

BANK REGULATION

Will Regulators Catch Up with the Market?

BY RANDALL S. KROSZNER

No. 45

March 12, 1999

Executive Summary

Legislation on financial services modernization has taken on special urgency since the banking industry is transforming itself through mergers stretching across financial services and across countries. Phil Gramm (R-Tex.), the new chairman of the Senate Banking Committee, has made bank regulatory reform his "number-one priority." A review of historical and contemporary evidence shows how market forces can address concerns about consumer protection and the soundness of the financial system. The financial services modernization legislation thus should

- repeal the 1933 Glass-Steagall Act and reform the 1956 Bank Holding Company Act,
- allow banks to structure their new activities through operating subsidiaries or affiliates,
- reduce the "moral hazard" of federal deposit insurance by mimicking private bond covenants, and
- not raise any new regulatory barriers.

BANK REGULATION
Will Regulators
Catch Up with the Market?

by Randall S. Kroszner

Introduction

The regulation of financial institutions has important consequences for the efficiency and performance of the financial system and the economy as a whole. Banks play a key role in encouraging and gathering the savings that finance a country's economic growth. By monitoring the use of the savings they lend to enterprises, banks are an integral part of the corporate governance system that ultimately affects the productivity of resources throughout the economy.

Although competition is the traditional means of achieving efficiency in any sector of the economy, banking is one of the most heavily regulated industries in the United States. Most rationales for bank regulation fall into two broad categories: (1) consumer protection, which concerns potential conflicts of interest when a bank has multiple roles, and (2) safety and soundness, which concerns the possibility of bank panics and financial instability. It is imperative that the regulatory system that has governed banking with little change since the 1930s be modernized. Each Congress for the past dozen years has made a major attempt to revise our Depression-era banking regulations, whose overhaul is long overdue. Each attempt at fundamental reform has failed. Most recently, the House of Representatives of the 105th Congress voted for the first time in favor of a bill (H.R. 10) that would end those Depression-era regulations, but the Senate never voted on the measure. As the proposed merger between Citibank and the Travelers Group clearly illustrates, the markets simply cannot wait any longer for legislative reform and are taking deregulation into their own hands.

While reform of financial services regulation is extremely complex, the general direction of reform is clear. The Glass-Steagall Act of 1933 and the Bank Holding Company Act of 1956 should be altered fundamentally to permit com-

Randall S. Kroszner is an associate professor of economics in the Graduate School of Business at the University of Chicago.

mercial banks to engage in a wide variety of financial services and to permit other financial services firms to engage in commercial banking. The artificial walls separating those activities should be eliminated. Those changes are necessary to provide greater convenience for the consumer as well as to keep financial institutions in the United States globally competitive. As Table 1 shows, banks in the United States have faced increasing competition from other financial institutions over time, and their market share has been declining. That share went from 62.9 percent of total assets of financial institutions in 1900 to 55.9 percent in 1948 and to 25.4 percent in 1993.

Permitting commercial banking and investment banking under one roof, however, does raise important questions about potential conflicts of interest and about the stability and soundness of the financial system. Competitive market forces and incentives can address those issues if the institutions are sufficiently capitalized. To survive in the marketplace, a commercial bank must be able to develop a reputation for fair and honest dealing with its customers; otherwise, customers will turn elsewhere. Pre-Glass-Steagall evidence shows how banks successfully resolved the conflict-of-interest issue and provides insights into how market forces would shape the involvement of commercial banks in other financial activities. Banks appear to have voluntarily developed effective "firewall" structures that provide lessons for the current debate about the appropriate structure of activities in a financial services firm.

The recent mergers of such banking organizations as Bank of America-NationsBank and Banc One-First Chicago are part of a broader trend toward consolidation and rationalization of the structure of the U.S. banking system. During the past quarter century, states have been eliminating artificial barriers to the geographic expansion of banks. That regulatory reform culminated at the national level with the Riegle-Neal Interstate Banking and Branching Efficiency Act that went into effect in June 1997 and will now allow the markets to create truly nationwide banks. Those mergers are helping to create efficient and convenient interstate banking networks that would have arisen 30 years ago if the United States had not severely restricted bank branching. Geographic and product-line diversification can provide greater stability to the financial system and enhance its efficiency and convenience for consumers. Contrary to the concerns of many consumer and community advocates, it is the traditional U.S. system, fragmented both along product lines and geographically, that is fundamentally anti-consumer. The transformation of the banking industry--illustrated by

Table 1
Percentage Shares of Assets of Financial Institutions in the United States (1860-1993)

