
The Future of Banking in America

Summary and Conclusions

George Hanc*

Purpose and Approach of the Future-of-Banking Study

The purpose of the FDIC's study of the future of U.S. banking is to project likely trends in the structure and performance of the banking industry over the next five to ten years and to anticipate the policy issues that will confront the industry and the regulatory community.¹

This study comes 17 years after the FDIC's last comprehensive consideration of the future of banking.² That earlier study, *Mandate for Change*, was undertaken against a background of increased competition for banks, weak profitability, and a reduced market share in commercial lending. The study recommended product and geographic deregulation, with appropriate safety-and-soundness safeguards, to ensure the viability of the banking industry.

Since then, the environment for banking has changed radically. Legislation was enacted to permit both interstate branching and combinations of banks, securities firms, and insurance companies. A generally strong economy, as well as deregulation, led to marked improvements in bank profitability and capital positions. At the

same time, however, the deregulation of products and markets intensified competition among banks and between banks and nonbank financial companies. In addition, together with improved information technology, deregulation accelerated the consolidation of the banking industry through mergers and acquisitions and set the stage for the establishment of huge banking organizations of unprecedented size and complexity.

Although the condition of the industry has greatly improved over the past decade or so, banks and the regulatory community will face significant challenges in the years ahead. Competition will continue to be intense, and few banks, if any, will be insulated from its effects. In the view of some observers, rapid consolidation of the banking industry will continue and may adversely affect the availability of credit for small businesses and local economies. Large, complex banking organizations may pose difficult supervisory issues, while

* Former Associate Director, Division of Insurance and Research, Federal Deposit Insurance Corporation.

¹ Throughout the paper, "this study" refers to the FDIC's collective project on the future of banking (FOB), consisting of the 16 papers listed in the first section of the references.

² FDIC (1987).

the burden of reporting and other regulatory requirements will fall heavily and disproportionately on small banks unless remedial action is taken. Further advances in information technology will permit the development of new products, services, and risk-management techniques but may also pose important competitive and supervisory issues. Nonbank entities will continue to offer bank-like products in competition with banks, raising anew the question of whether banks are still “special” and, more fundamentally, whether banks are sufficiently different from nonbank firms to justify the maintenance of a safety net for banks.

It is useful, therefore, to try to chart the course of the banking industry in the next five to ten years and to consider what policy issues the industry and regulators will face. The authors of this study do not pretend to be clairvoyant. They are mindful of the many financial predictions that were once offered with confidence but turned out to be wrong or premature. This study is perhaps best described as an exercise in strategic thinking. Its approach is to analyze what has happened in the recent past, consider in detail reasons for expecting recent trends to continue or to change, and draw the consequences for bank and regulatory policies. As always, uncertainties abound, and events that may now appear fairly improbable may in fact shape the future. This paper closes with a discussion of a number of such possible events.

The future-of-banking study addresses three broad questions:

1. What changes in the environment facing banking can be expected in the next five to ten years?
2. What are the prospects for different sectors of the banking industry in this anticipated environment? Because the banking industry is not monolithic and different segments of the industry have, to some degree, different opportunities and vulnerabilities, the study considers separately the prospects for large, complex banking organiza-

tions; regional and other midsize banks; community banks; and limited-purpose banks.

3. What policy issues are the industry and regulators likely to face in the years ahead? Separate consideration is given to

- *Consolidation of the banking industry:* What are the prospects for, and implications of, further consolidation of the banking industry, particularly relating to safety and soundness, market concentration, and small business credit?
- *Combinations of banking and commerce:* What are the pros and cons of permitting common ownership or control of banks and commercial enterprises? What are the options for regulating such combinations so as to protect the bank safety net and avoid conflicts of interest?
- *Large-bank supervisory issues:* What are the implications for bank supervision of the growing complexity of large banking organizations?
- *Governance issues:* Recent corporate scandals have led to efforts to hold corporate directors and managements to a higher standard. What are the likely effects on banking and what should banks do to avoid governance problems?
- *Financial services regulatory issues:* What should be done, either under existing law or through new legislation, to enhance the effectiveness of the federal financial regulatory system?
- *Bank liability structure:* What are the implications for supervision and deposit insurance of changes in the structure of bank liabilities?
- *Economic role of banks:* How does the increased role of nonbank financial institutions and markets affect the rationale for a safety net for banks?

The Environment for Banking

The future of banking will be shaped, in large part, by the environment—economic, demographic, regulatory, technological, payment-system, and competitive—in which it operates.

Economic Environment

In the decade ahead, a climate of moderate economic growth without severe or long-lasting recessions would be conducive to the strong growth and profitability of the banking industry. In such a climate, bank failures would be few in number and idiosyncratic in nature—typically caused by managerial and internal control weaknesses, excessive risk taking, or fraud, rather than by broader economic forces. Such, at least, has been the pattern of bank failures in most of the years since the inception of the FDIC, with the principal and very large exception of the 1980s and early 1990s. However, the economy is not immune to speculative bubbles like those occurring in the energy, commercial real estate, and agriculture sectors in the 1980s, which were among the important causes of the wave of bank failures during that period, or the more recent bubble in communications technology in the 1990s. Boom-and-bust conditions in markets in which banks participate could once again produce a significant number of failures caused by economic conditions, although the banking industry is stronger than it was on the eve of the 1980s, geographic diversification has reduced the vulnerability of many banks to local economic disturbances, and bank supervision has been strengthened.

Demographic Environment

Among the main demographic trends likely to affect banking in the years ahead are the aging of the population and the continued entry of immigrants.³ In the next decade or more, the baby boomers (people born during the post-World War II bulge in the birth rate) will retire or approach retirement. There are more than 80 million baby

boomers, and they account for 30 percent of the total U.S. population. Life-cycle theory and the available data suggest that they will be engaged in liquidating assets to a greater degree—and will make less use of credit—than younger age groups. Also compared with younger age groups, they will hold a greater proportion of their wealth in liquid assets, including bank deposits. At the same time, baby boomers may be less averse to risk than similar age groups that had experience with the Great Depression. Therefore, the composition of the baby boomers' wealth is likely to be affected not only by their stage in the life cycle but also by their overall motives for saving and their investment experience with equities and other market instruments. Baby boomers will live longer than the preceding generation and may find that their post-retirement incomes will be inadequate to support costs such as health care. Many, though, will inherit wealth from their parents and will need financial services for their retirement planning. Banks will therefore be able to profit by broadening their services to meet baby boomers' financial preferences.

Since 1990, the United States has attracted 9 million immigrants. Of the total U.S. population, 33 million, or 11 percent, are immigrants. Though the number of new immigrants is expected to increase, immigrants as a whole may not supply a proportional amount of funds for bank deposits because of low incomes and lack of legal documentation. In addition, immigrants often send large remittances back to their home countries. Low rates of home ownership and reliance on borrowing from informal sources such as family and friends are other factors likely to keep demand for bank credit low. Immigrants demand fewer mortgage loans because of their lower rate of home ownership and tend to make larger down payments than native-born Americans. Banks now earn service fees for transferring remittances and, in connection with this activity, may be able to provide incentives for immigrants to open

³This section is based on the FOB paper by Jiangli. Long-term reductions in population in some rural areas also have implications for banks and are discussed in the section on community banks.

banking accounts. Banks are tailoring their products to meet immigrants' unique characteristics—for example, by offering low-fee transaction accounts and flexible mortgage packages. As immigrants reside longer in the United States, their incomes will rise, more of them will buy homes, and they will generally merge into the financial mainstream.

Both baby boomers and immigrants will increase their supply of deposits to banks, but for different reasons. Baby boomers will desire to hold safe and liquid assets when they get older, whereas immigrants will likely become wealthier as they stay longer in the United States. As for the effects of aging baby boomers and immigrants on the demand for bank loans, the two groups tend to offset each other. Immigrants now demand fewer bank loans because of low incomes and a reliance on informal banking, but when they live long enough in the United States, they tend to become home buyers. In the next 10 to 20 years, however, increased loan demand from immigrants may not fully compensate for retiring baby boomers' decreased loan demand.

Regulatory Environment

As in the recent past, future deregulation of bank powers is more likely to start from developments in the marketplace or actions by individual states than from initiatives by Congress or the executive branch. However, Congress and the executive branch may be more receptive to proposals for legislation designed to protect consumers, prevent serious misconduct by bank personnel, or advance national security objectives. The provision of a bank safety net and the existence of regulatory agencies to enforce compliance make banking a politically attractive vehicle for furthering such objectives. The results have been substantial reporting and other regulatory burdens on banks. These requirements frequently involve fixed costs that tend to be proportionally heavier on small banks. Although, as noted below, we regard community banks as a viable business model, the disproportionate impact of regulatory burden on smaller banks places them at a competitive disad-

vantage. Excessive regulatory burdens may not only hurt existing banks but may also discourage new entrants, thereby depriving bank customers of the benefits of increased competition from newly established banks. This prospect highlights the importance of reducing reporting burdens wherever possible.

