medco's largest customers, UnitedHealth did not renew its contract, which expired in 2012, with Medco, which covered more than 20 million of its pharmacy benefit customers. Other competitors include Humana, Aetna, and Cigna, all of which have their own PBM services competing for managing drug benefits covered under Medicare Part D. With the loss of UnitedHealth's business, Express Script-Medco's share dropped from 34% in early 2012 to 29% at the end of that year.

Critics of the proposed merger argued that smaller PBM firms often do not have the bargaining power and data-handling capabilities of their larger competitors. Moreover, benefit managers can steer health plan participants to their own pharmacy-fulfillment services, and employers have little choice but to agree, due to their limited leverage. Opponents argue that the combination will reduce competition, ultimately raising drug prices. As the combined firms push for greater use of mail-ordering prescriptions instead of local pharmacies, smaller pharmacies could be driven out of business, for mail-order delivery is far cheaper for both PBMs and patients than dispensing drugs at a store.

Discussion Questions:

1. Why do you believe the U.S. antitrust regulators approved the merger despite the large increase in industry concentration?

Answer: While market concentration often is a necessary condition for firms to engage in monopolistic pricing practices, it is by no means sufficient. Highly concentrated industries such as autos, airlines, steel, and aluminum often are highly price competitive due to the commodity-like nature of their products and the comparatively low cost to customers of substituting one product for another. Furthermore, pharmacy benefit managers compete largely on price and service since what they offer their clients is largely a commodity. Even though the pharmacy benefit management market is highly concentrated with the top four competitors accounting for well-over one-half of the market, customers find it relatively easy to switch PBMs. This is evidenced by the ability and willingness of customers to move to more competitively priced plans. These low "switching costs" and the apparent absence of highly differentiated products make the PBM market highly competitive.

2. Did the timing of the proposed merger between Express Scripts and Medco help or hurt the firms in obtain regulatory approval? Be specific.

Answer: Escalating healthcare expenses represent an increasingly burdensome expense for both public (e.g., Medicare and Medicaid) and private insurers in the U.S. PBMs offer a potential solution to the perceived mismatch between the bargaining power of healthcare vendors (drug manufacturers) and providers (drug store chains) and their customers. In some countries, the government represents the sole buyer of medical services and products such as pharmaceuticals. In the U.S., PBMs potentially offer leverage in bargaining with manufacturers and drugstore chains and also the potential for greater operational efficiencies than what often is found in governmental agencies.

3. Speculate as to how the Express Scripts-Medco merger might influence the decisions of their competitors to merge? Be specific.

Answer: The approval of regulators of this transaction could serve as a “green light” for other PBMs to feel that they would also receive merger approval if they were to pursue this strategy. In addition, increasing scale may be a requirement for future success as a PBM. Scale is necessary to achieve negotiating leverage with drug manufacturers, to provide customer support services, and to finance and operate geographically dispersed mail handling operations. Consequently, increased consolidation through M&A may be a natural result of this regulatory ruling.

AT&T/T-MOBILE DEAL SHORT-CIRCUITED BY REGULATORS

Key Points

Regulators often consider market concentration when determining whether an M&A will drive up prices and reduce consumer choice and product/service quality.

What is an acceptable level of concentration often is difficult to determine.

Concentration may be an outgrowth of the high capital requirements of the industry.

Attempts to limit concentration may actually work to the detriment of some consumers.

United States antitrust regulators have moved aggressively in recent years to block horizontal mergers (i.e., those involving direct or potential competitors) while being more lenient on vertical deals (i.e., those in which a firm buys a supplier or distributor). These actions foreshadowed the likely outcome of the deal proposed by telecommunications giant AT&T to acquire T-Mobile for \$39 billion in cash in early 2011. Despite the unfavorable regulatory environment for horizontal deals, AT&T expressed confidence that it could get approval for the deal when it accepted a sizeable termination fee as part of the agreement if it did not complete the transaction by March 2012. However, the deal would never be completed, as U.S. antitrust regulators made it clear that a tie-up between number two, AT&T (behind Verizon), and number four, T-Mobile (behind Sprint), would not be permitted.

On December 20, 2011, AT&T announced that it would cease its nine-month fight to acquire T-Mobile. AT&T was forced to pay T-Mobile’s parent, Deutsche Telekom, \$3 billion in cash and a portion of its wireless spectrum (i.e., cellular airwaves) valued at as much as \$1 billion. T-Mobile and AT&T did agree to enter into a seven-year roaming agreement¹ that could cost AT&T another \$1 billion. The announcement came shortly after AT&T had ceased efforts to fight the Justice Department’s lawsuit filed in August 2011 to block the merger. The Justice Department would not accept any combination of divestitures or other changes to the deal, arguing that the merger would raise prices to consumers and reduce both choice and service quality. Instead, the Justice Department opted to keep a “strong” fourth competitor rather than allow increased industry concentration.

But T-Mobile’s long-term viability was in doubt. The firm’s parent, Deutsche Telekom, had made it clear that it wants to exit the mature U.S. market and that it has no intention of investing in a new high-speed network. T-Mobile is the only national carrier that does not currently have its own next-generation high-speed network. Because it is smaller and weaker than the other carriers, it does not have the cash or the marketing clout with handset vendors to offer exclusive, high-end smartphones to attract new

¹ Roaming agreements are arrangements between wireless companies to provide wireless service to each other’s subscribers in areas where a carrier’s coverage is spotty.

customers. While competitors Verizon and AT&T gained new customers, T-Mobile lost 90,000 customers during 2011.

In response to these developments, T-Mobile announced a merger with its smaller rival MetroPCS on October 3, 2012, creating the potential for a stronger competitor to Verizon and AT&T and solving regulators' concerns about increased concentration. However, it creates another issue by reducing competition in the prepaid cell phone segment. MetroPCS's low-cost, no-contract data plans and cheaper phones brought cellphones and mobile Internet to millions of Americans who could not afford major-carrier contracts. While T-Mobile announced the continuation of prepaid service, it has an incentive not to make it so attractive as to cause its own more profitable contract customers to shift to the prepaid service as their contracts expire. While T-Mobile also announced plans to develop a new high-speed network, it will be late to the game.

Some industries are more prone to increasing concentration because of their high capital needs. Only the largest and most financially viable can support the capital outlays required to support national telecom networks. While the U.S. Justice Department has sent a clear signal that mergers in highly concentrated industries are likely to be disallowed, it is probable that the U.S. cellular industry will become increasingly concentrated despite disallowing the AT&T/T-Mobile merger due to the highly capital-intensive nature of the business.

Justice Department Requires VeriFone Systems to Sell Assets before Approving Hypercom Acquisition

Key Points:

- Asset sales commonly are used by regulators to thwart the potential build-up of market power resulting from a merger or acquisition.
 - In such situations, defining the appropriate market served by the merged firms is crucial to identifying current and potential competitors.
-

In late 2011, VeriFone Systems (VeriFone) reached a settlement with the U.S. Justice Department to acquire competitor Hypercom Corp on the condition it sold Hypercom's U.S. point-of-sale terminal business. Business use point-of-sale terminals are used by retailers to accept electronic payments such as credit and debit cards.

