**Solutions for End-of-Chapter Questions and Problems: Chapter Twenty One**

1. How does product segmentation reduce the profitability and risk of FIs? How does it increase the profitability and risk of FIs?

Product segmentation reduces the profitability of FIs by preventing them from exploiting economies of scope across products. Moreover, tie‑in sales across markets are restricted. Customers are lost to FIs that could more completely supply all of their customers' financial services needs. Since customer relationships produce information and are profitable, this reduces the profitability of segmented FIs. Product segmentation reduces the risks of FIs by forcing them to specialize. Specialization generates expertise and access to information, which should enable FIs to more accurately price excessively risky situations.

Product segmentation increases the profitability of FIs by providing incentives for FIs to develop technology and other innovations to improve production efficiency. Product segmentation increases the risk of the FI because the benefits of diversification are reduced. Thus, specialization leaves the FI more exposed to downturns in the specific market to which it is confined.

2. What general prohibition regarding the activities of commercial banking and investment banking did the Glass-Steagall Act impose?

The Glass-Steagall Act specifically prohibited banks from engaging in the underwriting, issuing, and distributing of stocks, bonds, and other securities, while specifically prohibiting investment banks from taking deposits and making commercial loans.

3. What restrictions were placed on Section 20 subsidiaries of U.S. commercial banks that made investment banking activities other than those permitted by the Glass-Steagall Act less attractive? How did this differ from banking activities in other countries?

Although banks were allowed to engage in otherwise ineligible investment banking activities by creating Section 20 subsidiaries, the revenue from these ineligible activities could not exceed more than 50 percent of the revenues of the revenues they generated. Consequently, only the largest banks with businesses in activities permitted under the Glass-Steagall Act, such as trading U.S. Treasuries or general obligation municipal bonds were able to undertake the ineligible activities. In addition, stringent firewalls between Section 20 subsidiaries and the commercial banks made it difficult for banks to exploit economies of scale and diversification benefits. In most countries (except for Japan) both commercial and investment banking activities were undertaken under one roof, allowing full flexibility and benefits of integrated operations.

4. Explain in general terms what impact the Financial Services Modernization Act of 1999 should have on the strategic implementation of section 20 activities.

The Financial Services Modernization Act of 1999 allows the creation of financial services holding companies that can engage in banking activities and securities activities. The securities activities are allowed through the creation of Section 4(k)(4)(E) subsidiaries that replace the Section 20 subsidiaries. Thus, banks are able to underwrite securities providing that the activity is placed in a subsidiary under the regulation of the Office of the Comptroller of the Currency. Thus, full service financial institutions in the U.S. are able to compete with those of many other countries in the world.

5. What types of insurance products were commercial banks permitted to offer before 1999? How did the Financial Services Modernization Act of 1999 change this? How have nonbanks managed to exploit the loophole in the Bank Holding Company Act of 1956 and engage in banking activities? What law closed this loophole? How did insurance companies circumvent this law?

Commercial banks were prohibited from offering almost all insurance products with the exception of annuities, life, health, and accident insurance related to credit products, and some forms of employment related insurance. The Bank Holding Company Act of 1956 legally defined a bank as an organization that accepts demand deposits and makes commercial and industrial loans. By acquiring banks and subsequently divesting off either their deposits or their loans, nonbanks and commercial firms gained control over banking institutions, essentially exploiting a loophole. The 1987 Competitive Equality Banking Act redefined a bank as any institution that accepts deposit insurance, thereby closing this loophole, although nonbanks prior to the passage of the law were allowed to operate as before. The Financial Services Modernization Act of 1999 allowed bank holding companies to open affiliates to underwrite insurance and to sell insurance under the same regulations as the insurance industry.

6. The Financial Services Modernization Act of 1999 allows banks to own controlling interests in nonfinancial companies. What are the two restrictions on such ownership?

First, the investment cannot be made for an indefinite period of time, although the act did not specify a definition for the word “indefinite.” Second, the bank cannot become actively involved in the management of the corporation in which it invests.