The FDIC established a special task force to reevaluate its examination and supervisory practices in an effort to improve operations and reduce regulatory burden without compromising safety and soundness or undermining important consumer protections. Over the last several years the FDIC has streamlined examinations and procedures with an eye toward better allocating FDIC resources to areas that could ultimately pose greater risks to the insurance funds—areas such as problem banks, large financial institutions, high-risk lending, internal controls, and fraud.⁴

The FDIC is also leading an interagency effort to identify and eliminate restrictions that are outdated, unnecessary, or unduly burdensome. This effort is pursuant to the Economic Growth and Regulatory Paperwork Reduction Act of 1996. Comments are sought from the banking industry about which regulations are the most burdensome and which regulations place the industry at a competitive disadvantage. The agencies have jointly published the first two of a series of notices soliciting comment on regulations in a number of areas and have been conducting outreach sessions with bankers, consumer groups, and community groups. Armed with input from these efforts, the agencies will conduct a comprehensive review of banking regulations and will report to Congress on their findings and on the actions they have taken, or plan to take, about the level of burden. The agencies also expect to send Congress a list of legislative areas for consideration.

⁴ Actions taken by the FDIC, as well as interagency efforts to reduce regulatory burden, were outlined in congressional testimony by the Vice Chairman of the FDIC (Reich [2004]).

Technological Environment

The banking industry is now more dependent on technology than ever before, with annual industry expenditures for technology topping an estimated \$30 billion.⁵ In recent decades, the focus of large-bank technology developments has shifted.

These decades began with a large number of mergers and acquisitions after restrictions on interstate banking and branching were lifted, and the technology component of merging two entities proved to be a challenging task for acquirers. Lessons were learned over time by institutions that experienced numerous rounds of acquisitions. By the late 1990s, Y2K concerns dominated technology planning and, to an extent, restrained the level of mergers and acquisitions. Y2K work also had the effect of benefiting banks by requiring planning for business continuity and disaster recovery. Meanwhile, the world of technology continued to change, with rapid adoption of the Internet and increases in the market capitalization of Internet-related companies. Bankers invested heavily in Internet products and services. More recently, the technology focus of banks has moved to cost cutting, consolidation, and rationalization. Large banks will continue to develop new technologies and adapt to legislative and regulatory changes, such as Basel II and Check 21. Imaging, increased bandwidth, wireless networking, and Web services are innovations likely to have an impressive effect on the use of bank technology. For large banks, security and operational resiliency remain major concerns.

Community banks also depend on technology, but more as users of proven technology than as creators or innovators. By using proven technologies as they become available, community banks now offer a wide variety of products and services, often matching large banks in the scope of their offerings to retail customers. As a result of competitive pressures, even small banks now find it mandatory to have sophisticated, well-functioning technology to support customer service, administration, and financial reporting. But managing technology is a challenge for community banks, and among FDIC-supervised banks, only slightly more than half perform core processing in-house; the

remainder outsource this function. Thus, third-party service providers play a critical role in the efficiency and security of technology operations at community banks.

Objective assessments of community bank information technology (IT) operations are available through the examination process and from a survey of FDIC IT examiners. The vast majority of FDIC-supervised banks receive sound composite IT examination ratings. Examiners report that community banks are using technology to provide customers with more and better-quality products and services. Examiners also note vulnerabilities at FDIC-supervised banks in the areas of risk assessment and audit, strategic planning, management of outsourcing, security, and personnel.

Technology will continue to be a major expense, and security will remain a crucial issue for banks of all sizes. Responding to an ever more complex technology environment will be challenging. Nonetheless, proper technology management is within the grasp of every bank and can lead to better customer service, lower operating costs, and a more efficient banking system.

Payment-System Changes

Although the much-heralded checkless society has yet to arrive, major changes are underway in retail noncash payment systems, as the use of checks as a means of payment has declined and electronic forms of payment have increased.⁶ After rising for many years, the number of checks used in retail transactions declined from 49.5 billion in 1995 to 42.5 billion in 2000—the latest year for which comparable data are available. Over the same period, the number of retail electronic payments increased from 14.6 billion to 28.9 billion.

⁵ This section is based on interviews with large-bank supervisory personnel at the Office of the Comptroller of the Currency and the Federal Reserve Board and on information received from FDIC examiners who have experience performing or reviewing information technology examinations. The results are discussed in detail in the FOB paper by Golter and Solt.

⁶ This section is based on the FOB paper by Murphy.

Although fewer checks are being written, the number is still very large in absolute terms and in comparison with the number being written in several other countries, some of which have virtually eliminated the use of checks. Therefore, efforts are being made to “electronify” checks early in the process of clearing and settlement by sending the information forward electronically; that process is expected to be faster and less expensive than current methods, which require the physical transportation of large amounts of paper.

Banks will have to adapt their product offerings and pricing as well as their back-office processing to reflect these payment-system changes. Since more electronic transactions are cheaper to process, as is the conversion or truncation (or both) of checks, banks that do not explicitly charge for transaction services on a per-item basis will see a reduction in costs. For banks that have explicit fees for each service (mainly banks that supply cash-management services), it will be necessary to ensure that the profit margins on the electronic transaction services are commensurate with those on the paper transaction services. Banks of all sizes should be able to continue to serve their customers with a mix of capabilities, including ATMs, on- and off-line debit cards, credit cards, and other services.

Bank regulators must be aware of the risk implications of the changes in payment systems and must adapt their approaches accordingly. Operational risk is obviously an important issue. In this regard, the ownership of fund transfer networks has changed dramatically: the number and proportion of networks owned and operated by nonbank entities has increased, whereas those owned by joint ventures of banks have declined. Because the operation of these networks directly affects the risk exposure of banks, the risk-management practices of the network providers may have important implications for the banking industry and the bank regulatory community.

Banks and bank regulators also need to be concerned about the market structure of the network providers, especially those for ATMs, debit cards,

and credit cards. Significant consolidation among network providers has already occurred, and any further concentration raises concerns about pricing, quality of service, and product innovation in this segment of the market—one for which bank regulators have no direct responsibility.

Competitive Environment

The shares of debt held by commercial banks and savings institutions as a percentage of the total volume of debt have declined compared with the shares held in earlier decades of the twentieth century.⁷ Some observers have interpreted this decline as a sign of competitive weakness or even obsolescence. However, this decline is partly due to the proliferation of channels of financial intermediation, which often involve the issuance of financial instruments to fund other financial instruments rather than the channeling of funds to nonfinancial sectors of the economy—households, businesses, and governments.

In this regard, the overall volume of borrowing in credit markets has apparently increased permanently. During the 1980s the volume of borrowing by nonfinancial sectors of the economy rose from 1.3 times annual GDP to nearly 1.9 times annual GDP, an increase reflecting the rising indebtedness of households and nonfinancial businesses, in tandem with deficit spending by the federal government.

The growth of debt in our economy during the 1980s was associated with a decline in the share of domestic nonfinancial borrowing that is directly funded by commercial banks (the share declined from 30 percent in 1974 to a low of 20 percent in 1993). But when debt growth leveled off in the early 1990s, commercial banks' share of this credit-market pie also leveled off, and since the early 1990s it has remained generally stable. The continued need for bank financing on the part of many borrowers reflects their inability—owing to their small size and idiosyncratic risk—

⁷Trends in the importance of banks in U.S. credit markets are discussed in the FOB paper by Samolyk.

to access financial markets directly and cost effectively.

The reduction in banks' share of the credit-market pie reflects a dramatic shift in the way loans are being financed. Specifically, asset securitization (the pooling of loans and their funding by the issuing of securities) has allowed loans that used to be funded by traditional intermediaries, including banks, to be funded in securities markets. The securitization of home mortgages and consumer credit has reduced the extent to which these types of loans are directly funded by commercial banks and has had an even more adverse effect on savings institutions.

Nonetheless, commercial banks continue to play a significant role in funding business borrowers. The average share of nonfinancial business borrowing that commercial banks hold on their balance sheets has remained relatively stable for five decades. At the same time, there has been a clear shift in how banks lend—a shift from shorter-term lending to loans secured by business real estate. This shift may reflect banks' continuing comparative advantage in real estate lending, a form of lending less well suited to the standardization necessary for asset securitization.

The savings institution share of total household, business, and government debt has also stabilized in recent years, but at levels much lower than those of earlier post-World War II decades. The reasons for the decline are the liquidation of a substantial portion of the savings and loan industry during the 1980s and early 1990s, the absorption of numerous savings institutions by commercial banks, and the rapid growth of mortgage-backed securities.

Banks' importance relative to capital markets is lower in the United States than in many other countries. However, some countries are moving closer to the U.S. model as a result of forces that have increased the efficiency of "arms-length" financial markets, including improvements in the processing of information, increases in international trade and capital flows, and political integration.⁸ Thus, the lower market share of banks

in the United States may be seen as a sign of the advanced development of capital markets and IT in the United States rather than as a sign of terminal weakness in the banking industry.

Of course, market-share data based on balance-sheet totals underestimate the continuing importance of banks in financial markets precisely because they do not include off-balance-sheet activity. Through backup lines of credit, loan origination, securitization, and other means, banks support lending by other entities and earn fee income. An alternative measure of the importance of banks in the financial system is provided by the bank share of total net income of financial sector firms, which reflects income and expense from both on- and off-balance-sheet activities. During 1992–2002 net income of publicly traded commercial banks and savings institutions accounted for an average of 44 percent of total profits of all publicly traded financial companies—about the same proportion as in 1985, before the banking crisis of the late 1980s and early 1990s.⁹ Moreover, the net income of the largest individual banks was far greater than that of the largest nonbank financial companies.¹⁰ The ability of the banking industry and the largest individual banks to earn high net income relative to other financial firms is hardly a sign of competitive weakness.