	1860	1880	1900	1912	1922	1929	1939	1948	1960	1970	1980	1993
Commercial banks	71.4	60.6	62.9	64.5	63.3	53.7	51.2	55.9	38.2	37.9	34.8	25.4
Thrift institutions	17.8	22.8	18.2	14.8	13.9	14.0	13.6	12.3	19.7	20.4	21.4	9.4
Insurance companies	10.7	13.9	13.8	16.6	16.7	18.6	27.2	24.3	23.8	18.9	16.1	17.4
Investment companies	--	--	--	--	0.0	2.4	1.9	1.3	2.9	3.5	3.6	14.9
Pension funds	--	--	0.0	0.0	0.0	0.7	2.1	3.1	9.7	13.0	17.4	24.4
Finance companies	--	0.0	0.0	0.0	0.0	2.0	2.2	2.0	4.6	4.8	5.1	4.7
Securities brokers and dealers	0.0	0.0	3.8	3.0	5.3	8.1	1.5	1.0	1.1	1.2	1.1	3.3
Mortgage companies	0.0	2.7	1.3	1.2	0.8	0.6	0.3	0.1	^a	^a	0.4	0.2
Real estate investment trusts	--	--	--	--	--	--	--	--	0.0	0.3	0.1	0.1
Total (percentage)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (trillion dollars)	.001	.005	.016	.034	.075	.123	.129	.281	.596	1.328	4.025	13.952

Sources: See Randall S. Kroszner, "The Evolution of Universal Banking and Its Regulation in Twentieth-Century America," in Universal Banking: Financial System Design Reconsidered, ed. Anthony Saunders and Ingo Walter (New York: Irwin Professional Publishers, 1996). Data for 1860-1948 (except 1922) from Raymond W. Goldsmith, Financial Structure and Development (New Haven, Conn.: Yale University Press, 1969), Table D-33, pp. 548-49; data for 1922 from Raymond W. Goldsmith, Financial Intermediaries in the American Economy since 1900 (Princeton, N.J.: Princeton University Press, 1958), Table 10, pp. 73-74; and data for 1960-93 from Board of Governors of the Federal Reserve System, "Flow of Funds Accounts," various years. The table is expanded from George Kaufman and Larry Mote, "Is Banking a Declining Industry? A Historical Perspective," Federal Reserve Bank of Chicago Economic Perspectives, 1994, pp. 2-21.

^a Data not available.

the recent proposed mergers--is good for consumers and for the economy as a whole.

Potential Conflicts of Interest in Universal Banking

Whether commercial banks should be permitted to be involved in investment banking and act as "universal banks" has been hotly debated in the United States throughout most of the 20th century.¹ Following World War I, commercial banks became increasingly involved in the underwriting of securities. The Glass-Steagall Act of 1933 halted that evolution by forcing commercial banks to end their corporate securities operations, a separation that was further codified in the Bank Holding Company Act of 1956.²

One of the major motivations for the separation of commercial and investment banking both in the 1930s and today is concern about the potential for "conflicts of interest":³ will the public be harmed by commercial banks' engaging in investment banking? Banks might abuse the trust of their customers and take advantage of them by selling them low-quality securities without fully revealing the risks, and such behavior could broadly undermine confidence in the markets and banks themselves.⁴ Because of the often long-term lending relationship between a bank and a client firm, banks may be better informed than the individual investor about a client firm's soundness and prospects. That informational advantage, however, can be a double-edged sword.

On the positive side, given its detailed knowledge of the firm, a commercial bank might be better positioned than an investment bank to provide information to prospective purchasers of the firm's securities. Through the lending relationship, banks might know which firms have particularly good prospects and might be able to help them to bring their securities to the public markets earlier than would be the case if the young firms had to try to start new relationships with investment banks. In other words, commercial banks may enjoy a synergy in combining lending with underwriting that could make them more efficient than independent investment banks at monitoring and evaluating firms and securities.

On the negative side, however, a commercial bank might have an incentive to use its superior information to its own advantage. Commercial banks might have greater incentive and greater ability to take advantage of investors than do investment banks. First, consider the incentives. If the

bank is aware of a negative shock to a borrowing firm's prospects before the market is, for example, the bank may wish to have the now-risky loan repaid. To do so, the bank may underwrite a public securities offering for this firm, have the firm use the proceeds to repay the loan, but not adequately disclose information about the firm's troubles to the market. An investment bank without the prior lending relationship would not have the same incentive. Next, consider commercial banks' access to customers. Commercial banks might be able to exploit their information advantage more easily than could investment banks because depositors may be more easily duped than the more sophisticated customers of investment banks.

The positive and negative arguments, however, are not mutually exclusive. Commercial banks could enjoy efficiencies associated with combining lending and underwriting but also be subject to credibility problems due to the potential for conflicts of interest. Until recently, the commonly held view, dating from the 1930s, was not only that there was a potential for conflicts of interest to be important but also that the potential was realized and that the public was systematically fooled by rogue bankers. That view became the received wisdom even though there had been no systematic study of commercial bank involvement in underwriting during the period. Historical investigation⁵ is crucial because the received wisdom continues to be a major factor in the policy debates over how Glass-Steagall reform will affect small investors⁶ and because investigation suggests how the unregulated market may address conflict-of-interest problems if Glass-Steagall is repealed.