7. What is shadow banking? How does the shadow banking system differ from the traditional banking system?

More recently activities of nonfinancial service firms that perform banking services has been termed shadow banking. Shadow banks include finance companies, money market deposit funds, structured investment vehicles (SIVs), asset-backed paper vehicles, credit hedge funds, asset-backed commercial paper (ABCP) conduits, limited-purpose finance companies, and credit hedge funds. As of the end of 2011, worldwide total assets managed by the shadow banking system totaled $60 trillion. In the shadow banking system savers place their funds with money market mutual and similar funds, which invest these funds in the liabilities of shadow banks. Borrowers get loans and leases from shadow banks such as finance companies rather than from banks. Like the traditional banking system, the shadow banking system intermediates the flow of funds between net savers and net borrowers. However, instead of the bank serving as the middleman, it is the nonbank financial service firm, or shadow bank, that intermediates. Further, unlike the traditional banking system, where the complete credit intermediation is performed by a single bank, in the shadow banking system it is performed through a series of steps involving many nonbank financial service firms. For example, the lending process might involve (1) loan origination performed by a finance company, (2) loan warehousing conducted by single and multiple sellers funded through asset-backed commercial paper (ABCP), (3) ABS issuance conducted by broker-dealers, (4) ABS warehousing funded with repurchase agreements, (5) ABS collateralized debt obligation (CDO) issuance conducted by broker-dealers, and (6) ABS intermediation performed by limited purpose finance companies. Each step is performed by a specific type of shadow bank and through a specific funding vehicle. Thus, the shadow banking system decomposes the traditional process of deposit-funded, hold-to-maturity lending conducted by banks, into a more complex, wholesale-funded, securitization-based lending process that involves multiple shadow banks which are not regulated or monitored by a regulatory body.

Because of the specialized nature involved in the credit intermediation process as performed shadow banks, these nonbank financial service firms can perform the process more cost efficiently than traditional banks. Further, because of the lower costs and lack of regulatory oversight, shadow banks can take on risks that traditional banks either cannot or are unwilling to take. Thus, the shadow banking system allows credit to be available for individuals or businesses that might not otherwise have access to credit through the traditional banking system. However, shadow banks can increase the risk inherent in the financial system. Shadow banks fund their activities mainly with short-term, checking account like deposit services. They are, for the most part, highly levered financial institutions. They do not take deposits, so they are not subject to regulations to the extent seen by traditional banks. However, unlike traditional banks, since shadow banks do not have deposit insurance like traditional banks, a sudden loss of confidence in the asset quality of these nonbank financial institutions can lead to funding runs. Because commercial banks and shadow banks are interrelated through the credit intermediation system, problems that arise in the shadow banking system can quickly spread to the traditional banking system. Indeed, by transforming the way the credit intermediation process works—from the traditional banking method to the multilayered process used by shadow banks—shadow banks fuelled the unprecedented growth in the real estate markets in the mid-2000s that eventually crashed and led to the financial crisis.

8 What are the differences in the risk implications of a firm commitment securities offering versus a best-efforts offering?

In a best-efforts offering, the underwriting firm serves as a placement agent with the promise to do the best job possible. The firm has very little risk of loss in this situation. In a firm commitment offering, the investment bank actually buys the securities from the issuing firm and then must resell them to the public in the market. The investment firm faces two risks in this process. First, the securities cannot be sold at any price different from the negotiated price in effect during the offering window or period. Second, if adverse events occur during this window, the investment firm may be unable to sell the securities and will either hold the securities in inventory or sell them at a reduced price after the offering period. In either case, the underwriting firm is at risk to suffer a loss.

9. An FI is underwriting the sale of 1 million shares of Ultrasonics, Inc., and is quoting a bid-ask price of $6.00-$6.50.

a. What are the fees earned by the FI if a firm commitment method is used to underwrite the securities?

Firm commitment: ($6.50 ‑ $6.00) x 1 million = $500,000

b. What are the fees if the FI uses the best-efforts method and a commission of 50 basis points is charged?

Best efforts: 0.005 x $6.50 x 1 million = $ 32,500

c. How would your answer be affected if the FI manages to sell the shares only at $5.50 using the firm commitment method? The commission for best efforts is still 50 basis points.