The Justice Department had sued to block the \$485 million deal on concerns that the combination would limit competition in the market for retail checkout terminals. The asset sale is intended to create a significant independent competitor in the U.S. The agreement stipulates that private equity firm Gores Group LLC will buy the terminals business.

San Jose, California-based VeriFone is the second largest maker of electronic payment equipment in the U.S. and Hypercom, based in Scottsdale, Arizona, is number three. Together, the firms control more than 60 percent of the U.S. market for terminals used by retailers. Ingenico SA, based in France, is the largest maker of card-payment terminals. The Justice Department had blocked a previous attempt to sell Hypercom's U.S. point-of-sale business to rival Ingenico, saying that it would have increased concentration and undermined competition.

VeriFone will retain Hypercom's point-of-sale equipment business outside the U.S. The acquisition will enable VeriFone to expand in the emerging market for payments made via mobile phones by giving it a larger international presence in retail stores and the opportunity to install more terminals capable of accepting mobile phone payments abroad.

Discussion Questions

1. Do you believe requiring consent decrees that oblige the acquiring firm to dispose of certain target company assets is an abuse of government power? Why or why not?

U.S. antitrust regulators are required to promote the smooth functioning of interstate commerce. The sale of assets to create a viable competitor to the combined firms requesting regulatory approval is a fair means of preserving competition in certain markets. It is fair in that the firms requesting approval do not have to accept the asset sale and can choose not to combine. The challenge for the regulators is to properly define the served market by the combined firms and in turn the current and potential competitors.

2. What alternative actions could the government take to limit market power resulting from a business combination?

Answer: Regulators could require the combined firms to submit to price controls or to subject price increases to regulatory approval. However, this is likely to slow the ability of management to make good business decisions and introduces an element of uncertainty into any business decision in that the price change may not be approved.

The Legacy of GE's Aborted Attempt to Merge with Honeywell

Many observers anticipated significant regulatory review because of the size of the transaction and the increase in concentration it would create in the markets served by the two firms. Most believed, however, that, after making some concessions to regulatory authorities, the transaction would be approved, due to its perceived benefits. Although the pundits were indeed correct in noting that it would receive close scrutiny, they were completely caught off guard by divergent approaches taken by the U.S. and EU antitrust authorities. U.S regulators ruled that the merger should be approved because of its potential benefits to customers. In marked contrast, EU regulators ruled against the transaction based on its perceived negative impact on competitors.

Honeywell's avionics and engines unit would add significant strength to GE's jet engine business. The deal would add about 10 cents to GE's 2001 earnings and could eventually result in \$1.5 billion in annual cost savings. The purchase also would enable GE to continue its shift away from manufacturing and into services, which already constituted 70 percent of its revenues in 2000.² The best fit is clearly in the combination of the two firms' aerospace businesses. Revenues from these two businesses alone would total \$22 billion, combining Honeywell's strength in jet engines and cockpit avionics with GE's substantial business in larger jet engines. As the largest supplier in the aerospace industry, GE could offer airplane manufacturers "one-stop shopping" for everything from engines to complex software systems by cross-selling each other's products to their biggest customers.

Honeywell had been on the block for a number of months before the deal was consummated with GE. Its merger with Allied Signal had not been going well and contributed to deteriorating earnings and a much lower stock price. Honeywell's shares had declined in price by more than 40 percent since its acquisition of Allied Signal. While the euphoria surrounding the deal in late 2000 lingered into the early months of 2001, rumblings from the European regulators began to create an uneasy feeling among GE's and Honeywell's management.

Mario Monti, the European competition commissioner at that time, expressed concern about possible "conglomerate effects" or the total influence a combined GE and Honeywell would wield in the aircraft industry. He was referring to GE's perceived ability to expand its influence in the aerospace industry through service initiatives. GE's services offerings help differentiate it from others at a time when the prices of many industrial parts are under pressure from increased competition, including low-cost manufacturers overseas. In a world in which manufactured products are becoming increasingly commodity-like, the true winners are those able to differentiate their product offering. GE and Honeywell's European competitors complained to the EU regulatory commission that GE's extensive services offering would give it entrée into many more points of contact among airplane manufacturers, from communications systems to the expanded

² *BusinessWeek*, 2000b

line of spare parts GE would be able to supply. This so-called range effect or portfolio power is a relatively new legal doctrine that has not been tested in transactions of this size.³

On May 3, 2001, the U.S. Department of Justice approved the buyout after the companies agreed to sell Honeywell's helicopter engine unit and take other steps to protect competition. The U.S. regulatory authorities believed that the combined companies could sell more products to more customers and therefore could realize improved efficiencies, although it would not hold a dominant market share in any particular market. Thus, customers would benefit from GE's greater range of products and possibly lower prices, but they still could shop elsewhere if they chose. The U.S. regulators expressed little concern that bundling of products and services could hurt customers, since buyers can choose from among a relative handful of viable suppliers.

To understand the European position, it is necessary to comprehend the nature of competition in the European Union. France, Germany, and Spain spent billions subsidizing their aerospace industry over the years. The GE–Honeywell deal has been attacked by their European rivals from Rolls-Royce and Lufthansa to French avionics manufacturer Thales. Although the European Union imported much of its antitrust law from the United States, the antitrust law doctrine evolved in fundamentally different ways. In Europe, the main goal of antitrust law is to guarantee that all companies be able to compete on an equal playing field. The implication is that the European Union is just as concerned about how a transaction affects rivals as it is consumers. Complaints from competitors are taken more seriously in Europe, whereas in the United States it is the impact on consumers that constitutes the litmus test. Europeans accepted the legal concept of "portfolio power," which argues that a firm may achieve an unfair advantage over its competitors by bundling goods and services. Also, in Europe, the European Commission's Merger Task Force can prevent a merger without taking a company to court.

The EU authorities continued to balk at approving the transaction without major concessions from the participants—concessions that GE believed would render the deal unattractive. On June 15, 2001, GE submitted its final offer to the EU regulators in a last-ditch attempt to breathe life into the moribund deal. GE knew that if it walked away, it could continue as it had before the deal was struck, secure in the knowledge that its current portfolio of businesses offered substantial revenue growth or profit potential. Honeywell clearly would fuel such growth, but it made sense to GE's management and shareholders only if it would be allowed to realize potential synergies between the GE and Honeywell businesses.