The Environment for Banking: Summary

In general, the environment for banking in the next five to ten years is likely to remain favorable. The economic environment appears conducive to good banking industry performance, assuming that recessions are mild and that we avoid the speculative bubbles similar to those that con-

⁸ Rajan and Zingales (2003).

⁹ Tabulations by the FDIC, based on data from Standard and Poor's Compustat. For other measures of banks' market share, see the FOB paper by Samolyk, and Boyd and Gertler (1994).

¹⁰ In 2002 Citicorp earned net income of \$10.7 billion from banking operations, and Bank of America Corp. earned \$9.2 billion, whereas the four largest nonbank financial companies earned net income ranging from \$4.6 billion to \$5.8 billion (tabulations by the FDIC, based on data from Standard and Poor's Compustat).

tributed to widespread failures during the 1980s. The banking industry's market share has stabilized, according to a number of measures. Reduced use of checks and increased use of electronic payments are likely to exert downward pressure on costs of the banking system as a whole. Over time, banks will have increased opportunities to serve two growing segments of the population—retired baby boomers and immigrants.

Potential problems in the environment are likely to be associated with inadequate safeguards in the use of technology. Consolidation and increased nonbank ownership of fund transfer networks—especially networks for ATMs, debt cards, and credit cards—may expose banks to new operational risks. Outsourcing certain functions, including moving work offshore, involves political, business-continuity, and security risks. Inadequate IT staffing may make some banks vulnerable to attacks on the software they use, with customers exposed to inconvenience and banks to weakened reputations and weakened competitive positions.

For community banks, in particular, the burden of reporting and other regulatory requirements poses a significant threat to future prosperity. Efforts to address this problem are described above.

Prospects for Banking Sectors

As is well known, the U.S. banking system is characterized by large differences in the size of institutions; the system includes some of the world's largest banking organizations as well as thousands of relatively small banks. Institutions also differ in the extent to which they are affected by local rather than national economic forces and in the business strategies they have adopted to cope with their environments. Individual banks or groups of banks have, to some extent, different business opportunities, risk exposures, and future prospects, and many of these differences are associated with size. In this study, banks are divided into the following groups:

Large, complex banking organizations—defined as the top 25 organizations in terms of assets

Community banks—defined as institutions with less than \$1 billion in assets

Regional and other midsize banks—defined as banks that fall between community banks and the top 25 (in other words, banks with assets greater than \$1 billion but less than the assets of the smallest of the top 25 organizations—currently about \$42 billion)

Special-purpose banks—includes credit card banks, subprime lenders, and Internet banks.

Except when specifically noted, “banks” and “banking organizations” refer to independent commercial banks and savings institutions and to the holding companies of such institutions. “Assets” when used to denote the size of different groups of institutions means the assets of commercial banks and savings institutions combined. Asset limits of size groups are adjusted for inflation as measured by the GDP price deflator.

Large, Complex Banking Organizations

Over the past 20 years the structure of the U.S. banking system has changed enormously in response to changes in the legal, regulatory, and financial landscape.¹¹ At the end of 2003, the 25 largest insured banks and savings institutions held 56 percent of total industry assets, with the 10 largest holding almost 44 percent, up from 19 percent in 1984. For the next 15 banks, the growth has been much less dramatic: the combined assets of the banks ranked 11 through 25 have risen only 2 percentage points, from about 10 percent in 1984 to 12 percent at the end of 2003.

¹¹ This section is based on the FOB paper by Reidhill, Lamm, and McGinnis. Information on individual institutions is based on publicly available data.

Why did these institutions grow to be so large? Has the elimination of restrictions on branching and ownership been the main driving force? Do larger banking organizations enjoy economies of scale? Does management simply want to control ever-larger organizations? Do investors exert pressure to increase asset size, revenues, or net income? To some extent, all of these appear to be true.

The passage of the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 undoubtedly helped spur large banks to spread across state lines and to grow. This development helped create large, geographically diversified branch networks that stretch across large regions and even coast-to-coast. The Gramm-Leach-Bliley Financial Services and Modernization Act of 1999 (GLB) allowed the largest banking organizations to engage in a wide variety of financial services, acquiring new sources of noninterest income and further diversifying their earnings. Contributing to these developments were advances in IT that facilitated control of far-distant operations and fostered new products, services, and risk-management techniques.

As these banks have grown, have they gained efficiencies from their growth? The conclusions reached in the economic literature on bank economies of scale are mixed; some studies have found economies of scale and scope, and some have not.¹² With respect to market power, studies of mergers that resulted in high concentrations in local markets did not find significant gains to the acquiring firm. On the other hand, consolidation that leads to geographic diversification seems to be associated with increased profits and reduced risk. Some studies have also concluded that banks may seek growth in an attempt to be regarded by the market as too big to fail.¹³ According to this view, the funding costs of a bank would be lower if holders of uninsured deposits, bonds, and other credits assumed they would be protected if the bank failed.

Although the academic literature does not provide conclusive evidence that greater size leads to cost and other advantages, there appears to be

continual pressure on bank management from shareholders and market analysts to show growth in both revenue and earnings. Bigness is apparently regarded as advantageous. Nevertheless, the wave of mergers and acquisitions that occurred after enactment of the Riegle-Neal Act and GLB has probably passed. The large number of deals within the recent past partly reflects the backlog created by a restrictive legal environment; in a less-restrictive legal environment, many of the recent mergers and acquisitions would have occurred earlier and over a longer period. Although Riegle-Neal prohibits mergers when the merged bank's domestic deposits would exceed 10 percent of total domestic deposits (or 30 percent of the deposits in any state), only the Bank of America is close to the 10 percent limit (as a result of the recent merger with FleetBoston); other members of the top 25 group are much further from the limit and are not prevented from undertaking mergers by this legal provision. Further mergers among large banks may be expected in the immediate future, although not in the volume experienced after geographic and product deregulation.

Large banking organizations have widely different business strategies. Among the eight largest companies, some have extensive foreign operations, while others are essentially domestic commercial banks.¹⁴ Some have major credit card operations, and others do not. Some have large trading operations and are active in securities markets, while others do not and are not. Some focus on loans to businesses, while others have major consumer operations. Some concentrate on commercial and industrial loans, while a few are very active (or even specialize) in mortgage finance. They also

¹² These studies consider the cost structures of the bank as a whole. This is not to deny that there may be scale efficiencies in specific business lines, such as credit card operations. See the section on limited-purpose banks.

¹³ "Too big to fail" is a misnomer. The question for investors is whether unsecured and uninsured creditors of such a bank would be protected if the bank were to fail.

¹⁴ The eight largest banking organizations, in descending order of asset size as of January 2004, are Citigroup, J. P. Morgan Chase, Bank of America, Wells Fargo, Wachovia, Bank One, Washington Mutual, and FleetBoston. In the aggregate, these institutions account for 41 percent of total banking industry assets.

differ in geographic reach within the United States.

With some exceptions, the larger the institution, the more likely it is to engage in a wide range of activities. The smaller institutions are more likely to concentrate on growing their retail and consumer banking franchises, either internally or through mergers, and entering the investment banking business by purchasing smaller brokerage firms or building on a proprietary mutual fund business. At least in the near term, widespread entry into the property and casualty insurance underwriting business is unlikely. Life insurance underwriting and insurance brokerage show more promise, with less risk.

Despite the variety of business models, some of the ways in which large banks have changed are similar across all or many of them. They have increased their fee income as a percentage of total income, possibly to reduce their vulnerability to cyclical interest-rate changes. Most of them have increased income from deposit charges, and some have taken advantage of the new powers under GLB to increase trading revenues, investment banking income, and insurance commissions and fees. Much of the noninterest income from new powers is concentrated in the top two or three banks. These banks have also shifted from deposits to collateralized borrowings. Large banks also appear to have been successful in limiting their exposure to credit losses by improving their risk-management practices.

The experience of the eight largest banks during the recent economic recession has been mixed. Four of these banks had fairly consistent returns on book equity over the period, while the other four had large declines in earnings, with one bank experiencing an actual loss in 2000. In no case was the solvency of an organization threatened.

This mixed record may illustrate the advantages and disadvantages of large, complex organizations. In some cases, geographic diversification, international diversification, product diversification, and risk-management practices seem to have paid off well. Although some of the success was undoubt-

edly due to a very favorable interest-rate environment, loan losses during the period were low. In other cases, there were evident problems in managing large, complex organizations and in managing the process of acquiring and merging organizations. It appears, therefore, that the various strategies for capitalizing on size, geographic diversification, and product diversification can be successful—but that size itself does not guarantee consistent success.

It seems clear that for the immediate future, the large banks will continue to try to grow through internal growth and acquisitions. As these institutions grow and expand the breadth of their products, potential problems of managerial diseconomies and corporate governance may arise. The sheer size and complexity of today's large institutions place a heavy burden on their financial and operational risk-management systems. Undoubtedly many of these problems are being addressed. Permitted single-company exposures are reportedly being reduced at almost all large banks, and exposures are being tracked across business units. Financial risk models are being implemented in response to both the business need for better risk management and a presumption that Basel II will eventually be implemented.

What can be learned from the recent experience of the top 25 banks? The success of the best-performing organizations might argue that large organizations can be efficient and effective. The large losses sustained by the worst performers suggest that the risk of failure in these banks, although very small, is greater than zero. However, the size and diversification of these organizations help them absorb losses.