To determine how investors fared before Glass-Steagall, we can compare the performance of securities underwritten by independent investment banks with that of securities underwritten by commercial banks and their affiliates. If the commercial banks had succumbed to conflicts of interest, investors would have been lured into purchasing securities that would have turned out to be poor investments relative to similar securities underwritten by investment banks. Contrary to conventional wisdom, securities underwritten by commercial banks performed better than similar securities underwritten by investment banks. The public's wariness of the commercial banks appears to have made it difficult for them to issue anything but well-known securities of high quality. Relative to the investment banks, commercial banks, on average, tended to underwrite for larger, older, and better established firms and originate more senior (i.e., debt rather than equity) securities. Even before the advent of strict disclosure requirements, the public was not

systematically fooled and banks did not "abuse the public trust" by issuing unexpectedly low-quality securities. Thus, the historical record suggests that investors would not be harmed by an end to Glass-Steagall and could benefit from the convenience of one-stop shopping for financial services.

**Firewalls and Chinese Walls: What Type of Separations,
If Any, Should Be Mandated?**

Firewalls have been proposed both to mitigate potential conflicts of interest and to prevent the extension of the government's bank safety net beyond depositor protection.⁷ Since the late 1980s, regulators have permitted bank holding companies to operate so-called section 20 subsidiaries with limited involvement in the securities markets. Initially, a maximum of 5 percent of the subsidiaries' revenues could be from otherwise prohibited investment banking activities, a revenue limit that has recently been increased to 25 percent. In addition, the subsidiaries face a variety of restrictions on the sharing of personnel and information with the bank. The exact structure of the separation has been an important part of the current debate over financial modernization legislation.

Again, the historical record can help to predict the structures market forces would bring if Glass-Steagall restrictions were to end. Prior to the Glass-Steagall Act, banks entered the securities business in one of two ways: through internal departments or separate affiliates.⁸ Internal securities departments were organized within banks, parallel with the banks' lending departments, much as classic German universal banks have organized themselves. Affiliates were separately incorporated and capitalized firms with their own boards of directors and their own balance sheets, much like section 20 subsidiaries today.

During the 1920s, there was a strong trend toward the adoption of separate affiliates and away from the use of internal departments. A key motivation for that movement appears to have been concerns about internal departments' reputation and credibility with investors. Holding all other factors constant, investors rewarded separate affiliates with higher prices for the securities they underwrote than they did internal departments for otherwise similar securities. Investors appear to have been concerned that the securities underwritten through the internal departments were riskier and so would not pay as high a price for them as for otherwise similar securities underwritten through separate

affiliates. In other words, the market discounted for the greater likelihood of conflicts of interest when lending and underwriting were both within the bank. Although the affiliate and the bank were still connected--there were common board members--and there was no mandated firewall protection that could be enforced by the courts, the greater transparency and arm's-length structure of the affiliate provided some improved credibility.

An important mechanism by which the affiliates gained greater credibility appears to have been the use of independent directors on the boards of affiliates. Independent directors are individuals who are not officers or directors of the parent commercial bank. The public may perceive them as less willing than insiders to accede to the pressure of lending officers who might want risky loans repaid through the sale of public securities. A high proportion of independent directors on the boards of affiliates did lead to affiliates' being able to receive higher prices for their securities, holding all other quality factors constant. The market rewarded banks with more credible structures with higher prices. Market pressures thus appear to have been the key to determining the extent of the "independence" of the subsidiaries' boards and the extent of the firewall separations.

Competitive market forces appear to propel banks to adopt the structure that regulators would like to mandate. The legal requirements of a regulation-mandated firewall structure, however, are likely to be insufficiently flexible to allow banks to adapt to ongoing changes in the financial services market. In addition, a specific regulatory mandate does not permit the markets to explore a rich diversity of organizational forms and commitment devices that could effectively address conflict-of-interest issues at the lowest cost.

The evidence from the recent studies of the pre-Glass-Steagall involvement of commercial banks in investment banking supports the repeal of Glass-Steagall. Contrary to the concerns of the act's defenders, investors were not systematically fooled by commercial banks and did not suffer losses. Investor concerns about the credibility of commercial banks as underwriters led the banks to focus on higher grade and better known securities. Without regulatory pressure, commercial banks adopted some form of separation between their lending and underwriting operations consistent with addressing investor concerns about their credibility. To-

day, however, deposit insurance and the federal safety net are important factors to consider.

Stability and the Safety Net

An important argument made for bank regulation and, in particular, against broadening bank powers concerns the stability of the banking system.⁹ In a system without government guarantees or distortions, private owners of any enterprise have the appropriate incentives to choose the capital structure that permits the (privately) "optimal" amount of stability. The owners and managers of each enterprise decide the degree of risk of loss they will tolerate for a given expected level of return.

The optimal amount of stability in any industry, including the financial system, does not imply zero failures. Firms will enter and leave any healthy and dynamic competitive sector. Competition ensures efficiency through a winnowing process that eliminates firms that have poor management or experience bad luck.

In the financial sector, however, stability is widely perceived to be a distinct public concern because of a fear that the owners of individual institutions will not take into account the possibility that a failure of one institution might cause failures elsewhere. Such linkages could lead to a systemwide financial panic or "meltdown," which in turn might cause a broader macroeconomic decline. Bank owners may not take this adverse externality into account in pricing risk and determining the appropriate amount of private capital to invest. The socially optimal capital ratio thus may be greater than the privately optimal one. Since the benefits of systemwide stability accrue to all economic agents, not just banks, it may not be appropriate to have only the bank shareholders bear its cost.