GE said it was willing to divest Honeywell units with annual revenue of \$2.2 billion, including regional jet engines, air-turbine starters, and other aerospace products. Anything more would jeopardize the rationale for the deal. Specifically, GE was unwilling to agree not to bundle (i.e., sell a package of components and services at a single price) its products and services when selling to customers. Another stumbling block was the GE Capital Aviation Services unit, the airplane-financing arm of GE Capital. The EU Competition Commission argued that that this unit would use its influence as one of the world's largest purchasers of airplanes to pressure airplane manufacturers into using GE products. The commission seemed to ignore that GE had only an 8 percent share of the global airplane leasing market and would therefore seemingly lack the market power the commission believed it could exert.

On July 4, 2001, the European Union vetoed the GE purchase of Honeywell, marking it the first time a proposed merger between two U.S. companies has been blocked solely by European regulators. Having received U.S. regulatory approval, GE could ignore the EU decision and proceed with the merger as long as it would be willing to forego sales in Europe. GE decided not to appeal the decision to the EU Court of First Instance (the second highest court in the European Union), knowing that it could take years to resolve the decision, and withdrew its offer to merge with Honeywell.

On December 15, 2005, a European court upheld the European regulator's decision to block the transaction, although the ruling partly vindicated GE's position. The European Court of First Instance said regulators were in error in assuming without sufficient evidence that a combined GE–Honeywell could crush competition in several markets. However, the court demonstrated that regulators would have to

³ Murray, 2001

provide data to support either their approval or rejection of mergers by ruling on July 18, 2006, that regulators erred in approving the combination of Sony BMG in 2004. In this instance, regulators failed to provide sufficient data to document their decision. These decisions affirm that the European Union needs strong economic justification to overrule cross-border deals. GE and Honeywell, in filing the suit, said that their appeal had been made to clarify European rules with an eye toward future deals, since they had no desire to resurrect the deal.

In the wake of these court rulings and in an effort to avoid similar situations in other geographic regions, coordination among antitrust regulatory authorities in different countries has improved. For example, in mid-2010, the U.S. Federal Trade Commission reached a consent decree with scientific instrument manufacturer Agilent in approving its acquisition of Varian, in which Agilent agreed to divest certain overlapping product lines. While both firms were based in California, each has extensive foreign operations, which necessitated gaining the approval of multiple regulators. Throughout the investigation, FTC staff coordinated enforcement efforts with the staffs of regulators in the European Union, Australia, and Japan. The cooperation was conducted under the auspices of certain bilateral cooperation agreements, the OECD Recommendation on Cooperation among its members, and the European Union Best Practices on Cooperation in Merger Investigation protocol.

Discussion Questions

1. What are the important philosophical differences between U.S. and EU antitrust regulators? Explain the logic underlying these differences? To what extent are these differences influenced by political rather than economic considerations? Explain your answer.

Answer: In Europe, the main goal of antitrust policy is to ensure that all companies are able to compete on a level playing field. The impact of a merger on competitors is just as important to regulators as its impact on consumers. Consequently, complaints about impending mergers from competitors are given much more credence in Europe than in the U.S. where the impact on consumers is of paramount importance. In the U.S., regulators often approve M&As if the resulting company is likely to be more efficient and if there is a reasonable likelihood that the resulting lower costs will result in lower prices to consumers. In Europe, regulators believe that maintaining the viability of competitors is more likely to ensure that consumers pay “fair” prices. Europeans are less willing to tolerate increasing unemployment that may result in the short-run due to a merger than in the U.S. Therefore, political considerations are more likely to override economic factors.

2. This is the first time that a foreign regulatory body has prevented a deal involving U.S. firms only from occurring. What do you think are the long-term implications, if any, of this precedent?

Answer: Concerns about not receiving regulatory approval may discourage firms from engaging in cross-border transactions involving firms with European operations. Consequently, the potential benefits of improved efficiencies resulting from such mergers may not be realized.

3. What were the major obstacles between GE and the EU regulators? Why do you think these were obstacles? Do you think the EU regulators were justified in their position? Why/why not?

Answer: European regulators have accepted a legal concept called “portfolio power” which argues that a firm may achieve an unfair advantage over its competitors by bundling goods and services. GE viewed bundling of services as a major source of future revenue, and it was unwilling to give up this strategy. Moreover, the regulators expressed concern that GE Capital Services, its airplane financing business, would use its influence as one of the world’s largest purchasers of airplanes to pressure airplane manufacturers into using GE products. It is unclear if the regulators really believed their arguments or whether they were simply excuses for protecting GE’s competitors in Europe. It may be a combination of both factors.

4. Do you think that competitors are using antitrust to their advantage? Explain your answer.

Answer: Since EU regulators have made it clear that protecting European firms from “unfair” competition is a major priority, it is likely that competitors would leverage this doctrine to their advantage. The EU antitrust regulators thus create another barrier to entry for those wishing to compete in Western Europe. This barrier is particularly formidable since rulings by EU regulators cannot, at this time, be appealed in court, as they can be in the U.S.

5. Do you think the EU regulators would have taken a different position if the deal had involved a less visible firm than General Electric? Explain your answer.

Answer: Yes, the regulators may have been using GE as a signal to Washington about how they could retaliate for what Europeans believe to be unfair U.S. trade policies and practices and trade-related cases involving the U.S. and its European trading partners that were being contested in the World Court.

The Lehman Brothers Meltdown

Even though regulations are needed to promote appropriate business practices, they may also produce a false sense of security. Regulatory agencies often are coopted by those they are supposed to be regulating due to an inherent conflict of interest. The objectivity of regulators can be skewed by the prospect of future employment in the firms they are responsible for policing. No matter how extensive, regulations are likely to fail to achieve their intended purpose in the absence of effective regulators.

Consider the 2008 credit crisis that shook Wall Street to its core. On September 15, 2008, Lehman Brothers Holdings announced that it had filed for bankruptcy. Lehman's board of directors decided to opt for court protection after attempts to find a buyer for the entire firm collapsed. With assets of \$639 billion and liabilities of \$613 billion, Lehman is the largest bankruptcy in history in terms of assets. The next biggest bankruptcies were WorldCom and Enron, with \$126 billion and \$81 billion in assets, respectively.

In the months leading up to Lehman's demise, there were widespread suspicions that the book value of the firm's assets far exceeded their true market value and that a revaluation of these assets was needed. However, little was known about Lehman's aggressive use of repurchase agreements or repos. Repos are widely used short-term financing contracts in which one party agrees to sell securities to another party (a so-called counterparty), with the obligation to buy them back, often the next day. Because the transactions are so short-term in nature, the securities serving as collateral continue to be shown on the borrower's balance sheet. The cash received as a result of the repo would increase the borrower's cash balances and be offset by a liability reflecting the obligation to repay the loan. Consequently, the borrower's balance sheet would not change as a result of the short-term loan.