If larger and larger banks become a reality, how will the FDIC's risk profile be affected? First, if more institutions come up against the 10 percent deposit concentration limit, efforts to raise that limit may be expected over time and may raise concerns about the concentration of economic resources and power. Second, the possible failure of large banks, however unlikely, represents a risk not only to the insurance funds but also to the

banking system itself because of the large increases in deposit insurance premiums that might be required. Over the past 19 years the size of the largest banks has grown dramatically compared with the relevant deposit insurance fund. At year-end 1984 the Bank Insurance Fund (BIF) balance was \$16.3 billion, and the largest BIF member bank was about 7 times larger than the BIF. At year-end 1996 the largest single bank was about 9 times greater than the BIF. By the end of 2003 the largest single bank was *almost 19 times* larger than the BIF (\$33.8 billion).

Basel II will effectively create a different capital standard for the largest banks. Should the deposit insurance system be changed to isolate small banks from the effects of the failure of large insured institutions? If so, how? How will the FDIC and the regulatory agencies meet the challenges of mitigating the concentration of risk created by these very large and still-growing organizations? Capital adequacy standards and vigilant supervision present the greatest promise. Optimally pricing deposit insurance, creating separate safety-net arrangements for large and small institutions are ideas that deserve discussion and research.

Regional and Other Midsize Banks

For purposes of this study, banks that have assets of more than \$1 billion but less than the assets of the smallest of the 25 largest banking organizations (currently about \$42 billion) are designated “regional and other midsize” banks.¹⁵ As a group they are heterogeneous, not only in asset size but also in geographic reach. A quarter of them are truly regional in the sense that they have a significant presence in a number of markets, while the remaining three-quarters are sizable banks concentrated in one market—either located in only one state or having more than 60 percent of their deposits in only one market (as measured by metropolitan statistical areas [MSAs]), or both. This study has divided banks in this in-between size group into two subgroups depending on the geographic concentration of their deposits: one subgroup consists of the truly regional banks, and the

other consists of the other midsize banks (i.e., those considered to be large local banks rather than regional institutions).¹⁶

In the past seven years, both subgroups have consistently outperformed community banks in terms of average return on assets (ROA) and have often outperformed the top 25 banks. During the same period the number of regional and other midsize banks increased by 13 percent. In terms of assets, however, the midsize sector lost market share between 1996 and 2003, largely because of the top 25 banks’ dramatic growth through mergers and acquisitions.

The regional and other midsize banks may be small enough to avoid any diseconomies that may be associated with managing distant facilities and heterogeneous product lines but large enough to attract qualified employees, diversify their portfolios, and take advantage of IT to offer a wide variety of services and to manage risk. Within this group, banks that are concentrated locally have had somewhat better earnings than those whose offices are dispersed. Whether locally concentrated banks will continue to outperform regionally dispersed banks is uncertain. If economic conditions should significantly worsen in some local markets, banks concentrated in these markets might be hit hard.

Despite the whole group’s strong performance, some commentators have predicted the decline or even the disappearance of these banks. This view reflects a judgment that, in order to thrive, a bank needs either the close community ties of a small bank or the geographic scope, marketing power, and product lines of a megabank.

However, it is hard to imagine that one of the best-performing banking sectors is slated for outright disappearance. Like other good performers, regional and other midsize banks have a number of practical options. They may acquire communi-

¹⁵ This section is based on the FOB paper by Gratton.

¹⁶ According to this definition, a bank would be considered a “true” regional bank if it operated in more than one state and had less than 60 percent of its deposits in one MSA.

ty banks, merge among themselves, or seek to be acquired by larger banks that remain below the 10 percent deposit concentration limit. And rapid growth and mergers among some community banks may augment the number of in-between banks. We expect the number of banks in the regional and other midsize group to remain significant.

Community Banks

Community banks (defined here as institutions with less than \$1 billion in aggregate bank and thrift assets) were not swept away by larger banks following product and geographic deregulation, as some observers had expected.¹⁷ Community banks represent about 94 percent of all banks in the United States—nearly the same as their 95 percent share in 1985, when the recent wave of consolidation began.¹⁸ The persistently large number of relatively small banks is characteristic of the U.S. banking system and reflects long-standing public policies based on concern about the concentration of economic power, the desire to maintain local ownership and control, and efforts to protect local banks from competition. In some cases, these considerations had led to a prohibition of branching; for example, in 1985 42 percent of all community banks were located in 12 states that previously had unit banking.

The picture has changed greatly as a result of the banking crisis of the 1980s and geographic deregulation. The number of community banks has declined by 47 percent since 1985, as a result both of failures (in the earlier part of this period) and (more recently and more significantly) of voluntary mergers. Moreover, the community bank shares of total banking industry assets, deposits, and offices have also declined.

Perhaps the most notable feature of the decline in the number of community banks has been its pervasiveness: the number has declined across geographic areas, across both growing and declining markets, and among community bank size groups. The number declined in rural areas, small metropolitan areas, and large metropolitan areas, and,

within the latter, in suburban as well as urban areas,¹⁹ with the pace of the declines during the period since 1985 falling within a fairly narrow range. Moreover, in areas that suffered net reductions in population (mostly rural counties), the decline in the number of community banks was comparable to the decline among community banks as a whole.²⁰

The number of community banks declined somewhat faster in formerly unit-banking states than in states that had permitted branching.²¹ This finding suggests that restrictive branching laws contributed to the establishment of some small banks that could not (or preferred not to) continue as independent entities once branching restrictions were lifted and competition increased. However, the difference in rates of decline was not very large. Among community banks of different sizes, the largest decline was among banks with less than \$100 million in assets (where diseconomies of small scale are believed to exist); however, this decline resulted not so much from more mergers or failures as from the fact that numerous small banks grew faster than the rate of inflation and “graduated” to a higher size group.

A striking difference between urban and rural areas is in the various cross-cutting forces that ended up reducing the number of community banks. Urban areas had proportionally more mergers and failures than rural areas but also more new institutions, with the result that total net

¹⁷ This section is based on the FOB paper by Critchfield, Davis, Davison, Gratton, Hanc, and Samolyk.

¹⁸ Bank size groups are adjusted for inflation so that, for community banking organizations, the number of organizations with less than \$1 billion in bank/thrift assets in 2002 is compared with the number that had less than about \$650 million in 1985.

¹⁹ The location of community banks is determined by the location of the holding company headquarters or, when there is no holding company, the location of the institution's headquarters. Division into rural, small metro, suburban, and urban areas depends on whether the bank is located in a metropolitan statistical area (MSA) and on population density.

²⁰ Although banks in counties suffering depopulation showed no greater proportional decline in number than banks in other areas, the performance of banks in counties suffering depopulation differed from that of banks in growing areas, as discussed in the FOB paper by Anderlik and Walser, and in Myers and Spong (2003).

²¹ The 12 states where unit banking existed as of the end of 1977 were Colorado, Illinois, Kansas, Minnesota, Missouri, Montana, Nebraska, North Dakota, Oklahoma, Texas, West Virginia, and Wyoming (Conference of State Bank Supervisors [1978], 95).

reductions were roughly the same in rural and urban areas. Urban areas are clearly where the action is; urban areas are central in terms of both merger activity and the establishment of de novo banks. The two types of activity are, to some extent, related; dissatisfied customers of a merged bank may be attracted to a new institution, and areas of high population density may be more attractive markets for the establishment of new banks while also containing more attractive merger targets.

The pervasiveness of consolidation among community banks casts doubt on, or provides only weak support for, some familiar explanations of the reduction in the number of community banks. The lifting of branching restrictions in states that previously prohibited branching, diseconomies of small-scale operations, and depopulation and weak local economies all have undoubtedly affected the fortunes of community banks. However, none of these factors seems to have been the main cause of the consolidation among these institutions. In time, these factors may produce further consolidation, although it is difficult to estimate the length of the lags in bank response. These lags may reflect, in part, a lack of interest on the part of potential acquirers in banks located in weak local economies as well as the ability of banks in such areas to perform at a level satisfactory to their owners. In the recent past, at least, the main impetus for consolidation seems to have been individual decisions by shareholders and managers in response to intensified competition.

As noted above, the effect of mergers and failures was dampened somewhat by the establishment of new banks, mostly in areas of high population density. About 1,250 new community banks were established between 1992 and 2003, of which about 100 have been merged and about 1,100 remain as independent organizations. Like other new and young businesses, they exhibit significant risk factors in some cases, but only 4 have failed. If real estate and other markets served by these banks do not experience serious downturns, these institutions will have an opportunity to mature and prosper.²²

As a result of both a slowdown in mergers and the continued establishment of de novos, the pace of consolidation has slowed considerably in the past few years. In the near term, some further consolidation may be expected. Low returns on equity (resulting partly from higher capital ratios) may lead to consolidation among some institutions, as stockholders seek higher returns through increased leverage at merged institutions.²³ Attracting and retaining qualified employees and management succession will pose challenges for some of these institutions. Dependence on interest income will periodically squeeze margins unless fee income is increased. Regulatory burdens may also contribute to consolidation.