Best efforts: 0.005 x $5.50 x 1 million = $27,500

Firm commitment: ($5.50 ‑ $6.00) x 1 million = -$500,000

10. A Section 20 affiliate agrees to underwrite a debt issue for one of its clients. It has suggested a firm commitment offering for issuing 100,000 shares of stock. The FI quotes a bid-ask spread of $97-$97.50 to its customer on the issue date.

a. What are the total underwriting fees generated if all the issue is sold? If only 60 percent is sold?

If all shares are sold, underwriting fees = 100,000 x $0.50 = $50,000. If only 60 percent are sold, the fee will depend on what price the remaining 40 percent are sold. Most likely the affiliate will keep the shares in inventory and try to sell them at a later date when the price for these shares has stabilized. If none of the shares are sold, the minimum fees will be 100,000 x $0.50 x 0.6 = $30,000

b. Instead of taking a chance that only 60 percent of the shares will be sold on the issue date, the FI suggests a price of $95 to the issuing firm. The FI quotes a bid-ask rate of $95-$95.40 and sells 100 percent of the issue. From the FI’s perspective, which price is better if it expects to sell the remaining 40 percent at the bid price of $97 under the first quote?

If the price quoted is $95.00-$95.40, the underwriting fees = 100,000 x $0.40 = $40,000. If 60 percent is sold at $97.50, the underwriting fees = 60,000 x 0.50 = $30,000, and if the remaining 40 percent are sold at $97, the underwriting fee is $0 for that portion. Thus, the total fees generated = $30,000 + $0. Clearly, the FI is better off recommending an issue price of $95 rather than $97.

11. What are three ways that the failure of a securities affiliate in a holding company organizational form could negatively affect a bank affiliate? How has the Fed attempted to prevent a breakdown of the firewalls between bank and nonbank affiliates in these situations?

An FI could be affected negatively in three ways if its securities affiliate fails. First, the holding company could upstream resources by increasing dividend and other fee payments from the bank to the holding company.

Second, a holding company could compel the bank to make interaffiliate loans to its loss-making unit. The Federal Reserve Act prevents banks from making loans to their affiliates in excess of 10 percent of their capital. In the case of Section 20 affiliates, no loans are permitted by their bank affiliates.

Third, a securities affiliate that incurs losses may induce depositors to engage in a run on the bank even though the Fed requires strict separation between the bank and nonbank affiliates. This is even more likely if the two affiliates bear a common name, such as Chase bank and Chase Securities. Such contagion effects cannot be controlled by the Fed except through publicizing the information on the soundness of the firewall between the institutions.

Recognizing that allowing banking organizations to expand their securities activities may lead to more risk in the banking system, the FSMA of 1999 explicitly incorporated provisions regarding the way the new financial services holding companies would be regulated. For example, the act streamlines bank holding company supervisions by clarifying the regulatory roles of the Federal Reserve as the umbrella holding company supervisor and of the state and federal financial regulators that “functionally” regulate various affiliates. It provides for federal bank regulators to prescribe prudential safeguards for bank organizations engaging in new financial activities. It provides for state regulation of insurance, subject to a standard that no state may discriminate against persons affiliated with a bank. Finally, the Act prohibits FDIC assistance to affiliates and subsidiaries of banks and savings institutions. However, FDIC “bailouts” to failing bank holding companies during the financial crisis provided indirect assistance to their affiliates and subsidiaries. Finally, financial regulatory overhaul legislation, passed in July 2010, calls for the Federal Reserve to receive new oversight powers and to impose conditions designed to discourage any type of financial institution from posing extensive risk to the overall financial system

12. What role does bank activity diversification play in the ability of a bank to exploit economies of scale and scope? What remains as the limitation to creating potentially greater benefits?

Most research studies have found revenue-based economies of scope at large FIs, although early research studies on economies of scale opportunities may be available to FIs with total assets under $25 billion. The firewalls between banks and investment affiliates may be limiting the realization of greater benefits from revenue and cost synergies. More recent studies, conducted after the Financial Services Modernization Act of 1999 was passed have found economies of scale for all FIs.

13. What six conflicts of interest have been identified as potential roadblocks to the expansion of banking powers into the financial services area?