In early 2010, a report compiled by bank examiners indicated how Lehman manipulated its financial statements, with government regulators, the investing public, credit rating agencies, and Lehman's board of directors being totally unaware of the accounting tricks. Lehman departed from common accounting practices by booking these repos as sales of securities rather than as short-term loans. By treating the repos as a sale of securities (rather than a loan), the securities serving as collateral for the repo were removed from the books, and the proceeds generated by the repo were booked as if they had been used to pay off an equivalent amount of liabilities. The resulting reduction in liabilities gave the appearance that the firm was less levered than it actually was despite the firm's continuing obligation to buy back the securities. Since the repos were undertaken just prior to the end of a calendar quarter, their financial statements looked better than they actually were.

The firm's outside auditing firm, Ernst & Young, was aware of the moves but continued to pronounce the firm's financial statements to be in accordance with generally accepted accounting principles. The SEC, the recipient of the firm's annual and quarterly financial statements, failed to catch the ruse. In the weeks before the firm's demise, the Federal Reserve had embedded its own experts within the firm and they too failed to uncover Lehman's accounting chicanery. Passed in 2002, Sarbanes-Oxley, which had been billed as legislation that would prevent any recurrence of Enron-style accounting tricks, also failed to prevent

Lehman from “cooking its books.” As required by the Sarbanes-Oxley Act, Richard S. Fuld, Lehman’s chief executive at the time, certified the accuracy of the firm’s financial statements submitted to the SEC.

When all else failed, market forces uncovered the charade. It was the much maligned “short-seller” who uncovered Lehman’s scam. Although not understanding the extent to which the firm’s financial statements were inaccurate, speculators borrowed Lehman stock and sold it in anticipation of buying it back at a lower price and returning it to its original owners. In doing so, they effectively forced the long-insolvent firm into bankruptcy. Without short-sellers forcing the issue, it is unclear how long Lehman could have continued the sham.

A Federal Judge Reprimands Hedge Funds in their Effort to Control CSX

Investors seeking to influence a firm’s decision making often try to accumulate voting shares. Such investors may attempt to acquire shares without attracting the attention of other investors, who could bid up the price of the shares and make it increasingly expensive to accumulate the stock. To avoid alerting other investors, certain derivative contracts called “cash settled equity swaps” allegedly have been used to gain access indirectly to a firm’s voting shares without having to satisfy 13(D) prenotification requirements.

Using an investment bank as a counterparty, a hedge fund could enter into a contract obligating the investment bank to give dividends paid on and any appreciation of the stock of a target firm to the hedge fund in exchange for an interest payment made by the hedge fund. The amount of the interest paid is usually based on the London Interbank Offer Rate (LIBOR) plus a markup reflecting the perceived risk of the underlying stock. The investment bank usually hedges or defrays risk associated with its obligation to the hedge fund by buying stock in the target firm. In some equity swaps, the hedge fund has the right to purchase the underlying shares from the counterparty.

Upon taking possession of the shares, the hedge fund would disclose ownership of the shares. Since the hedge fund does not actually own the shares prior to taking possession, it does not have the right to vote the shares and technically does not have to disclose ownership under Section 13(D). However, to gain significant influence, the hedge fund can choose to take possession of these shares immediately prior to a board election or a proxy contest. To avoid the appearance of collusion, many investment banks have refused to deliver shares under these circumstances or to vote in proxy contests.

In an effort to surprise a firm’s board, several hedge funds may act together by each buying up to 4.9 percent of the voting shares of a target firm, without signing any agreement to act in concert. Each fund could also enter into an equity swap for up to 4.9 percent of the target firm’s shares. The funds together could effectively gain control of a combined 19.6 percent of the firm’s stock (i.e., each fund would own 4.9 percent of the target firm’s shares and have the right to acquire via an equity swap another 4.9 percent). The hedge funds could subsequently vote their shares in the same way with neither fund disclosing their ownership stakes until immediately before an election.

The Children’s Investment Fund (TCI), a large European hedge fund, acquired 4.1 percent of the voting shares of CSX, the third largest U.S. railroad in 2007. In April 2008, TCI submitted its own candidates for the CSX board of directors’ election to be held in June of that year. CSX accused TCI and another hedge fund, 3G Capital Partners, of violating disclosure laws by coordinating their accumulation of CSX shares through cash-financed equity swap agreements. The two hedge funds owned outright a combined 8.1 percent of CSX stock and had access to an additional 11.5 percent of CSX shares through cash-settled equity swaps.

In June 2008, the SEC ruled in favor of the hedge funds, arguing that cash-settled equity swaps do not convey voting rights to the swap party over shares acquired by its counterparty to hedge their equity swaps. Shortly after the SEC’s ruling, a federal judge concluded that the two hedge funds had deliberately avoided the intent of the disclosure laws. However, the federal ruling came after the board election and could not reverse the results in which TCI was able to elect a number of directors to the CSX board. Nevertheless, the ruling by the federal court established a strong precedent limiting future efforts to use equity swaps as a means of circumventing federal disclosure requirements.

Discussion Questions

1. Do you agree or disagree with the federal court's ruling? Defend your position.
2. What criteria might have been used to prove collusion between TCI and 3G in the absence of signed agreements to coordinate their efforts to accumulate CSX voting shares?

Google Thwarted in Proposed Advertising Deal with Chief Rival Yahoo!

A proposal that gave Yahoo! an alternative to selling itself to Microsoft was killed in the face of opposition by U.S. government antitrust regulators. The deal called for Google to place ads alongside some of Yahoo!'s search results. Google and Yahoo! would share in the revenues generated by this arrangement. The deal was supposed to bring Yahoo! \$250 million to \$450 million in incremental cash flow in the first full year of the agreement. The deal was especially important to Yahoo!, due to the continued erosion in the firm's profitability and share of the online search market.

The Justice Department argued that the alliance would have limited competition for online advertising, resulting in higher fees charged to online advertisers. The regulatory agency further alleged that the arrangement would make Yahoo! more reliant on Google's already superior search capability and reduce Yahoo!'s efforts to invest in its own online search business. The regulators feared this would limit innovation in the online search industry.

On November 6, 2008, Google and Yahoo! announced the cessation of efforts to implement an advertising alliance. Google expressed concern that continuing the effort would result in a protracted legal battle and risked damaging lucrative relationships with their advertising partners.

The Justice Department's threat to block the proposal is a sign that Google can expect increased scrutiny in the future. High-tech markets often lend themselves to becoming "natural monopolies" in markets in which special factors foster market dominance by a single firm. Examples include Intel's domination of the microchip business, as economies of scale create huge barriers to entry for new competitors; Microsoft's preeminent market share in PC operating systems and related application software, due to its large installed customer base; and Google's dominance of Internet search, resulting from its demonstrably superior online search capability.

Discussion Questions

1. In what way might the Justice Department's actions result in increased concentration in the online search business in the future?
2. What are the arguments for and against regulators permitting "natural monopolies"?