With respect to earnings performance, in recent years the before-tax ROAs have been lower for community banks than for larger banks. However, this gap between community banks and larger banks is narrowed after corporate taxes are taken into account. Community banks hold a larger percentage of their assets in lower-yield, nontaxable municipal bonds. Moreover, about 2,100 community banks were organized as Sub-chapter S corporations as of March 2004 and therefore paid no federal corporate income tax if they met certain conditions. After taxes, community bank ROAs have averaged from 1.0 percent to 1.2 percent in recent years, lower than those of larger banks but a level of profitability that would have been regarded as exceptional in earlier years. As might be expected, community banks located in counties experiencing more rapid growth in either population or real personal income have experienced higher ROAs and net interest margins,

²² During the 1980s, failures were higher among new or "young" banks than among existing banks. In the early 1980s a large number of new national banks were chartered following a change in policy by the Office of the Comptroller of the Currency, a change designed partly to increase competition. At the time, banks obtaining a national charter were, by statute, automatically insured by the FDIC. In 1991, as a result of the FDIC Improvement Act, the FDIC obtained separate authority to approve insurance for national banks. See FDIC (1997), 106.

²³ Such reasoning does not apply, or applies with considerably less force, to owner-operated banks that do not rely on uninsured or unprotected sources of funds. Returns of owner-managers may be augmented by compensation received as officers of the bank, and there may be no outside shareholders to challenge the decision to remain independent.

although expense ratios are currently similar.²⁴ These results are hardly surprising; what may be surprising to some is that even in slow-growth areas, the performance of community banks can be considered “satisfactory.”²⁵

In deposit and loan markets community banks have faced strong competition, not only from within their own ranks but also from larger banks, credit unions, and nonbank competitors. The community bank share of deposits has declined in rural, small metro, suburban, and urban areas, with the largest 25 banking organizations showing a large increase in market share.²⁶ (These comparisons reflect both internal growth and mergers.) The share held by regional and other midsize banks has also declined, while that of credit unions has remained relatively stable, increasing from 8 to 9 percent since 1994. Within the credit union industry, large institutions (assets over \$100 million) have shown an increased share, while small credit unions have lost ground. Leaving aside the very largest banking organizations, credit unions have increased their market share *relative to the smaller banks*, a development that many would attribute to credit unions’ tax-exempt status and the expansion of their permissible areas of operation. Not all community banks face credit union competition of the same intensity; credit unions are concentrated in urban areas in the central and eastern states, whereas community banks are located in large numbers in rural, suburban, and urban areas.²⁷

After adjustments are made for mergers, small banks have actually shown more rapid growth since the early 1990s than the largest banks.²⁸ Small banks have paid higher rates, and charged lower fees, than large banks in order to attract deposits. They have also increased their borrowings from Federal Home Loan Banks in order to broaden their sources of funds, as core deposit growth has lagged behind demands for credit.

On the lending side, there have been declines in the community bank shares of the increasingly standardized consumer, home mortgage, and unsecured business loan markets—markets that large

lenders, using credit-scoring technologies, have penetrated on a nationwide basis. On the other hand, community banks appear to be largely holding their own in real estate lending to businesses and in farm lending. Community banks hold a disproportionately large share of small business and farm loans (real estate and operating loans).

In summary, the number of community banks has been halved since 1985, and these banks’ market share has declined relative to the largest banks’ market share. On the face of it, the declines in number and market share would seem to suggest that community banks have serious problems. A more detailed examination presents a somewhat more optimistic view. Community banks still represent 94 percent of the total number of banks, not much different from the percentage before the recent wave of consolidation began. Moreover, it is impressive that community banks have been able to register respectable earnings and growth in recent years while facing intensified competition from nonbank financial companies, as well as from other banks after the removal of the branch restrictions that had protected many community banks from competition.

The conclusion we draw is that the community bank is a viable business model. Research suggests that community banks have certain advantages as lenders to small businesses, small farmers, and other informationally opaque borrowers; these advantages are their ability to assess the risks of borrowers who lack long credit histories, their

²⁴ From 1992 to 2001 community banks located in counties experiencing population declines recorded ROAs ranging from 1.0 percent to 1.2 percent—not much lower than the ROAs of banks located in counties experiencing population growth.

²⁵ Myers and Spong (2003) reached a similar conclusion.

²⁶ Credit union offices and deposits are classified geographically according to the location of the organization’s headquarters. For the large majority of credit unions this probably is acceptable, although for large credit unions—such as those serving military personnel—this may distort data on the location of credit union resources.

²⁷ Eighty percent of credit unions are located in MSAs, compared with 54 percent of community bank offices.

²⁸ Bassett and Brady (2001) reached a similar conclusion. It should be noted that the more rapid percentage growth rates of small banks may partly reflect the fact that the internal growth rates of very large banks may be more limited by the size of markets and the marginal cost of increases in funding.

ability to use “soft” data (such as borrower reputations) effectively in risk assessment, and their ability to operate effectively in situations where the proximity of decision makers to customers is important.²⁹ The proposition that community banks have informational advantages in lending to small business is supported by research suggesting that small banks have higher risk-adjusted returns on business loans than large banks. The willingness of private investors to risk their own money to establish new banks is a powerful market test of the viability of small banks, at least in areas of population density. Moreover, a concentration of de novos in areas where large and distant banks have taken over local institutions suggests, as well, that many customers may be dissatisfied with the more impersonal approach of large banks. Although consumer attitudes may change and larger banks may seek to emulate the personal-service approach of smaller institutions, community banks should continue to be important in the banking industry for the foreseeable future.

Limited-Purpose Banks

Limited-purpose banks are institutions that specialize in a relatively narrow business line. The limited-purpose banks examined in this study are credit card banks, subprime lenders, and Internet-primary banks.³⁰ Numerically these institutions make up a small share of the banking industry. Yet their unique production functions and product mixes warrant attention.

Although the diversification of risks is widely regarded as desirable, some institutions have chosen to specialize. Focusing on a limited set of activities allows them to develop expertise quickly and become efficient producers. Moreover, technological innovations in the financial services industry, which lead to gains in productivity and economies of scale, may also have promoted specialization.

The credit card banks provide their customers with both convenience and liquidity by offering a product that can be used as a payment device and

as an open-end revolving credit. Credit card loans pose unique risks to these lenders, however. In addition to being unsecured, credit card loans do not have a fixed duration, a lack that complicates the measurement and management of interest-rate risk. Moreover, the mass marketing of credit cards may lead to problems of adverse selection, and small average balances on individual accounts may make collection efforts cost ineffective. Despite such risks, credit card banks have managed to offset the effects of potentially greater volatility and risk in income: their average ROAs are considerably higher than those of the industry as a whole. Their high profitability results from high interest rates on credit card loans, securitization, fee income, successful use of technology, and the benefits of scale economies in credit card operations. It is reasonable to expect that credit card banks will continue to prosper. Credit card banks have been undergoing a process of consolidation, and whether further consolidation may be expected depends heavily on whether they have exhausted the benefits of scale economies.

In this study, “subprime lenders” refers to insured institutions that extend credit to borrowers who may have had more limited borrowing opportunities because of their poor or weakened credit histories. Not only can these lenders increase business volume by serving a new customer base, but they can also be profitable by pricing these loans accurately to compensate for greater risk. Although subprime lenders earn interest income higher than the industry average, their lending activity involves greater risk and losses. Moreover, increased scrutiny from regulators on issues such

²⁹The extensive literature on the economic role of community banks is discussed in the FOB paper by Critchfield et al.

³⁰This section is based on the FOB paper by Yom. Credit card banks are defined as institutions that have more than 50 percent of total assets in loans and credit card asset-backed securities (ABS) and have more than 50 percent of total loans and credit card ABS in credit card loans and credit card ABS. Subprime lenders are institutions with more than 25 percent of tier 1 capital in subprime loans. Internet banks' primary contact with customers is the Internet. Data used in this study are based on 37 credit card banks, 120 subprime banks, and 17 Internet banks.

as capital adequacy and predatory lending practices may have effectively eliminated the advantage the insured institutions once enjoyed relative to other financial firms operating in the subprime lending field. In response, subprime lending has tailed off recently, and some participants have withdrawn from the market. On the basis of the evidence to date, it is reasonable to expect bank participation in subprime lending to stay at reduced levels, if it does not decline further.

Internet-primary banks are institutions that deliver banking services mainly on-line. By taking advantage of the Internet distribution channel, these institutions offer convenience to their customers. It was once thought that eliminating physical branches and employing fewer employees would enable Internet banks to provide banking services at lower cost, but in reality, Internet banks underperform brick-and-mortar banks. This may reflect limited consumer demand for Internet banking services. These institutions are also at a competitive disadvantage relative to brick-and-mortar banks in lending to small businesses because they lack the means of building long-term relationships with borrowers. The evidence to date indicates that, as a business model, Internet banks have apparently only a modest chance of success, given present customer attitudes and the present state of technology.

Although limited-purpose banks have compiled a mixed record, their activities can be effectively undertaken by larger, more diversified institutions. A number of credit card banks are subsidiaries of large banking companies. On-line banking is offered by numerous institutions that also offer more traditional forms of access. And with appropriate underwriting and capital support, subprime lending can be a useful component of a more diversified portfolio.