The six conflicts of interest are (1) the incentive interest of the salesperson to sell rather than to just provide dispassionate advice, (2) the opportunity to sell unwanted securities in a firm commitment underwriting to trust department accounts within the bank, (3) the ability to encourage a creditor to issue bonds and to use the proceeds to pay down the bank loan under conditions where the creditor’s bankruptcy risk has increased, (4) the incentive to lend to third-party investors for the purpose of buying securities that are offered by the investment affiliate, (5) the opportunity to tie lending availability to the use of the investment affiliate products for securities’ needs, and (6) the opportunity to misuse inside information.

14. Under what circumstances could the existence of deposit insurance provide an advantage to banks in competing with other traditional securities firms?

The provision of insurance for deposits up to $250,000 provides banks with a source of funds at below-market cost. If these funds are loaned to securities affiliates at less than market rates, the affiliates have received explicit benefits. In cases where the regulators implement the too-big-to-fail (TBTF) guarantee, the institution may take excessive risk by placing aggressive bids for new issues. In these cases, the TBTF guarantees provide unfair competitive advantages.

15. In what ways does the current regulatory structure argue against providing additional securities powers to the banking industry? Does this issue concern only banks?

The regulatory structure for most banks is multilayered and complex. The efficiency of the overlapping structure is questionable from a public policy perspective because of the waste of monitoring and surveillance resources as well as the inherent coordination problems. Further, these problems may become magnified in times of financial distress regardless of the source, causing potentially serious negative effects to occur for shareholders, customers, and the general financial system.

The Fed’s role as the supervisor of a bank holding company is to review and assess the consolidated organization’s operations, risk management systems, and capital adequacy to ensure that the holding company and its nonbank subsidiaries do not threaten the financial stability of the company’s depository institutions. In this role, the Fed serves as the umbrella supervisor of the consolidated organization. In fulfilling this role, the Fed relies to the fullest extent possible on information and analysis provided by the appropriate supervisory authority of the company’s bank, securities, or insurance subsidiaries.

Financial regulatory overhaul legislation, passed in July 2010, calls for the Federal Reserve to receive new oversight powers. The proposals put the Federal Reserve in charge of monitoring the country’s biggest financial firms—those considered critical to the health of the system as a whole. Those firms would also face new, stiffer requirements on how much capital and liquidity they keep in reserve. The overhaul also provides unprecedented powers to the Fed to step into any financial institutions—such as insurance giant AIG (whose main regulators include the New York State Department of Insurance and the Office of Thrift Supervision)—that are facing imminent collapse, in order to force an orderly bankruptcy that would protect the wider economy.

16. How do limitations on domestic geographic diversification affect an FI’s profitability?

Limitations on domestic geographic diversification increase FI profitability by creating locally uncompetitive markets. FIs in these markets earn monopoly rents that are protected by limitations on domestic geographic expansion by potential competitors. Limitations on geographic diversification reduce FI profitability by preventing the FI from exploiting any economies of scale and/or scope or revenue synergies that may be available.

17. How are insurance companies able to offer services in states beyond their state of incorporation?

Insurance companies are state-regulated firms that are not prohibited from establishing subsidiaries and offices in other states. Further, the capital requirements are kept low by state regulators.

18. In what way did the Garn-St. Germain Act and FIRREA provide incentives for the expansion of interstate branching?

Both legislative acts provided for sound banks and thrifts to acquire failing banks and thrifts across state lines. These acquisitions could be operated either as separate subsidiaries or as branches of the acquiring institution.

19. What is an interstate banking pact?

An interstate banking pact is an agreement between states defining the conditions under which out-of-state banks can acquire in-state subsidiaries. A major feature of these pacts normally was the reciprocity conditions awarded each state involved.

20. How did the provisions of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 allow for full interstate banking? What are the expected profit performance effects of interstate banking? What has been the impact on the structure of the banking and financial services industry?

The main feature of the Riegle-Neal Act of 1994 is the removal of barriers to interstate banking. In September 1995, bank holding companies were allowed to acquire banks in other states. In 1997, banks were allowed to convert out-of-state subsidiaries into branches of a single interstate bank. The act has resulted in significant consolidations and acquisitions, with the emergence of very large banks with branches all over the country, as currently practiced in the rest of the world. The law, as of now, does not allow the establishment of de novo branches unless allowed by the individual states.