BHP Billiton and Rio Tinto Blocked by Regulators in an International Iron Ore Joint Venture

The revival in demand for raw materials in many emerging economies fueled interest in takeovers and joint ventures in the global mining and energy sectors in 2009 and 2010. BHP Billiton (BHP) and Rio Tinto (Rio), two global mining powerhouses, had hoped to reap huge cost savings by combining their Australian iron ore mining operations when they announced their JV in mid-2009. However, after more than a year of regulatory review, BHP and Rio announced in late 2010 that they would withdraw their plans to form an iron ore JV corporation valued at \$116 billion after regulators in a number of countries indicated that they would not approve the proposal due to antitrust concerns.

BHP and Rio, headquartered in Australia, are the world's largest producers of iron ore, an input critical to the production of steel. Together, these two firms control about one-third of the global iron ore output. The estimated annual synergies from combining mining and distribution operations of the two firms were estimated to be \$10 billion. The synergies would come from combining BHP's more productive mining

capacity with Rio's more efficient distribution infrastructure, enabling both firms to eliminate duplicate staff and redundant overhead and BHP to transport its ore to coastal ports more cheaply.

The proposal faced intense opposition from the outset from steel producers and antitrust regulators. The greatest opposition came from China, which argued that the combination would concentrate pricing power further in the hands of the top iron ore producers. China imports about 50 million tons of iron ore monthly, largely from Australia, due to its relatively close proximity.

The European Commission, the Australian Competition and Consumer Commission, the Japan Fair Trade Commission, the Korea Fair Trade Commission, and the German Federal Cartel Office all advised the two firms that their proposal would not be approved in its current form. While some regulators indicated that they would be willing to consider the JV if certain divestitures and other "remedies" were made to alleviate concerns about excessive pricing power, others such as Germany said they would not approve the proposal under any circumstances.

Discussion Questions:

1. A "remedy" to antitrust regulators is any measure that would limit the ability of parties in a business combination from achieving what is viewed as excessive market or pricing power. What remedies do you believe could have been put in place by the regulators that might have been acceptable to both Rio and BHP? Be specific.
2. Why do you believe the antitrust regulators were successful in this instance but so unsuccessful limiting the powers of cartels such as the Organization of Petroleum Exporting Countries (OPEC), which currently controls more than 40 percent of the world's oil production?

Justice Department Approves Maytag/Whirlpool Combination Despite Resulting Increase in Concentration

When announced in late 2005, many analysts believed that the \$1.7 billion transaction would face heated anti-trust regulatory opposition. The proposed bid was approved despite the combined firms' dominant market share of the U.S. major appliance market. The combined companies would control an estimated 72 percent of the washer market, 81 percent of the gas dryer market, 74 percent of electric dryers, and 31 percent of refrigerators. Analysts believed that the combined firms would be required to divest certain Maytag product lines to receive approval. Recognizing the potential difficulty in getting regulatory approval, the Whirlpool/Maytag contract allowed Whirlpool (the acquirer) to withdraw from the contract by paying a "reverse breakup" fee of \$120 million to Maytag (the target). Breakup fees are normally paid by targets to acquirers if they choose to withdraw from the contract.

U.S. regulators tended to view the market as global in nature. When the appliance market is defined in a global sense, the combined firms' share drops to about one fourth of the previously mentioned levels. The number and diversity of foreign manufacturers offered a wide array of alternatives for consumers. Moreover, there are few barriers to entry for these manufacturers wishing to do business in the United States. Many of Whirlpool's independent retail outlets wrote letters supporting the proposal to acquire Maytag as a means of sustaining financially weakened companies. Regulators also viewed the preservation of jobs as an important consideration in its favorable ruling.

Discussion Questions:

1. What is anti-trust policy and why is it important?

Answer: Anti-trust policy is a government policy intended to prevent firms from achieving excessively pricing power, i.e., the ability to raise prices to levels much higher than could have been achieved under more competitive conditions. Firm's achieving "monopoly" or "near-monopoly" status usually charge higher prices and produce at lower output and therefore employment levels than would have existed under more competitive conditions. By

working to prevent monopoly conditions, anti-trust policy if applied reasonably results in lower average prices, greater product selection, higher employment levels, and possibly more product and service innovation.

2. What factors other than market share should be considered in determining whether a potential merger might result in an increased pricing power?

Answer: Other factors include the availability of substitute products and services, ease of entering the market, customer price sensitivity, the impact on employment, and the potential for improved operating efficiency as a result of the merger. The latter factor is often cited as a justification for allowing businesses to combine if there is reason to believe that the resulting combination will result in an overall improvement in efficiency due to economies of scale and scope and subsequently potentially lower prices in the long-run.

FCC Uses Its Power to Stimulate Competition in the Telecommunications Market

Oh, So Many Hurdles

Having received approval from the Justice Department and the Federal Trade Commission, Ameritech and SBC Communications received permission from the Federal Communications Commission to combine to form the nation's largest local telephone company. The FCC gave its approval of the \$74 billion transaction, subject to conditions requiring that the companies open their markets to rivals and enter new markets to compete with established local phone companies.

Satisfying the FCC's Concerns

SBC, which operates under Southwestern Bell, Pacific Bell, SNET, Nevada Bell, and Cellular One brands, has 52 million phone lines in its territory. It also has 8.3 million wireless customers across the United States. Ameritech, which serves Illinois, Indiana, Michigan, Ohio, and Wisconsin, has more than 12 million phone customers. It also provides wireless service to 3.2 million individuals and businesses.

The combined business would control 57 million, or one-third, of the nation's local phone lines in 13 states. The FCC adopted 30 conditions to ensure that the deal would serve the public interest. The new SBC must enter 30 new markets within 30 months to compete with established local phone companies. In the new markets, it would face fierce competition from Bell Atlantic, BellSouth, and U.S. West. The company is required to provide deep discounts on key pieces of their networks to rivals who want to lease them. The merged companies also must establish a separate subsidiary to provide advanced telecommunications services such as high-speed Internet access. At least 10% of its upgraded services would go toward low-income groups. Failure to satisfy these conditions would result in stiff fines. The companies could face \$1.2 billion in penalties for failing to meet the new market deadline and could pay another \$1.1 billion for not meeting performance standards related to opening up their markets.

A Costly Remedy for SBC

SBC has had considerable difficulty in complying with its agreement with the FCC. Between December 2000 and July 2001, SBC paid the U.S. government \$38.5 million for failing to provide adequately rivals with access to its network. The government noted that SBC failed repeatedly to make available its network in a timely manner, to meet installation deadlines, and to notify competitors when their orders were filled.

Discussion Questions:

1. Comment on the fairness and effectiveness of using the imposition of heavy fines to promote social policy.

Answer: The use of fines to achieve social objectives assumes that the government can provide a better solution than the free market. In general, the imposed solution will be less efficient than what the free market would have determined. It requires the government to determine what constitutes a fair solution. Such definitions are often arbitrary and result in less innovation and less product variety offered to customers and in some cases higher prices. The usual justification for the use of fines in a regulated industry is that industries such as utilities are “natural monopolies” not subject to competitive market conditions. While this may have been a compelling argument in the past, it is less relevant today due to the emergence of a variety of competing technologies such as voice over internet and wireless telephony.