Prospects for Banking Sectors: Summary

Individual banks and groups of banks differ greatly in size, strategy, and operating characteristics. They also share some attributes. Operating in a generally favorable economic environment, banks

have responded to intensified competition and the expanded opportunities offered by sweeping legislative and regulatory change. With some exceptions, they have performed at levels of profitability that would have been regarded as extraordinary in earlier years. Assuming effective macroeconomic and regulatory policies, each of the main banking industry sectors—community banks, regional and other midsize banks, and large, complex banking organizations—should prosper in the years immediately ahead.

Public Policy Issues

Although the banking industry is likely to continue to be healthy, ongoing trends raise a number of public policy issues, mainly related to the increased size and complexity of banking organizations. Chief among the issues that policy makers need to consider are the safety and soundness of banking in an industry dominated by megabanks, and concerns related to bank customers and markets.

The emergence of megabanks has raised the possibility, however remote, that failures could deplete the deposit insurance funds, require large premium increases that place a heavy burden on the remaining banks, disrupt financial markets, and undermine public confidence. Financial and technological risks arise partly from the problems of monitoring and controlling multiple business lines, geographically dispersed operations, and complex corporate structures. Furthermore, the diversification of large banks into new financial areas exposes these institutions to new reputational risks. The involvement of large financial holding companies in recent corporate scandals illustrates this exposure.

The growing importance of large, complex banks also raises issues relating to concentration and competition in individual markets and the availability of credit for borrowers and local markets that were traditionally served by local banks.

The FDIC's approach to analyzing the effects of large banks in those two areas and formulating

recommendations for possible action rests on three principles:

Banking should evolve primarily in response to the consumer and the marketplace rather than in response to regulation. The strong performance record compiled by the banking industry in recent years amply confirms what banking can achieve when it is allowed to respond to market forces. There are, of course, situations when government action is required to make markets work better. One example is the establishment of deposit insurance and of the bank safety net generally, which has contributed to the prevention of the extreme instability that characterized financial markets during much of the early history of the United States. Legislation and regulation to prevent anticompetitive practices are another example. In both cases, government action was taken to ensure that markets operate safely, fairly, and competitively.

Risks posed by large, complex banks need to be addressed through effective prudential regulation and supervision. Requiring banks to maintain adequate capital is central to an effective regulatory regime. Effective examination, supervision, and enforcement are equally important. Furthermore, regulation and supervision should be backed by market discipline exerted by holders of unprotected bank securities; regulation and supervision should also be backed by sound governance arrangements adopted by the banks themselves. As suggested above, the potential usefulness of a two-tier, large bank/small bank supervisory system needs to be considered.

To help ensure the effectiveness of prudential regulation and supervision, the structure of the bank regulatory system should be reevaluated. In the fragmented bank regulatory system of the United States, the FDIC as the deposit insurance agency has no direct supervisory responsibility for the

major risks to which it is exposed. At the same time, state and federal primary regulatory agencies that are funded by examination fees are increasingly exposed to financial strains arising from the consolidation of the industry. Within present law, or with minimum legislative change, it may be possible to coordinate better the activities of the various banking agencies, reduce the overall cost of regulation and supervision, and help all bank safety-net agencies discharge their responsibilities effectively.

The discussion that follows is based on these principles. It focuses on major public policy issues arising mainly from the consolidation of the banking industry and the consequent emergence of very large and complex banking organizations. The areas covered are the effects of further consolidation, combinations of banking and commerce, large-bank supervisory issues, governance issues, financial service regulatory issues, bank liability structure, and the economic role of banks.

Effects of Consolidation: Safety and Soundness, Competition, and Small Business Credit

After decades of relative stability, the number of banks in the United States has dropped by about one-half from the level of the mid-1980s.³¹ More recently, the pace of consolidation has slackened. Although a resumption of the headlong pace that followed geographic deregulation seems unlikely, further mergers and acquisitions can be expected in the period immediately ahead. As noted above, investors, market analysts, and managers appear to be strongly in favor of mergers as a means of achieving revenue and earnings growth, even though academic studies do not provide conclusive evidence that greater efficiency will be achieved. Some of the anticipated advantages of earlier mergers and acquisitions have failed to materialize, although it is difficult to say how the

³¹ This section is based partly on the FOB paper by Critchfield and Jones.

merger partners would have fared if they had not combined.

Yet we can also expect the number of banks to remain higher than most recent projections by other analysts.³² In the absence of a new shock to the industry, it seems likely that the U.S. banking industry will retain a structure characterized by the existence of several thousand small institutions, a less-numerous group of regional and other midsize banks, and a handful of extremely large banking organizations. It seems reasonable, also, to expect that an eventual balance may develop between the number of new-bank startups and charter losses through mergers and acquisitions—with little net change in the number of banking organizations nationwide.

The public policy issues raised by consolidation concern safety and soundness, market concentration and competition, and small business credit.

The effect of consolidation on safety and soundness. The failure of one of the largest U.S. banks is generally regarded as a low-probability event. Very large banks have greater opportunities to diversify, although the resulting reduction in risk may be offset by increased risk taking to enhance profits and by problems in monitoring and controlling increasingly complex and diverse operations.

The much greater size of today's megabanks, compared with their past counterparts, tends to increase the prospect that the failure of such a bank—although unlikely—would seriously affect the banking and financial systems. Depending on the condition of the industry and the general economy, systemic risk could arise from the failure of a bank that is a major player in certain business lines, including payments processing, international operations, derivatives, and major market-clearing functions. If it is concluded that the least-cost resolution of such a bank represents an unacceptable risk to the financial system and if, consequently, the bank regulators act to protect unsecured and uninsured liability holders, the additional cost will be covered by special assessments. These will be based essentially on assets

rather than deposits and will be borne more heavily by the largest institutions.³³

Current law contains certain provisions to deal with the special issues posed by size. Among these are the assessment provision of the systemic-risk exception for large-bank failures, the authority for the FDIC to create different premium systems for large and small institutions, and the authority for bank regulators to require more capital based on risk.

Although various options are available, the most direct way to deal with the size of the nation's largest banking organizations is to ensure that they hold sufficient capital to provide a cushion to absorb potential losses. Regulators can accomplish this by establishing minimum regulatory capital requirements in addition to requirements based on the banks' internal risk estimates (as contemplated by Basel II).

Effect of consolidation on market concentration and competition. As a result of the concentration of banking resources, some large banks may be in a position to exert their market power to raise prices of bank services in some markets. Even with the consolidation of the past 15 to 20 years, however, the banking industry is less concentrated than either its nearest competitors among financial industries—the securities and the insurance industries—or many nonfinancial industries. Banking is also less concentrated in the United States than in other developed countries. Moreover, the 10 percent domestic deposit limit inhibits the creation of a banking monopoly through nationwide mergers and acquisitions. Although some large banks may have more influence on the prices of banking services in particular markets than they once had, sizable increases in prices will invite entry by a variety of bank and nonbank firms. Among those entering these markets will be newly established institutions. The

³² See the FOB paper by Critchfield and Jones.

³³ Current law requires that special assessments in systemic-risk resolutions be based on assets less tangible equity and subordinated debt, whereas regular assessments are based on domestic deposits. Large banks tend to fund assets with nondeposit liabilities and foreign deposits to a greater extent than small banks.

entry of new banks is encouraged by the existence of deposit insurance and would be further encouraged if the reporting and other regulatory requirements that currently place heavy burdens on small banks were reduced.

Taking all these factors into account, we foresee that competitive forces are likely to continue dominating banking markets for the foreseeable future.

Effect of consolidation on small business credit. Concern has been expressed about the effect of banking consolidation on the availability of credit for small businesses and small farms.³⁴ This concern arises because community banks devote proportionally more of their resources to lending to these borrowers than large banks do. Lending to small business has often been “reputational” in nature, requiring the local expertise that is both characteristic of community banks and more favorable to some small business borrowers, such as new or young firms with limited credit histories. Large banks, on the other hand, are likely to focus more on large borrowers and use credit-scoring and other standardized lending methods in underwriting loans.

On the basis of the available evidence, the effect of consolidation on small business credit appears to be complex and dependent on numerous factors. For example, it has been argued that as banks get larger, they are better able to diversify their portfolios and therefore increase their lending to all borrowers, including small businesses. New credit-scoring models used by large banks may identify borrowers who were previously not able to obtain credit from small banks. Moreover, whether small business lending increases or decreases may depend on whether the acquiring bank already regards small business lending as an important business line. The effect of consolidation on small business credit availability also depends on whether there are other lenders in the market that can offset a merger-related reduction in lending. These effects seem to differ between rural and urban markets and between already concentrated and more competitive markets.

The effect of consolidation on small business lending will continue to be the subject of research. Although the outcome of such research cannot be predicted in detail, one important consideration is the possibility that consolidation may create opportunities for the remaining community banks. Any reduction in small business lending by large banks should invite increased lending by community banks, while also encouraging the formation of new banks to serve the needs of these borrowers. The presence of a substantial community bank sector and the prospect of new market entrants are potentially important safeguards against the possibility that bank consolidation will make small business credit less available.

Combinations of Banking and Commerce

As is well known, banking consolidation has been accompanied by affiliations of banks and other financial service firms. GLB permitted combinations of commercial banks, securities firms, and insurance companies. Looking ahead, one can expect market forces to push in the direction of more mixing of banking and commerce. The underlying policy issues are whether permitting affiliations among banks and commercial entities serves the public interest and, if such combinations are to occur, what is the appropriate regulatory framework for them.³⁵

With respect to the first question, there are two dominant views as to the desirability of maintaining a separation between banking and commerce. Proponents of one view argue that the failure to maintain a line of separation—especially in terms of ownership and control of banking organizations—would have potentially serious consequences, ranging from conflicts of interest to an unwarranted expansion of the financial safety net.