This potential negative externality provides the justification for government intervention to provide a "safety net." Banks are viewed as more fragile than other firms mainly because of two features of a typical bank's financial structure. First, banks and financial institutions tend to be highly leveraged; that is, they have a low capital-to-assets ratio compared with nonfinancial firms. Consequently, their cushion against insolvency is thinner than that of nonfinancial firms.

Second, banks tend to hold a low ratio of liquid assets relative to their highly liquid liabilities. Because they

provide demand and other short-term deposits on a fractional reserve basis, banks have a much greater liquidity and duration mismatch between assets and liabilities than do nonfinancial firms. That mismatch makes banks particularly sensitive to sudden large withdrawals of funds (bank runs) that cannot be met in full and on time by the banks' cash and liquid asset holdings.¹⁰ Banks thus may be required to sell assets quickly. To the extent that those assets are not traded in highly liquid markets, the banks may suffer fire-sale losses that may exceed their small capital base and drive them into insolvency. The duration mismatch also exposes banks to interest rate risk so that abrupt changes in interest rates can induce (realized and unrealized) losses that can quickly exceed their capital.

Such concerns about bank instability have provided a rationale for restricting the types of assets that a bank can hold in its portfolio. Part of the rationale for maintaining the Glass-Steagall Act is to shield banks from exposure to many types of risks, particularly those of holding equity instruments. Some people have gone further to argue for even greater restrictions on bank assets and bank activities. Some "narrow bank" proposals, for example, would require banks to hold 100 percent reserves of liquid, short-term government bonds to address and remedy the two main causes of individual bank fragility just discussed.¹¹

In addition to concerns about the stability of individual banks, there is concern that the banking system is particularly fragile because of the close interconnectedness of banks through interbank deposits and lending. Losses at any one bank may thus produce losses at other banks, which can cascade throughout the banking system. Moreover, if depositors are unable to differentiate among the financial health of individual banks, troubles at one or a few institutions could spread quickly throughout the system as uninformed depositors withdraw funds indiscriminately from depository institutions regardless of their financial fundamentals. In the absence of offsetting actions by the central bank, such runs from deposits at banks will worsen fire-sale losses, increase the number of bank failures, and cause a multiple contraction of money and credit and macroeconomic instability.

The fragility of banks and the banking system in the absence of a government safety net, however, may be overemphasized. First, bank failures spread throughout the system only if losses exceed a bank's capital by enough to produce losses at creditor banks that exceed their capital and, in turn, force them into insolvency. If losses associated with

individual insolvencies could be minimized, the likelihood of contagion or systemic risk would be greatly reduced. As discussed below, delays that have permitted financial institutions to become deeply insolvent before closure are primarily due to regulatory, not market, failure.¹²

Second, before the introduction of the lender of last resort in the United States, the failure rate of banks was actually lower than that of nonfinancial firms, and losses to depositors and other bank creditors were lower than to creditors of nonfinancial firms.¹³ In addition, U.S. banks held higher capital-to-asset ratios prior to safety net regulations. Recent international experiences suggest that banks substitute government deposit insurance or public capital for private capital.¹⁴ Again, the safety net may have made banks more, not less, fragile.

Third, Charles Calomiris and Joseph Mason have examined in detail the bank panic that took place in Chicago during June 1932.¹⁵ Although there did seem to be some temporary confusion about the quality of bank assets and a short-lived general depositor run, Calomiris and Mason do not find any evidence of failure of banks that were solvent at the beginning of the panic. The runs were directed primarily against the weakest banks, which were the ones that failed. Thus, even during the heights of bank panics of the Great Depression, depositor runs do not appear to have generated "contagion" or "systemic" problems that caused otherwise solvent institutions to fail.

Fourth, historically, bankers developed innovative contracts to attenuate the likelihood of panic runs. One example is the "option clause" that came to be a standard provision in private bank notes circulating in Scotland during its 18th-century "free-banking" era.¹⁶ The option clause gave bank directors the right to suspend specie payment for up to six months, but the bank then promised to pay a high rate of interest on the notes during the period of suspension. This clause allowed the banks to stop "panic" runs and to have more time to adjust to negative liquidity shocks that might occur, thereby avoiding fire-sale losses. Also, banks in Scotland had some form of extended or unlimited liability covering their notes, rather than simple limited liability. Those notes were widely and voluntarily accepted, and the Scottish banking system showed much greater stability than did the English system during this period.

Finally, there is little historical evidence that permitting banks to expand their portfolios to include equity reduces stability. Eugene White shows that, during the

1920s and 1930s, commercial banks in the United States that actively engaged in the securities markets were less likely to fail than were other commercial banks.¹⁷ In addition, banks with securities operations tended to have higher capital ratios and lower variance of their cash flows than did other banks. Involvement in the securities business, thus, appears to have helped banks to diversify and thereby enhanced their stability during the 1920s and 1930s.