2. Under what circumstances, if any, do you believe the government should relax the imposition of such fines in the SBC case?

Answer: The imposition of fines should be relaxed in cases of extenuating circumstances such as the finding that the time frames for entering new markets are unrealistic.

Exxon and Mobil Merger—The Market Share Conundrum

Following a review of the proposed \$81 billion merger in late 1998, the FTC decided to challenge the Exxon–Mobil transaction on anticompetitive grounds. Options available to Exxon and Mobil were to challenge the FTC’s rulings in court, negotiate a settlement, or withdraw the merger plans. Before the merger, Exxon was the largest oil producer in the United States and Mobil was the next largest firm. The combined companies would create the world’s biggest oil company in terms of revenues. Top executives from Exxon Corporation and Mobil Corporation argued that they needed to implement their proposed merger because of the increasingly competitive world oil market. Falling oil prices during much of the late 1990s put a squeeze on oil industry profits. Moreover, giant state-owned oil companies are posing a competitive threat because of their access to huge amounts of capital. To offset these factors, Exxon and Mobil argued that they had to combine to achieve substantial cost savings.

After a year-long review, antitrust officials at the FTC approved the Exxon–Mobil merger after the companies agreed to the largest divestiture in the history of the FTC. The divestiture involved the sale of 15% of their service station network, amounting to 2400 stations. This included about 1220 Mobil stations from Virginia to New Jersey and about 300 in Texas. In addition, about 520 Exxon stations from New York to Maine and about 360 in California were divested. Exxon also agreed to the divestiture of an Exxon refinery in Benecia, California. In entering into the consent decree, the FTC noted that there is considerably greater competition worldwide. This is particularly true in the market for exploration of new reserves. The greatest threat to competition seems to be in the refining and distribution of gasoline.

Discussion Questions:

1. How does the FTC define market share?

Answer: The market is generally defined by the regulators as a product or group of products offered in a specific geographic area. Market participants are those currently producing and selling these products in this geographic area, as well as potential entrants. Regulators calculate market shares of all firms identified as market participants based on total sales or capacity currently devoted to the relevant markets. In addition, the market share estimates include capacity that is likely to be diverted to this market in response to a small, but significant and sustainable, increase in price.

2. Why might it be important to distinguish between a global and a regional oil and gas market?

Answer: The value chain for a fully integrated oil and gas company consists of the following segments: exploration, production, transmission, refining, and distribution. Oil and gas exploration and production is largely a global market subject to substantial competition from numerous competitors. In contrast, the refining and distribution segments of the business can be

highly concentrated in the hands of a few oil and gas companies. Such concentration may give the oil and gas company substantial pricing power within a specific region for various types of refined products by owning substantially all of the refining capacity or distribution points, such as gas stations, or both.

3. Why are the Exxon and Mobil executives emphasizing efficiencies as a justification for this merger?

Answer: Current antitrust guidelines recognize that the efficiencies associated with a business combination may offset the potential anti-competitive effects of increased concentration. The guidelines call for an examination of the net effects of the proposed combination. Proving that the presumed efficiencies justify the merger is difficult, since most synergies will not be realized for a number of years. It is therefore difficult to measure their true impact.

4. Should the size of the combined companies be an important consideration in the regulators' analysis of the proposed merger?

Answer: Size alone should not be a criterion unless it results in anti-competitive practices. Because of the increasing cost of oil and gas exploration and development worldwide, increasing size to realize economies of scale is becoming more important if increasingly scarce world energy resources are to be recovered.

5. How do the divestitures address perceived anti-competitive problems?

Answer: Requiring one or both of the parties to the merger to sell assets, such as refineries or gas stations, to competing firms can reduce concentration. Such actions will tend to restore competition within a heavily concentrated market

FTC Prevents Staples from Acquiring Office Depot

As the leading competitor in the office supplies superstore market, Staples' proposed \$3.3 billion acquisition of Office Depot received close scrutiny from the FTC immediately after its announcement in September 1996. The acquisition would create a huge company with annual sales of \$10.7 billion. Following the acquisition, only one competitor, OfficeMax with sales of \$3.3 billion, would remain. Staples pointed out that the combined companies would comprise only about 5% of the total office supply market. However, the FTC considered the superstore market as a separate segment within the total office supply market. Using the narrow definition of "market," the FTC concluded that the combination of Staples and Office Depot would control more than three-quarters of the market and would substantially increase the pricing power of the combined firms. Despite Staples' willingness to divest 63 stores to Office Max in markets in which its concentration would be the greatest following the merger, the FTC could not be persuaded to approve the merger.

Staples continued its insistence that there would be no harmful competitive effects from the proposed merger, because office supply prices would continue their long-term decline. Both Staples and Office Depot had a history of lowering prices for their customers because of the efficiencies associated with their "superstores." The companies argued that the merger would result in more than \$4 billion in cost savings over 5 years that would be passed on to their customers. However, the FTC argued and the federal court concurred that the product prices offered by the combined firms still would be higher, as a result of reduced competition, than they would have been had the merger not taken place. The FTC relied on a study showing that Staples tended to charge higher prices in markets in which it did not have another superstore as a competitor. In early 1997, Staples withdrew its offer for Office Depot.

Discussion Questions:

1. How important is properly defining the market segment in which the acquirer and target companies compete to determining the potential increased market power if the two are

permitted to combine? Explain your answer.

Answer: Whether a company is able to engage in anticompetitive practices is heavily dependent on how the market is defined. If the market is defined narrowly to include superstores only, the Herfindahl index calculation will show a much higher level of concentration than if the market is more broadly defined to include the total office supply market. The presumption is that the degree of pricing power is directly related to the degree of market concentration. In a world where people can increasingly order office supplies over the Internet, it would seem that the broader definition would be more appropriate. Few are constrained to shop only at their local superstores.

2. Do you believe the FTC was being reasonable in not approving the merger even though Staples agreed to divest 63 stores in markets where market concentration would be the greatest following the merger? Explain your answer.

Answer: While the FTC study did provide support for the notion that pricing power was higher in areas not having another superstore, the results may have been skewed in that areas without competing superstores tend to be rural. Their small size does not justify multiple stores. Since these areas are rural, costs of supplying stores may be higher and thereby justify the higher prices. That said, it does seem the FTC was being unreasonable in view of Staples' willingness to divest the stores in high concentration areas. Perhaps the government was simply trying to send a message to all superstore retailers that they intended to be highly vigilant due to their perception that the retailing industry was becoming too dominated by the superstore retailers.