21. What cost synergies may be obtained by an FI from domestic geographic expansion?

Annual cost savings from geographic expansion can be achieved by consolidating certain operations and eliminating redundant costs, including the elimination of overlapping positions, cutting duplicate back-office operations. Llarger banks can also take more advantage of outsourcing operations locally or abroad.

22. What are the three revenue synergies that may be obtained by an FI from domestic geographic expansion?

The three revenue synergies that an FI may obtain by expanding geographically are:

(a) Opportunities to increase revenue because of growing market share.

(b) Different credit risk, interest rate risk, and other risks that allow for diversification benefits and the stabilization of revenues.

(c) Expansion into less-than-competitive markets, which provides opportunities to reap some economic rents that may not be available in competitive markets.

23. What is the Herfindahl-Hirschman Index? How is it calculated and interpreted?

The Herfindahl-Hirschman Index (HHI) is a measure of market concentration whose value can be 0 to 10,000. The index is measured by adding the squares of the percentage market share of the individual firms in the market. An index value greater than 2,500 indicates a highly concentrated market, a value between 1,500 and 2,500 indicates a moderately concentrated market, and an unconcentrated market would have a value less than 1,500.

24. City Bank currently has a 60 percent market share in banking services, followed by NationsBank with 20 percent and State Bank with 20 percent.

a. What is the concentration ratio as measured by the Herfindahl-Hirschman Index (HHI)?

HHI = (60)2 + (20)2 + (20)2 = 4,400

b. If City Bank acquires State Bank, what will be the new HHI?

HHI = (80)2 + (20)2 = 6,800

c. Assume the Justice Department will allow mergers as long as the changes in HHI do not exceed 1,400. What is the minimum amount of assets that City Bank will have to divest after it merges with State Bank?

For City Bank to complete the merger, its maximum HHI should be such that when it disposes of part of its assets, the HHI will be *X*2 + *Y*2 + *Z*2  = 5,800. Since Z = 20 percent, we need to solve the following: *X*2 + Y2 = 5,400; that is, 5,800 less the share of *Z*2 which is 202 or 400.

If the merger stands with no adjustment, then X = 80 and Y = 0. But some portion of X must be liquidated. Therefore, we need to solve the equation (80 – Q)2 + Q2 = 5,400 where Q is the amount of disinvestment. This requires solving the quadratic equation of the form: Q2 + (80 - Q)2 = 5,400 which expands and simplifies to 2Q2 – 160Q + 1,000 = 0.

Using the formula: Q =  , we get Q = 73.1662 percent, which means City Bank has to dispose of 6.8338 percent of total banking assets. To verify, we can check the total relationship: (73.1662)2 + (6.8338)2 + (20)2 = 5,800.

25. The Justice Department has been asked to review a merger request for a market with the following four FI's.

**Bank Assets** A $12 millionB 25 millionC 102 millionD 3 million

a. What is the HHI for the existing market?

Bank Assets Market Share

A $12 m 8.45 %

B $25 m 17.61%

C $102 m 71.83%

D $3 m 2.11%

100.00%

The HHI = (8.45)2 + (17.61)2 + (71.83)2 + (2.11)2 = 5,545.5

b. If Bank A acquires Bank D, what will be the impact on the market's level of concentration?

Bank Assets Market Share

A $15 m 10.56%

B $25 m 17.61%

C $102 m 71.83%

100.00%

The HHI = (10.56)2 + (17.61)2 + (71.83)2 = 5,581

c. If Bank C acquires Bank D, what will be the impact on the market's level of concentration?

Bank Assets Market Share

A $12 m 8.45 %

B $25 m 17.61%

C $105 m 73.94%

100.00%

The HHI = (8.45)2 + (17.61)2 + (73.94)2 + (2.11)2 = 5,848.6

d. What is likely to be the Justice Department's response to the two merger applications?

The Justice Department may challenge Bank C’s application to acquire Bank D since it significantly increases market concentration (HHI = 5,848.6 vs 5,545.5, an increase of 303.1). On the other hand, the Justice Department would most likely approve Bank A's application since the merger causes only a small increase in market concentration (HHI = 5,581 vs 5,545.5, an increase of 35.5).

26. What factors other than market concentration does the Justice Department consider in determining the acceptability of a merger?