Safety Nets and Market Discipline

Given that the concerns about the inherent fragility of banks and the banking system may be overstated, the next step is to evaluate the role of the regulatory safety net that governments--implicitly or explicitly--have placed under their banking systems. While, in principle, safety net measures could increase the stability of the system, in practice, it has proven difficult to design a safety net that does not undermine both efficiency and stability. Improperly designed safety nets may encourage behavior by both the insured banks and their regulators that over time is likely to prove far costlier than the benefits safety nets may generate. As has been clearly demonstrated in almost all countries in recent years, poorly designed and implemented deposit insurance, for example, has greatly reduced depositor discipline of banks and thereby encouraged them to engage in moral hazard behavior, by assuming greater credit and interest rate risk exposure in their asset and liability portfolios and by maintaining lower capital ratios.

By short-circuiting market discipline, deposit insurance also allows bank regulators to engage in regulatory forbearance, delaying the imposition of sanctions on troubled banks and permitting even economically insolvent institutions to continue to operate. The costs of forbearance can be and have been very large.¹⁸

Without government guarantees of deposits, insolvent banks could not stay in business long. Banks receiving low ratings from depositors as well as independent private rating agencies would either have to compensate depositors with higher interest rates or see funds flow out. Withdrawals by informed depositors might force troubled banks to sell assets quickly and perhaps experience fire-sale losses. If a bank could no longer satisfy the depositors' demands in full and on time, it would close (suspend operations) either voluntarily or at the order of the regulators. In addition, without the strong "heads I win, tails you lose" character

of the safety net, the bank owners might have chosen a different initial risk profile for the bank. As noted above, prior to the introduction of the lender of last resort in the United States, bank failure and loss rates were lower than those for nonfinancial firms.

The problems of moral hazard are not associated only with the existence of a government safety net; they also exist in many market contexts, so it is valuable to understand how the market deals with such problems. Private markets address those problems through debt covenants that tend to prevent, rather than provide forbearance for, excessive risk taking.¹⁹ Debt covenants are explicit provisions in debt contracts that restrict a firm's behavior and ability to take risks. Banks often include such provisions in their own loan agreements with firms. Covenants are triggered as soon as earnings or capital fall below prespecified levels or leverage rises above such levels. In some cases, covenants allow the debt holders to seize control of the firm as the firm experiences financial distress. Covenants thus prevent a distressed firm from continuing to operate as it did before and attempt to prevent it from increasing its risk exposure.

When government deposit insurance is implicit or explicit, regulatory discipline should be structured to mimic the way in which the market deals with the moral hazard problem.²⁰ Rather than permit regulatory forbearance, the government should require that regulators follow clearly defined practices to restrict the risk-taking activities of banks experiencing financial distress and to resolve their problems before they become deeply insolvent. In parallel with private debt covenants, intervention by regulators could be related to capital ratios or other performance and solvency measures. Such regulatory discipline would prevent depositor (and taxpayer) losses at individual institutions from growing and possibly causing systemwide problems. The Federal Deposit Insurance Corporation Improvement Act of 1991 was a first step toward introducing explicit intervention and closure rules in the United States.²¹

Geographic Rationalization and Consolidation of Banking through Mergers

Having discussed what type of internal bank structures market forces are likely to give rise to, I focus now on the likely structure of the banking industry itself as mergers and consolidations continue.²² A two-tiered banking system in which nationwide and regionwide banks coexist with small-

er local banks is likely to emerge. Although the number of banks in the United States will continue to decline, small banks will survive. Consumers will enjoy greater convenience and a greater array of options, and that will be true in neighborhoods of all income categories.

To project how the U.S. banking system is likely to evolve, it is useful to focus on California, which has had unrestricted branching within the state for more than a century. Market forces, rather than branching and geographic restrictions, have been the primary determinant of the structure of banking within California. The large and diverse economy of California thus can provide a good indication of how the U.S. banking system as a whole will evolve now that artificial barriers to branching across state lines have been eliminated.²³ Four hundred commercial banks and thrift institutions operate in the state of California (as of June 1997). These California banks and thrifts hold just under one-seventh of all U.S. deposits. If the whole of the United States will ultimately have the structure we see in California today, the number of banks that is likely to exist in the long run in the United States is roughly 2,800. (In other words, multiply the number of institutions in California [400] by the inverse of their U.S. market share [7] to determine the total number of banks.)

Survival of Small Institutions

Since there are approximately 9,000 banks and thrifts in the United States today, that projection implies that the number of banks in the United States will shrink by two-thirds. That large reduction in the number of banks, however, does not imply that the smaller banks are in danger of disappearing or that there will be less competition. First, California provides an instructive example of the survival of small banks. Banking in California is not more concentrated than in other states even though there are relatively fewer banks there. Bank of America, the largest bank in California and one of the largest banks in the world, has a market share of 21 percent of deposits in California. The average market share of the largest bank in each state in the United States is 20 percent, virtually the same as in California. If we sum the deposits held by the 5 or 10 largest banks and thrifts in each state, however, banking in California is less concentrated than in the average state. Small institutions have survived and will survive in the same markets as the banking giants.