Justice Department Blocks Microsoft's Acquisition of Intuit

In 1994, Bill Gates saw dominance of the personal financial software market as a means of becoming a central player in the global financial system. Critics argued that, by dominating the point of access (the individual personal computer) to online banking, Microsoft believed that it may be possible to receive a small share of the value of each of the billions of future personal banking transactions once online banking became the norm. With a similar goal in mind, Intuit was trying to have its widely used financial software package, Quicken, incorporated into the financial standards of the global banking system. In 1994, Intuit had acquired the National Payment Clearinghouse Inc., an electronic bill payments system integrator, to help the company develop a sophisticated payments system. By 1995, Intuit had sold more than 7 million copies of Quicken and had about 300,000 bank customers using Quicken to pay bills electronically. In contrast, efforts by Microsoft to penetrate the personal financial software market with its own product, Money, were lagging badly. Intuit's product, Quicken, had a commanding market share of 70% compared to Microsoft's 30%.

In 1994 Microsoft made a \$1.5 billion offer for Intuit. Eventually, it would increase its offer to \$2 billion. To appease its critics, it offered to sell its Money product to Novell Corporation. Almost immediately, the Justice Department challenged the merger, citing its concern about the anticompetitive effects on the personal financial software market. Specifically, the Justice Department argued that, if consummated, the proposed transaction would add to the dominance of the number-one product Quicken, weaken the number two-product (Money), and substantially increase concentration and reduce competition in the personal finance/checkbook software market. Moreover, the DoJ argued that there would be few new entrants because competition with the new Quicken would be even more difficult and expensive.

Microsoft and its supporters argued that government interference would cripple Microsoft's ability to innovate and limit its role in promoting standards that advance the whole software industry. Only a Microsoft-Intuit merger could create the critical mass needed to advance home banking. Despite these arguments, the regulators would not relent on their position. On May 20, 1995, Microsoft announced that it was discontinuing efforts to acquire Intuit to avoid expensive court battle with the Justice Department.

Discussion Questions:

1. Explain how Microsoft's acquisition of Intuit might limit the entry of new competitors into the

financial software market.

Answer: The proliferation of the use of online financial software creates links between the vendor and the home/small business user. These links constitute distribution channels through which financial services vendors can sell users additional services. The cost of switching from one type of software to a competitor's software may be significant due to the effort the user must expend in order to learn how to learn to use the software effectively. A case could be made that once Microsoft acquired Intuit that would essentially "own" this distribution channel to the home/small business user. Consequently, they could charge significant fees to allow various financial services vendors to be represented on their software. This could create a barrier to entry for many financial institutions, reduce competition, and result in higher prices to home/small business users.

2. How might the proliferation of Internet usage in the twenty-first century change your answer to question 1?

Answer: Many financial institutions offer online banking today. In some instances, such services are free. Consequently, the array of alternatives to Intuit has grown to the point where competition would be fierce if the firm tried to raise prices sharply or did not provide the services users demanded.

3. Do you believe that the FTC might approve of Microsoft acquiring Intuit today? Why or why not?

Answer: It is doubtful the transaction would be approved today despite the increase in competition. Microsoft's size precludes it from receiving approval for any acquisition that gives the perception that "monopoly" pricing may be possible.

How the Microsoft Case Could Define Antitrust Law in the "New Economy"

The Microsoft case was about more than just the software giant's misbehavior. Antitrust law was also on trial. When the Justice Department sued Microsoft in 1998, it argued that the century old Sherman Antitrust Act could be applied to police high tech monopolies. This now looks doubtful. As the digital economy evolves, it is likely to be full of natural monopolies (i.e., those in which only one producer can survive, in hardware, software, and communications), since consumers are motivated to prefer products compatible with ubiquitous standards. Under such circumstances, monopolies emerge. Companies whose products set the standards will be able to bundle other products with their primary offering, just like Microsoft has done with its operating system. What type of software can and cannot be bundled continues to be a thorny issue for antitrust policy.

Although the proposed remedy did not stand on appeal, the Microsoft case had precedent value because of the perceived importance of innovation in the information-based, technology-driven "new economy." This case illustrates how "trust busters" are increasingly viewing innovation as a central issue in enforcement policy. Regulators increasingly are seeking to determine whether proposed business combinations either promote or impede innovation.

Because of the accelerating pace of new technology, government is less likely to want to be involved in imposing remedies that seek to limit anticompetitive behaviors by requiring the government to monitor continuously a firm's performance to a consent decree. In fact, the government's frustration with the ineffectiveness of sanctions imposed on Microsoft in the early 1990s may have been a contributing factor in their proposal to divide the firm.

Antitrust watchdogs are likely to pay more attention in the future to the impact of proposed mergers or acquisitions on start-ups, which are viewed as major contributors to innovation. In some instances, business combinations among competitors may be disallowed if they are believed to be simply an effort to slow the rate of innovation. The challenge for regulators will be to recognize when cooperation or mergers among competitors may provide additional incentives for innovation through a sharing of risk and resources.

However, until the effects on innovation of a firm's actions or a proposed merger can be more readily measured, decisions by regulators may appear to be more arbitrary than well reasoned.

The economics of innovation are at best ill-defined. Innovation cycles are difficult to determine and may run as long as several decades between the gestation of an idea and its actual implementation. Consequently, if it is to foster innovation, antitrust policy will have to attempt to anticipate technologies, markets, and competitors that do not currently exist to determine which proposed business combinations should be allowed and which firms with substantial market positions should be broken up.

Discussion Questions:

1. Comment on whether antitrust policy can be used as an effective means of encouraging innovation.

Answer: Regulation almost always is reactive rather than proactive. Efforts to promote innovation through regulation may be particularly inappropriate in that the conditions that give rise to innovation are not well understood. For example, efforts to establish product standards may promote innovation by enabling software developers to focus on developing new products for the Windows standard. Without a standard, the risk of developing new applications is higher due to the potential for developing products for operating systems that achieve a relatively low market share in the future. However, the existence of standards may also make it possible for companies such as Microsoft to stifle innovation by embedding innovative ideas developed by others in their operating system as they have done in the past.

2. Was Microsoft a good antitrust case in which to test the effectiveness of antitrust policy on promoting innovation? Why or why not?

Answer: No. While there may be merit in the notion that most innovative ideas emerge from smaller, more nimble companies, there is little empirical evidence that punishing larger firms that became successful by making better business decisions than their competitors actually stimulates innovation in the aggregate. Indeed, market forces such as the emergence of competing operating systems such as Linux have tended to chip away at Microsoft's dominance. The success of Google in the search engine market is another example of how market forces are at work to limit Microsoft's perceived monopoly advantage.