Other factors considered by the Justice Department include ease of entry, the nature of the product, the terms of sale of the product, market information about specific transactions, buyer market characteristics, conduct of firms in the market, and market performance.

27. What are some plausible reasons for the percentage of assets of small and medium sized banks decreasing and the percentage of assets of large banks increasing since 1984?

One reason for the decreasing share of small and medium sized bank assets is the wave of mergers that has taken place over the period. If two small banks merge, the merged bank may have assets that move it into the next higher asset category. The changes in the interstate banking laws have encouraged this wave of mergers. Finally, the growth of the national economy has been unprecedented during this time, which has caused the entire banking industry to perform well since the late 1980s.

28. What are some of the benefits for banks engaging in geographic expansion?

The benefits to geographic diversification are:

(a) Economies of scale: If there are efficiency gains to growth, geographic diversification can reduce costs and increase profitability.

(b) Risk reduction: Overall risk reduction via diversification.

(c) Survival: As nonbank financial firms have increasingly eroded banks’ market share, banks’ campaign to expand geographically can be viewed as a competitive response. That is, as global FIs dominate the financial environment, larger institutions with presence in many regions may better position the FI to compete.

29. How did the Overseas Direct Investment Control Act of 1964 assist in the growth of global banking activities? How much growth in foreign assets occurred from 1980 to 2012?

The Overseas Direct Investment Control Act of 1964 restricted the ability of U.S. banks to lend to U.S. corporations that wanted to make investments overseas. Although later repealed, the law created incentives for U.S. banks to establish offices offshore to serve the financial needs of their U.S. corporate clients. From 1980 to 2012, foreign assets of U.S. banks grew from $353.8 billion to $1,578.8 billion, growth in foreign assets of 450% in 34 years.

30. Identify and explain the impact of at least four factors that have encouraged global U.S. bank expansion.

First, the growth of international trade with the dollar as the primary medium of exchange has encouraged the use of U.S. foreign bank subsidiaries to assist in these trade-related transactions. Second, the U.S. banks in strategic locations, such as the Cayman Islands and the Bahamas, have become preferred depositories for funds that are flowing out of politically sensitive and risky countries. Third, the Federal Reserve Bank often allows U.S. banks to participate in activities that are permitted in foreign countries, even though those same activities may not be permitted in the U.S. Finally, the technological improvements in communications, and the development of an international payment system (CHIPS) provide banks with the control of overseas operations at a decreasing rate.

31. What is the expected impact of the implementation of Basel III risk-based capital requirements on the international activities of some major U.S. banks?

Several large banks may find it necessary to increase capital because under Basel III, risk weights for sovereign exposures are determined using OECD Country Risk Classifications (CRCs), which assigns countries to one of eight risk categories (0-7). Countries assigned to categories 0-1 have the lowest possible risk assessment and are assigned a risk weight of 0 percent, while countries assigned to category 7 having the highest possible risk assessment and are assigned a risk weight of 150 percent.

32. What effect have the problems of emerging market economies in the late 1990s and 2000s had on the global expansion of traditional banking activities by U.S. banks?

Many U.S. banks have become more cautious in expanding outside the traditional overseas markets even though the regulatory environment seems more favorable.

33. What is the European Community (EC) Second Banking Directive? What impact has the Second Banking Directive had on the competitive banking environment of Europe?

The EC Second Banking Directive created a single banking market in Europe wherein banks could branch and acquire banks throughout the entire European Community. As a result, a significant cross-border merger wave among European banks occurred, as well as the development of strategic alliances that allow customers to utilize any of the branches of the members of the alliances to open accounts, access account information, and make payments to third parties. These actions obviously make a more competitive environment for U.S. banks.

34. What factors affected the proportion of U.S. banking assets that were controlled by foreign banks during the 1990s through 2012?