³⁴ Evidence on the effect of consolidation on small business credit is discussed in Avery and Samolyk (2003).

³⁵ The section on combinations of banking and commerce is based on the FOB paper by Blair.

Proponents of the other view argue that, if adequate safeguards are in place, the benefits from affiliations between banking and commerce can be realized without jeopardy to the federal safety net. Among these safeguards are requirements affecting bank capital and the enforcement of firewalls to protect the corporate separateness of the bank.

With respect to the appropriate regulatory framework, the Federal Reserve Board maintains that supervision of the insured bank's parent and affiliated companies is necessary if the associated risks are to be understood and controlled. The FDIC has long argued that national and state-chartered banks, regardless of size or holding company affiliation, should be able to choose the ownership structure that best suits their business needs if adequate protections are present. Thus, at the heart of the debate is the question of whether the public interest requires federal regulatory oversight of the entire banking organization or just of the bank.

Although the current prohibitions on corporate ownership of banks are sometimes defended on the grounds that banking and commerce have always been separate, the history of U.S. banking reveals no evidence of a long-term separation. Certainly the activities permitted to banks have always been subject to prohibitions, but the prohibitions on affiliations with commercial firms that are currently in effect stem from the Bank Holding Company Act of 1956 and its amendments. Despite these regulations and prohibitions, however, extensive links between banking and commerce have existed and still exist. And the market pressure for more business combinations between banks and commercial firms can be expected to continue. Moreover, the potential risks of allowing banking and commerce to mix—conflicts of interest, concentration of economic power, and expansion of the safety net—can be contained through the use of adequate safeguards and firewalls. Thus, these risks do not appear to justify a separation of banking and commerce.

Does the mixing of banking and commerce constitute good public policy? The evidence suggests

that the answer is a qualified yes: with adequate safeguards in place, the careful mixing of banking and commerce can yield benefits without excessive risk. The issue facing policy makers is how these combinations of banking and commerce will be regulated. Specifically, will increasing amounts of commercial activity be subject to umbrella supervision, or will the insured entity be the focus of supervision? Regulators and policy makers should consider what additional powers, if any, are needed for regulators to be able to effectively ensure the corporate separateness of the insured entity, while also ensuring that banks can choose the corporate structure that meets their business needs.

Large-Bank Supervisory Issues

Large, complex banking organizations pose unique challenges to regulators.³⁶ Traditional methods of examining banks were suited for smaller institutions, and as financial institutions became larger and increasingly complex, bank regulation and supervision had to adapt. The regulatory and supervisory issues raised by the growth of these banking organizations may be considered in the context of the New Basel Capital Accord, or Basel II. As is well known, the new accord rests on three pillars:

Pillar 1: Minimum Capital Requirements

Pillar 2: Supervisory Review Process

Pillar 3: Market Discipline.

Pillar 1 (capital requirements). On June 26 2004, the Basel Committee on Banking Supervision released the framework for the new Basel capital accord. It outlines the minimum requirements for credit, market, and operational risk. The target for implementation of the new accord was year-end 2006, with the most advanced approach available for implementation by year-end 2007. The proposed accord includes two primary changes to the current capital standards. First, it modifies the approach to credit risk; second, it includes explicit capital requirements for opera-

³⁶This section is based on the FOB paper by Bennett and Nuxoll.

tional risk. Most U.S. banks will continue to use the existing risk-based capital rules, but all very large, internationally active banks will be required to adopt the new capital standards and to use the Advanced Internal Ratings-Based (AIRB) approach to credit risk. Under the AIRB approach, the probability of default, loss given default, and exposure at default will be estimated internally by the banks. With respect to operational risk, the new accord proposes that banks using the AIRB approach will also estimate operational risk internally.

As a member of the Basel Committee, the FDIC has three basic goals for Basel II: (1) capital regulations should preserve and maintain minimum capital requirements; (2) the standards should be designed so that they may be implemented and supervised effectively in the real world; and (3) any new standards should not produce substantial adverse unintended consequences. Among such unintended consequences is the possibility that smaller banks will be adversely affected compared with large banks. As noted above, the FDIC also believes that a minimum regulatory capital requirement should be adopted in addition to the requirements based on the banks' internal estimates as contemplated by Basel II. This belief is consistent with the FDIC's principle that a strong capital base not only is necessary for a safe and sound banking industry but also can equip the industry to weather downturns in the economy or the onset of unanticipated events.

Pillar 2 (supervisory review). The supervision of large banks is challenging because of the complexity of these institutions. Four sources of complexity are size, geographic span, business mix, and nontraditional activities. Given the sheer volume of transactions and types of assets, it is difficult to gather, aggregate, and summarize information in a manner that is meaningful for risk management. The wide geographic span of these institutions, including both domestic and foreign operations, may obscure correlations among exposures. More sophisticated products and a wider range of business activities also complicate supervision. As major business units are acquired or

sold, the risk profile of the organizations may change considerably. Supervisors will be strongly challenged to develop the expertise necessary for monitoring the activities of large, complex banking organizations, as well as to avoid extending the safety net to nondeposit products.

Pillar 3 (market discipline). Investors in the various securities issued by banks have interests similar to those of supervisors. This similarity of incentives has led to a number of suggestions that supervisors rely on market discipline for information about and control of the riskiness of banks. As also discussed in a later section, there are two critical questions about market discipline. First, do investors know what the bank is doing? Second, can investors control what the bank is doing? Various views have been expressed about whether banks are opaque to the investor, and recent corporate scandals provide grounds for skepticism as to shareholders' ability to control management. The effectiveness of market discipline is likely to remain a subject of further research.

Governance Issues

Failures of corporate governance can cause enormous financial losses, not only to individual corporations and their stockholders but also to society as a whole.³⁷ One widely quoted estimate of the cost of U.S. corporate governance failures is \$40 billion a year, or the equivalent of a \$10 a barrel increase in the price of oil.³⁸ Enron shareholders alone lost \$63 billion in Enron's failure. Recent corporate governance scandals have resulted in new legislative, regulatory, and judicial initiatives to counteract perceived corporate governance failings.

Because of their special and important role in society, banks need to be particularly careful about conflicts of interest, or the appearance of

³⁷ The section on governance issues is based on the FOB paper by Craig Litan (2002).

them, so as to maintain public confidence. As a result of earlier banking legislation, current bank corporate governance standards are higher than the standards for nonbank enterprises, and most banks to which the Sarbanes-Oxley Act of 2002 applies have little trouble meeting that act's requirements.³⁹ In fact, many of the provisions of this legislation are derived from bank governance standards; this law introduces nonbanking businesses to standards that banks have been observing for years.

However, the combination of the Sarbanes-Oxley legislation and new stock exchange rules, recent SEC actions and recent court decisions, a new activism on the part of blockholders, and heightened public scrutiny of business behavior has produced a changed corporate governance environment, one that continues to evolve. The major changes in this environment that will affect banks are changing norms of board independence, increased shareholder involvement, and changing and uncertain standards of board accountability. In particular, bank interlocking directorships may run up against the changing norms for board independence. In addition, public dismay over excessive executive compensation is likely to prolong shareholder scrutiny of boards' compensation policies—and likely to increase the pressure on some boards.

Banks, like other businesses, must be prepared to meet these evolving standards of corporate governance. The most effective way to avoid corporate governance problems is to select a knowledgeable, engaged, and independent board of directors. However, increased commitments of time by board members, increased liability issues, an emphasis on financial expertise, and the trend toward more independent boards are likely to make it more difficult for banks, and other businesses, to recruit board members. Some observers suggest that banks and other businesses will need to focus on recruiting people who have traditionally not been members of boards in large numbers—women and both younger and older members: for example, more division directors rather than sitting CEOs, and more retired people

who have the time and expertise to devote to board membership. In this demanding and changing corporate governance environment, banks and other businesses may need to expand their vision of what constitutes a qualified board member.

Financial Services Regulatory Issues

In the 20 years since the last major study of the federal financial regulatory system,⁴⁰ the financial system has continued to evolve and become more complex. Yet, its regulatory system remains rooted in the reforms of the 1930s. Regulation and supervision of large, multi-product, internationally active financial organizations that span numerous federal financial regulatory agencies pose challenges for a system designed largely to regulate smaller, distinct, locally based organizations. Although changes have been made—especially over the past decade—to improve the regulation and supervision of these new financial conglomerates, it is time to take a hard look at the current federal financial regulatory structure.⁴¹

As the financial services industry grows larger and more complex, the question is increasingly raised as to whether our fragmented, piecemeal system of regulation is up to the task. Since the mid-1980s a number of countries have examined their financial regulatory structures and concluded that changes needed to be made. Internationally, the trend has been to consolidate all—or most—financial services regulation within one agency and to move that function outside the central bank.

³⁹ The Sarbanes-Oxley Act applies to publicly held institutions—institutions that issue securities registered with the SEC or with a federal financial regulatory agency. In addition, nonpublic banking institutions with more than \$500 million in assets are required to comply with the SEC's definition of auditor independence.

⁴⁰ See *The Report of the Task Group on Regulation of Financial Services* (1984).

⁴¹ This section is based on the FOB paper by Kushmeider.