Another place where small banks have survived the challenge from large banks is New York.²⁴ Regulatory changes in the early 1970s permitted the large banks in New York City to expand upstate for the first time. During the 1970s, most of the money-center banks did try to move upstate by opening branches and purchasing local banks. The small upstate banks, however, proved to be tough competitors. During the 1980s, Bankers Trust and Bank of New York divested much of the upstate networks built in the previous decade; Citibank also sold many of its upstate branches. The money-center banks generally have not been able to achieve a dominant position upstate. A study by the Federal Reserve Bank of New York divided all of upstate New York into 15 markets and showed that NYC-based banks had greater market shares than the local banks and thrifts in only 2 of those 15 upstate markets.²⁵ After more than 20 years, small local banks have survived and prospered in head-to-head competition with the largest banks in the country.

Concentration and Competition: Local and National

Another issue raised by the consolidation in the banking industry is how the reduction in the number of banks might affect market concentration and competition. Given the fragmentation of the U.S. banking system due to more than a century of strict branching regulation, it is very important to distinguish between bank concentration at the local level and at the national level. Reducing the number of banks in the nation could increase competition and reduce concentration in local retail markets.

To take an extreme example, assume that each state had only one bank, and banks could not compete across state lines. While there would be monopoly at the state level, measured concentration at the national level might not be particularly high. The number of banks nationally and the national-level concentration, however, would be irrelevant because the individual banks could not compete with each other. Now assume that banks are permitted to branch and merge across state lines. Banks will then begin to compete directly by entering each other's markets through branching and mergers. At the national level, mergers will make it appear that the industry is becoming more concentrated, but the effect will be the opposite at the local level. Even if only, say, 10 banks survive after the mergers, each local market may have lower concentration and more consumer choice because multiple banks will operate in each state.

The recent bank megamergers are primarily of the network-extension type. The merging institutions generally have been operating in distinct markets. Bank of America and NationsBank, for example, have almost no overlap. First Chicago and Banc One overlap in parts of Indiana and Illinois, but a majority of their operations are distinct. The effect of these mergers is to create stronger competitors in each of the markets in which the two banks initially operated rather than to eliminate a competitor.

Potential and Actual Entry

Even in cases in which there might be a significant preexisting overlap of the merging partners, simply counting the number of institutions and measuring concentration are not sufficient for understanding what the effects on competition will be. If barriers to new entry are high, then high concentration and few banks in a local market may imply a competitive problem. If barriers to new entry are low, however, it will be very difficult for the incumbents to engage in anti-competitive behavior. If banks in a particular market were enjoying monopoly profits, new banks would then enter and compete away those profits.

Since one must obtain a charter from the state or federal government to operate a bank, the chartering process could constitute a barrier to entry. To maintain a competitive and efficient banking environment, it is imperative to keep such regulatory costs low. Regulatory reform should ensure that regulation does not pose unnecessary obstacles to new entry. As evidence that such costs have not been prohibitive, more than 1,500 charters have been granted during the past decade. During the same period, nearly 4,900 banking organizations have disappeared through failure and merger. The number of new charters granted has risen steadily over the last few years, and 188 were granted in 1997, the most since 1989. In an environment where barriers to entry are not high, the mergers we are seeing are highly unlikely to generate anti-competitive outcomes.

Most of the future big mergers will continue to be of the network-extension type--expanding a banking franchise into new markets to provide regionwide and, ultimately, truly nationwide service. In the next 10 years, that process will create the type of banking structure that the United States would have developed 30 years ago if not for the branching restrictions. National banking giants such as Citigroup and Bank of America-NationsBank will then be facing off in markets throughout the country. The small local

banks will survive by providing a level of personalized and individualized service that super-regional and national banks do not. Consumers will benefit from the battle of the titans.

Effects on Fees

The impact of bank consolidation on prices that customers will pay has received much attention. Consumer and community advocates have been concerned that larger banks charge higher fees. The Federal Reserve conducts an annual survey of 1,000 banks around the country to determine what fees they charge and reports the results to Congress.²⁶ Consumer advocates have interpreted tables in the report as suggesting that larger institutions may appear to charge higher fees for some services than do smaller institutions.

That conclusion, however, is not justified by the data. The key reason is that larger banks tend to operate in metropolitan areas and smaller banks tend to operate in rural areas. The costs of most goods and services are higher in cities than in the countryside. If one adjusts for whether the bank is located in a Standard Metropolitan Statistical Area or not, then the difference between the fees charged by large and small banks disappears.²⁷ In other words, both large and small banks in metropolitan areas tend to charge higher fees than large and small banks in rural areas. Since large banks are more likely to be located in cities than are small banks, the fee difference appears at first glance to be due to bank size; however, the difference is actually due to location. If some multistate banks should decide to charge higher fees than are typical in the local markets, those institutions would be leaving open a market niche that could then be filled by smaller local institutions.