In 1980 foreign banks had $166.7 billion in assets held in the U.S. (10.8 percent of the size of total U.S. bank assets). This activity grew through 1992, when foreign banks had $514.3 billion in assets (16.4 percent of the size of U.S. assets). In the mid-1990s, there was a modest retrenchment in the asset share of foreign banks in the United States. In 1994, their U.S. assets totaled $471.1 billion (13.8 percent of the size of U.S. assets). This retrenchment reflected a number of factors, including the highly competitive market for wholesale banking in the United States, a decline in average U.S. loan quality, capital constraints on Japanese banks at home, and their poor lending performance at home, and the introduction of the Foreign Bank Supervision and Enhancement Act (FBSEA) of 1991, which tightened regulations on foreign banks in the United States (discussed below). However, as foreign banks adjusted to these developments and because of the strong U.S. economy in the late 1990s, activity of foreign banks in the United States grew, reaching 16.1 percent in 2000. The worldwide economic recession in the early 2000s again depressed the level of international activity in the United States. As the economic situation improved, the level of international activity in the United States accelerated. In September 2009 (late in the financial crisis) foreign bank assets in the U.S. were 13.2 percent the size of domestic bank assets. At year-end 2010 they were 14.8 percent the size of domestic assets and, most recently, in September 2012, foreign bank assets in the U.S. were 17.8 percent the size of domestic assets.

35. What was the fundamental philosophical focus of the International Banking Act (IBA) of 1978?

The IBA of 1978 (and the Foreign Bank Supervision Enhancement Act of 1991) brought the regulation of foreign banks under the control of federal regulators with the intent of treating them under the same guidelines as domestic national banks.

36. What events led to the passage of the Foreign Bank Supervision Enhancement Act (FBSEA) of 1991? What was the main objective of this legislation?

The primary objective of FBSEA was to extend federal regulatory authority over foreign banking organizations in the United States. The three events that served as the catalyst for this legislation were the failure of the Bank of Credit and Commerce International (BCCI), the issuance of more than $1 billion of unauthorized letters of credit to Iraq by the Atlanta branch of Banca Nazionale del Lavoro, and the unauthorized use of deposit funds by the U.S. representative office of the Greek National Mortgage Bank of New York.

37. What were the main features of FBSEA? How did FBSEA encourage cooperation with the home country regulator? What was the effect of the FBSEA on the Federal Reserve and on the foreign banks?

The five main features of FBSEA are identified and discussed below:

**Entry**. The Fed must approve the establishment of a subsidiary, branch, agency, or representative office in the United States. The two mandatory standards are (a) the comprehensive supervision of the foreign bank on a consolidated basis by a home country regulator, and (b) the provision by the home country regulator of all of the necessary information needed by the Fed to evaluate the application.

**Closure**. The Fed has the power to close the foreign bank if (a) the home country supervision is inadequate, (b) the bank has violated U.S. laws, and (c) the bank is engaged in unsound and unsafe banking practices.

**Examination**. The Fed has the power to examine each office of a foreign bank, and must examine at least annually each branch or agency.

**Deposit taking**. Only foreign subsidiaries with access to FDIC insurance are allowed to take deposits under $250,000.

**Activity powers**. Effective December 19, 1992, state-licensed branches and agencies of foreign banks could not engage in any activity not permitted to a federal branch.

Clearly the authority of the Federal Reserve over the foreign banks was increased. Further, the regulatory burden and the costs of entry by foreign banks into the United States also increased.

38. What are the major advantages of international expansion to FIs? Explain how each advantage can affect the operating performance of FIs?

First, an FI can benefit from significant risk diversification, especially if the economies of the world are not perfectly integrated, or if different countries allow different banking activities. Second, an FI may benefit from economies of scale. Third, the returns from new product innovations may be larger if the market is international rather than just domestic. Fourth, the risk and cost of sources of funds both should be reduced. Fifth, FIs should be able to maintain contact with, and thus provide better service to, their international customers. Sixth, an FI may be able to reduce its regulatory burden by selectively finding those countries that have lower regulatory restrictions.

39. What are the difficulties of expanding globally? How can each of these difficulties create negative effects on the operating performance of FIs?

First, the difficulties of international expansion include the higher cost of information collection and monitoring in many countries. Because the level of customer specific information may not be as readily available as in the U.S., the absolute level of lending risk may be higher. Also, coordinating different regulatory rules and guidelines will increase the cost of regulation. Second, the political risk of nationalization or expropriation may increase the costs to an FI from the loss of fixed assets to the legal recovery of deposits in U.S. courts from such action. Third, the establishment of foreign offices may have large fixed costs.