Anthem-Well Point Merger Hits Regulatory Snag

In mid-2004, a California insurance regulator refused to approve Anthem Inc's ("Anthem") \$20 billion acquisition of WellPoint Health NetWorks Incorporated ("WellPoint"). If allowed, the proposed merger would result in the nation's largest health insurer, with 28 million members. After months of regulatory review, the deal had already received approval from 10 state regulators, the Justice Department, and 97% of the shares outstanding of both firms. Nonetheless, California Insurance Commissioner, John Garamendi, denounced the proposed transaction as unreasonably enriching the corporate officers of the firms without improving the availability or quality of healthcare. Earlier the same day, Lucinda Ehnes, Director of the Department of Managed Healthcare in California approved the transaction. The Managed Healthcare Agency has regulatory authority over Blue Cross of California, a managed healthcare company that is by far the largest and most important WellPoint operation in the state. Mr. Garamendi's department has regulatory authority over about 4% of WellPoint's California business through its BC Life & Health Insurance Company subsidiary ("BC"). Interestingly, Ms. Ehnes is an appointee of California's Republican governor, Arnold Schwarzenegger, while Mr. Garamendi, a Democrat, is an elected official who had previously run unsuccessfully for governor. Moreover, two week's earlier he announced that he will be a candidate for lieutenant governor in 2006.

Mr. Garamendi had asked Anthem to invest in California's low income communities an amount equal to the executive compensation payable to WellPoint executives due to termination clauses in their contracts. Estimates of the executive compensation ranged as high as \$600 million. Anthem immediately sued John

Garamendi, seeking to overrule his opposition to the transaction. In the lawsuit, Anthem argued that Garamendi acted outside the scope of his authority by basing his decision on personal beliefs about healthcare policy and executive compensation rather than on the criteria set forth in California state law. Anthem argued that the executive compensation payable for termination if WellPoint changed ownership was part of the affected executives' employment contracts negotiated well in advance of the onset of Anthem's negotiations to acquire WellPoint. The California insurance regulator finally dropped his objections when the companies agreed to pay \$600 million to help cover the cost of treating California's uninsured residents.

Following similar concessions in Georgia, Anthem was finally able to complete the transaction on December 1, 2004. Closing occurred almost one year after the transaction had been announced.

Discussion Questions:

1. If you were the Anthem CEO, would you withdraw from the deal, initiate a court battle, drop the Blue Cross subsidiary from the transaction, agree to regulators' demands, or adopt some other course of action? Explain your answer.

Answer: While Anthem was ultimately successful, it was able to do so only after agreeing to a \$600 million one-time payout to help defray California's healthcare provided to the uninsured. Presumably, this did not change the economics of the deal from Anthem's perspective, as it was willing to make the payout. Consequently, the lawsuit seemed the most appropriate because it gave both parties an opportunity for a negotiated settlement.

2. What are the risks to Anthem and WellPoint of delaying the closing date? Be specific.

Answer: The risks of delay are significant and can be measured in terms of loss of key employees in both firms, as well as potential customer and supplier attrition. Other costs such as the sheer absorption of management time and the impact on decision-making is more difficult to quantify. Nonetheless, it is a real cost.

3. To what extent should regulators use their powers to promote social policy?

Answer: The answer to this question depends on whether one believes that competitive market forces will provide both the most efficient as well as the fairest outcome. The fact that the merger was allowed suggests that regulators did not find any compelling potential for anticompetitive activities. Therefore, regulators presumably believed that improved efficiency would outweigh any concerns about the potential for increased pricing power. However, the fairness issue is more subjective. The controversy may have been more a result of political aspirations of some of the interested parties and the seeming excessive payout for senior managers who would be terminated as a result of the merger. While large by any measure, the firms were contractually obligated to pay them. Payments to particular social groups to get regulatory approval may be the simplest way of addressing the fairness issue in a way that satisfies the agendas of key competing interests.

The Bear Stearns Saga—When Failure Is Not an Option

Prodded by the Fed and the U.S. Treasury Department, J.P. Morgan Chase (JPM), the nation's third largest bank, announced, on March 17, 2008, that it had reached an agreement to buy 100 percent of Bear Stearns's outstanding equity for \$2 per share. As one of the nation's larger investment banks, Bear Stearns had a reputation for being aggressive in the financial derivatives markets. Hammered out in two days, the agreement called for the Fed to guarantee up to \$30 billion of Bear Stearns's "less liquid" assets. In an effort to avoid what was characterized as a "systemic meltdown," regulatory approval was obtained at a breakneck pace. The Office of the Comptroller of Currency and Fed approvals were in place at the time of the announcement. The SEC elected not to review the deal. Federal and state antitrust regulatory approvals were obtained in record time.

With investors fleeing mortgage-backed securities, the Fed was hoping to prevent any further deterioration in the value of such investments. The fear was that the financial crisis that beset Bear Stearns could spread to other companies and ultimately test the Fed's resources after it had said publicly that it would lend up to \$200 billion to banks in exchange for their holdings of mortgages.

Interestingly, Bear Stearns was not that big among investment banks when measured by asset size. However, it was theoretically liable for as much as \$10 trillion due to its holdings of such financial derivatives as credit default swaps, in which it agreed to pay lenders in the event of a borrower defaulting. If credit defaults became widespread, Bear Stearns would not have been able to honor its contractual commitments, and the ability of other investment banks in similar positions would have been questioned and the panic could have spread.

With Bear Stearns's shareholders threatening not to approve what they viewed as a "fire sale," JPM provided an alternative bid, within several days of the initial bid, in which it offered \$2.4 billion for about 40 percent of the stock, or about \$10 per share. In exchange for the higher offer, Bear Stearns agreed to sell 95 million newly issued shares to JPM, giving JPM a 39.5 percent stake and an almost certain majority in any shareholder vote, effectively discouraging any alternative bids. Under the new offer, JPM assumed responsibility for the first \$1 billion in asset losses, before the Fed's guarantee of up to \$30 billion takes effect.

Discussion Questions:

- 1 Why do you believe government regulators encouraged a private firm (J.P. Morgan Chase) to acquire Bear Stearns rather than have the government take control? Do you believe this was the appropriate course of action? Explain your answer.

Answer: In a free market economy, the government is often ill-suited to managing businesses deemed too big to fail by their tendency to make decisions based on politics rather than on sound economics. Moreover, the government rarely has the talent available to manage complex businesses and therefore must turn to other businesses in the same industry to takeover the failing entity. Unfortunately, when the business to be acquired is deemed too big to fail, the solution of having another firm acquire the business simply exacerbates the problem by creating an even bigger institution.

- 2 By facilitating the merger, the Fed sent a message to Wall Street that certain financial institutions are "too big to fail." What effect do you think the merger will have on the future investment activities of investment banks? Be specific.

Answer: The facilitation of the merger communicates to other investment banks that the government stands ready to take over institutions deemed too big to fail. While the Dodd-Frank bill purports to discourage this type of behavior by establishing a mechanism for liquidating failing institutions, it is hard to see how the dissolution of such a bank would not result in a panic in financial markets since the firm's assets would still be thrust on the market at about the same time thereby driving down prices and the liquidation of the firm would signal to investors that other firms could be experiencing similar problems. So-called claw back mechanisms designed to discourage managers from making excessively risky investments are often difficult to implement in practice.