The types of mergers we are discussing also are likely to result in lower actual fees being incurred by customers. As is true in many lines of business, banks often give their own customers discounts that they do not offer to noncustomers. One example is automatic teller machine (ATM) fees, which are often lower or zero for consumers who use their own bank's machines, whereas the bank will charge noncustomers a higher fee for using the bank's ATM. The megamergers are creating multistate networks of ATM machines owned by the same bank. A customer traveling to different cities thus can avoid paying such fees and receive the discount regardless of where she is. This provides an important convenience to business travelers and to vacation travelers,

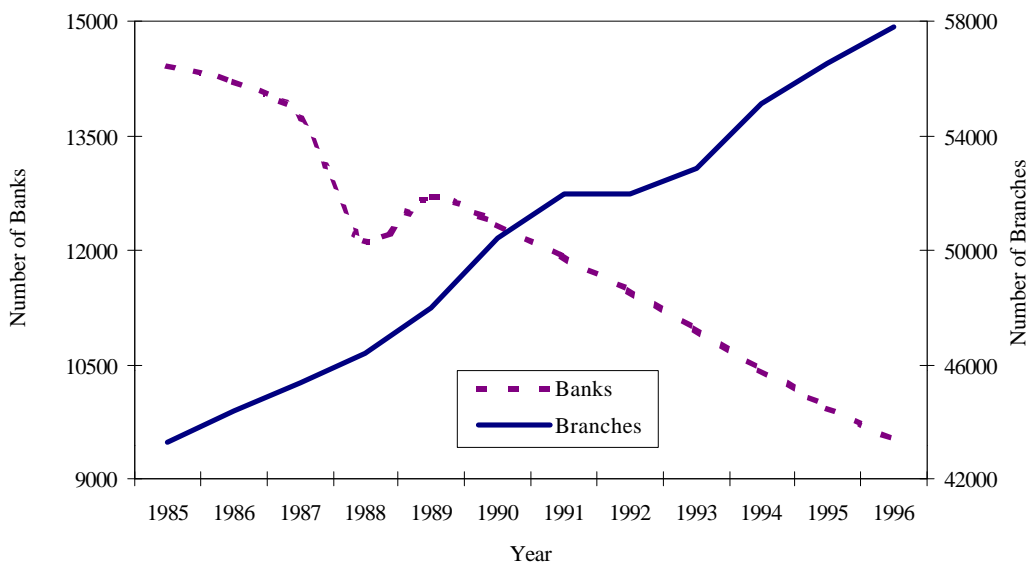
since they can now deal with their home institution wherever their travels take them and continue to enjoy the discount for using their own bank's services.

Effects on the Availability of Services through Branches

Another issue of interest is the impact that bank consolidation will have on the availability of services through branches. As Figure 1 clearly shows, branch networks have been growing despite the reduction in the number of banks during the last decade. Since 1985 the number of banking organizations has declined by nearly one-third, primarily through mergers, to just over 9,000. The number of bank branches, however, has increased by one-third, to nearly 58,000. In addition, the number of ATMs also has risen rapidly to exceed 125,000 in the United States, and ATMs have also been spreading internationally.²⁸ Banking by phone and electronically has also increased. Consumer options have thus been increasing, not decreasing, with bank consolidation.

Consumer and community advocates raise questions about the effect of mergers not just on the number of branches but also on the location of branches. Economists at the Federal

Figure 1
Bank Consolidation and Branch Networks in the United States, 1985-96



Sources: Federal Deposit Insurance Corporation and Federal Reserve Board.

Reserve Board have recently developed a new, comprehensive database to use in studying the direct impact of mergers on the growth of branches and their locations.²⁹ Using detailed data from 1975 to 1995 that classify branches by postal ZIP codes, they find that mergers involving little overlap of branches in the same ZIP codes do not reduce the number of branches per capita.

More striking is the finding that the effect of mergers on branching does not vary with average income in the ZIP code: the impact of mergers on the number of branches per capita in poor neighborhoods is the same as in wealthy neighborhoods. That evidence is inconsistent with the concern that after mergers banks tend to increase service to relatively affluent areas in comparison with lower income areas.

In fact, mergers of the type we have seen recently provide consumers with far more convenience. Customers who have family members in different states will find that they can now use the same bank to service all family members. Setting up a joint account for family members in different states and transferring funds among separate family members' accounts is much simplified. A single phone call or visit to the local branch will replace the process of writing a check, mailing it, waiting for the check to arrive, depositing it, and waiting again for the check to clear. Having a bank with regionwide and nationwide offices can thus save consumers both time and money.

International Context

The expansion of bank powers and banking networks through mergers also should be considered in an international context. Concerning bank powers, all of the European Union members and G-10 countries except the United States permit commercial banks to underwrite and deal in private securities.³⁰ All but four of these countries (Belgium, Canada, Greece, and Japan) permit banks to conduct securities activities directly; the four other countries require some type of subsidiary structure, similar to the section 20 subsidiaries that have been permitted in the United States during the past decade. Most developed countries thus give banks great flexibility in choosing the type of corporate form best suited for their involvement in the securities business.