Reform of the U.S. financial regulatory structure raises complex issues regarding deposit insurance, the role of the central bank, and the dual banking system. Although many observers would argue that in the absence of a crisis, regulatory restructuring is not a topic that will generate much political interest in the United States, there are issues that will affect how the financial regulatory system is organized and operates regardless of whether full-scale restructuring is desired. Among these issues are funding for the Office of the Comptroller of the Currency and the Office of Thrift Supervision, federal preemption, the crossing of functional regulators, and umbrella supervision for all financial conglomerates that own an insured depository institution.⁴²

The options outlined in the paper represent possible ways in which reform or restructuring of the federal financial regulatory system could occur. They focus on the least-intrusive, most easily accomplished reforms (those that regulators could undertake themselves or that require little legislative change) to a full-scale restructuring of the federal financial regulatory system. There are valid arguments for taking either approach or even for finding some middle ground, such as a thorough restructuring of the bank regulatory system. Within each option there is room for debate over how regulation might be structured—for example, what entities might be included. The paper is designed to provide background regarding issues that will influence the debate over regulatory restructuring and to provoke thought and discussion about the design of the U.S. federal financial regulatory system.

Bank Liability Structure

Growth in core deposits (total deposits less time deposits in denominations of more than \$100,000) has failed to keep pace with the corresponding growth in bank assets.⁴³ There may be many reasons, either singly or in some combination, for this phenomenon. The supply of core deposits may be growing at a slower rate than bank assets, banks may be increasingly using alternative funding sources that have lower costs, and

some alternative sources may offer risk reducing features. As all of these explanations are likely to be true, the mix between core deposits and alternative funding sources will continue to change. This prospect suggests continued reliance on wholesale funding sources (such as Federal Home Loan Bank advances and brokered deposits) and efforts to expand other nondeposit sources of funds.

These changes in liability structure raise several issues for banking regulators. The one that has received most attention recently is market discipline—particularly for large, complex banking organizations. The research to date shows that unprotected investors monitor bank performance and respond to changes in risk exposure. Supervisors play an important role in ensuring that markets have accurate data on banks, since troubled banks otherwise may overstate capital. The evidence is weaker on the ability of markets to encourage banks to reduce their risk exposure when trouble arises. And for the very largest banks, market discipline may be diminished by the perceptions of market participants that such banks are too big to fail—that is, the perception that uninsured depositors and other creditors would be protected if the institution failed. In the future, more emphasis should be put on disclosing information to the markets as well as on increasing the use of market data to inform and enhance the supervisory process.

Another issue raised by banks' heavier reliance on wholesale funding sources and rate-sensitive deposits for funding is liquidity risk exposure, which has increased. Regulators have responded by updating their examiner guidance on liquidity risk. It may also be worthwhile to seek better ways to measure liquidity risk and better ways to handle the operational challenges associated with liquidity failures.

⁴² The last issue has implications for the operation of U.S. financial conglomerates in Europe, where they must meet a requirement for consolidated supervision.

⁴³ This section is based on the FOB paper by Bradley and Shibut.

A third issue concerns the assessment base, and a fourth concerns depositor preference. To the extent that asset growth is funded by nondeposit liabilities, the exposure of the FDIC tends to increase without any increase in the assessment base on which premiums are calculated. (The assessment base is essentially the amount of domestic deposits after certain adjustments.) In the past, various proposals were advanced to expand the assessment base. And changes in the liability structure have highlighted the importance of domestic depositor preference when banks fail. Some observers have questioned the cost savings attributed to the present priority provision and have pointed to the provision's potential effects if a multinational banking organization were to fail. In light of changes in the structure of bank liabilities, it may be useful to consider the advisability of revising the assessment base to ensure that premiums are properly aligned with the risks to which the FDIC is exposed, and the advisability of reviewing the effects of the present system of domestic depositor preference.

The Economic Role of Banks

Historically, banks have been regarded as a special class of intermediary because they perform four unique functions: (1) they issue transaction accounts that have universal acceptability and are available at par on demand, (2) they fund idiosyncratic (and illiquid) loans with liquid liabilities, (3) they serve as backup sources of liquidity, and (4) they play a key role in the transmission of monetary policy.⁴⁴ Consequently, policy makers have maintained a government safety net that protects and regulates the banking industry to ensure that it operates with minimal disruption. Yet, over the past quarter of a century, revolutionary advances in IT and telecommunications have combined with the economic and political forces of globalization and deregulation to fundamentally alter the operations of financial intermediaries (both bank and nonbank) and the markets in which they operate. One result of these changes is that financial markets are much more complete, efficient, and competitive today than they were 25 years ago. This development has led some

observers to argue that banks are no longer unique among financial institutions and therefore do not merit the current level of government protection or regulation.

This study concludes, however, that banks have not lost their importance as financial intermediaries and that they have in fact evolved to meet the challenges and demands of the new world of finance. Banks, for example, are still at the center of the payments system. Indeed, virtually every financial transaction that involves a net transfer of wealth is still eventually settled through the banking system. Banks also continue to play an important role in the transmission of monetary policy. And despite signs of disintermediation and what some see as a decline in the relative importance of banks, banks continue to serve as the primary sources of credit to important segments of the economy (such as small businesses and small farms).

Moreover, as the capital markets have become more developed, banks have evolved to provide important behind-the-scenes support to much of the intermediation activity that occurs elsewhere. For example, almost all commercial paper issues are backed by bank-issued stand-by letters of credit that enhance the paper's credit rating and increase its liquidity. In securitizations, banks are involved in originations, servicing, and monitoring and in the provision of credit enhancements. In this respect, banks remain an important player in the intermediation process even though they are no longer the primary lender or the direct source of the loaned funds. Finally and perhaps most importantly, as has been demonstrated repeatedly during a number of financial panics and crises in the United States over the last three decades, banks play an essential role as emergency sources of liquidity to the rest of the financial system and to the broader economy as well. Indeed, several studies have shown that banks may in fact have a comparative advantage in providing liquidity on demand.

⁴⁴This section is based on the FOB paper by Jones.

In conclusion, ample evidence is available to support the position that banks (and the business of banking) are not fading away. Rather, in the more complex, sophisticated, and volatile financial world of the twenty-first century, banks' importance may actually be growing.

Concluding Comments

This study views banking as a strong, competitive industry that continues to serve useful economic purposes. Within the banking industry, we conclude that each of the three main sectors—community banks, regional and other midsize banks, and the largest banking organizations—has favorable prospects for the years immediately ahead, even though the number of institutions is likely to decline further. What could materially diminish these relatively favorable prospects?

With respect to community banks, a number of competitive and regulatory developments could diminish their market role and viability. One possibility is that credit-scoring and other financial technology used by large banks and nonbank financial companies could advance to the point that it would supplant the relationship lending practiced by community banks in financing local credit needs, including those of small businesses and small farms. And large banks might adopt organizational structures more conducive to reputational lending—for example, by giving branch managers more authority. The consequences might be analogous to the results in home mortgage lending, where a nationwide market has much diminished the role once played by local portfolio lenders. Given the heterogeneous nature of small business loans and the organizational problems of controlling the activities of far-flung branch systems, this result does not seem likely in the time frame of this study—five to ten years—but it cannot be ruled out completely or indefinitely.

The burden of reporting and other regulatory requirements could also threaten the prospects for community banks. Although the banking industry as a whole is a politically attractive vehicle for

implementing various nonbanking political and social programs, the fixed costs of such requirements fall particularly heavily on smaller banks. The resulting regulatory burden could have effects analogous to those of earlier regulations that weakened the ability of banks to compete with credit unions and other nonbank institutions not subject to similar burdens.

Community banks that lack adequate IT staffs are also exposed to the possibility of attacks on the software products they use. In addition to the direct losses they might suffer, the inconvenience to their customers and the damage to their reputations could be a serious competitive disadvantage.

For large banks, the principal issues are the risks associated with size and diversity—the very features that are these banks' main strengths. Problems identifying and mitigating correlated risks, reputational risks arising from potential conflicts of interest and lapses in governance, and operational risks associated with IT systems are among the most prominent of the risks faced by large banks.

For all banks, the possibility of economic bubbles in markets where banks participate, like the bubbles in energy, agriculture, and real estate markets during the 1980s, cannot be entirely discounted. This is particularly so as economic and financial decision making related to banking is increasingly in the hands of those who have experienced nothing but profits.

We consider these and similar possibilities to be low-probability, high-impact events within the five- to ten-year horizon of this study. In many cases these possibilities are being addressed by bank management and bank supervisory agencies. Nevertheless, it is important to keep them in mind as a cautionary accompaniment to the relatively favorable picture of banking painted in this study.

At the same time, important policy issues will continue to command the attention of bankers and bank regulators. The consolidation of the

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banking industry highlights the challenges of supervising large, complex banking organizations. The possibility of large-bank failures poses risks not only to the deposit insurance funds but also to the banking system itself. Market forces are likely to push for more business combinations of banks and commercial firms, raising again the issue of how best to regulate such combinations. The existing regulatory structure appears to be

increasingly out of alignment with the rapidly changing financial products and markets. The nature of the safety net itself may need to be reexamined to ensure that it effectively accommodates an industry characterized by a few megabanks alongside thousands of community banks. These difficult issues are likely to be prominent in discussions of the future of banking in the years ahead.

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