The mergers occurring in the United States may not be as "mega" as it might seem when they are considered in an

Table 2
A Comparison of the Structure of Banking Systems in the G-7 Countries, 1993

No. of Commercial Country	No. of Banking Banks	Total Population Offices ¹	Population (000s)	Population per Banking per Bank	Total Banking Assets Office	Banking Assets per U.S.\$ (bil. U.S.\$)	Market Share of Top Three GDP	Banks (%) ²
France	425	10,867	57,530	135,365	5,294	1,379.4	0.91	63.6
Germany	330	7,934	80,975	245,379	10,206	963.2	0.5	89.5
Italy ³	315	20,037	56,960	180,825	2,843	964.1	0.97	35.9
United Kingdom	491	13,291	58,099	118,328	4,371	2,189.4	2.33	29.1
Canada	60	7,804	28,798	479,967	3,690	567.6	1.04	65.2
Japan ⁴	150	15,147	124,764	831,760	8,237	6,130.2	1.46	28.3
United States ⁵	10,971	65,100	257,908	23,508	3,962	3,707.2	0.59	13.3

Source: James Barth, Daniel Nolle, and Tara Rice, "Commercial Banking Structure, Regulation, and Performance: An International Comparison," Office of the Comptroller of the Currency, Working Paper 97-6, February 1997, Table 3.

Notes:

¹ Total number of bank main offices plus bank branch offices.

² Percent of total banking system assets held by the largest three banks.

³ Figures include commercial banks and former savings banks but exclude rural and artisanal banks and central institutions.

⁴ City banks, regional banks, trust banks, and long-term credit banks.

⁵ FDIC-insured commercial banks.

international context. Table 2 compares the structure of the banking systems in the G-7 countries. The United States has far more banks per person (i.e., lower population per bank) than any of the other major industrialized nations. If the number of banks in the United States were reduced to about 2,800, then the number of banks per person would become similar to the figures for France, Italy, and the United Kingdom but still be much greater than for Germany, Canada, and Japan. The United States also has a relatively high number of bank offices per person (i.e., lower population per banking office); of the G-7 nations, only Italy and Canada have more bank offices per person.

The final columns of Table 2 demonstrate the very low level of banking concentration in the United States relative to the other G-7 countries. The three biggest U.S. banks control roughly 13 percent of all banking assets in the United States, by far the lowest concentration in the G-7. The next least concentrated countries are Japan and the United Kingdom, where the top three banks have market shares more than double that for the top three banks in the United States. In addition, banking system assets as a fraction of total gross domestic product are relatively low in the United States compared with the other industrialized countries.

In the United States banking system assets are roughly 59 percent of GDP, which is roughly half the average of the other six G-7 countries. When seen in a global context, even the largest combinations being created through the so-called megamergers in the United States are not generating institutions that are unusually large relative to either the banking system or the economy as a whole.

Conclusion

We are in the midst of the transformation of the U.S. banking system from one that is effectively unfriendly to the consumer to one that is much less so. Addressing financial services regulatory reform is very important to permit an efficient and sound modernization of the U.S. banking and financial system. Expanding banking powers and giving banks flexibility to choose the most appropriate firewall separations, as long as the banks and their subsidiaries have high levels of capital, will be an important part of any reform effort. Market forces can be very effective in minimizing the opportunities for conflicts of interest and avoiding any harm to consumers. Customers can benefit from having the option of using financial services supermarkets if they so choose.

The banking industry will continue to consolidate. The number of institutions will decline, but no danger to competition or service is on the horizon. The 106th Congress should act now to remove obstacles such as the Glass-Steagall Act of 1933 and the Bank Holding Company Act of 1956. Dismantling such barriers would allow commercial banks to underwrite securities, offer brokerage services, expand into merchant banking, and provide insurance. In addition, Congress should

- allow banks to have maximum flexibility to choose how to structure those activities, through an operating subsidiary or an affiliate in the bank holding company, to permit the greatest scope for future innovations and increases in consumer convenience;
- permit banks to own equity in nonfinancial firms and thereby take a more active part in the U.S. system of corporate governance;
- reduce the "moral hazard" of deposit insurance by having the system mimic private bond covenants that restrict risk-taking behavior as a firm's capital declines, building on the first steps taken in this direction by the FDIC Improvement Act of 1991;
- not raise new obstacles to the rationalization and consolidation of the banking industry and eliminate the limit on the maximum national market share for banks; and
- subject existing banking and financial regulations to the same kind of rigorous cost/benefit review to which health and safety regulations are subject.

Enacting these regulatory reforms would lift a heavy burden from U.S. banks and make the financial services industry more competitive. Expanding economic freedom would both be in keeping with the Constitution and serve consumers. This is an opportunity Congress cannot afford to miss.

Notes

1. This section and the next draw on Randall S. Kroszner, "Rethinking Bank Regulation: A Review of the Historical Evidence," Journal of Applied Corporate Finance 11 (Summer 1998): 48-58.

2. See Randall S. Kroszner, "The Evolution of Universal Banking and Its Regulation in Twentieth-Century America," in Universal Banking: Financial System Design Reconsidered, ed. Anthony Saunders and Ingo Walter (New York: Irwin Professional Publishers, 1996), pp. 70-99.

3. See Randall S. Kroszner and Raghuram G. Rajan, "Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking before 1933," American Economic Review 84 (September 1994): 810-32; and Randall S. Kroszner and Raghuram G. Rajan, "Organization Structure and Credibility: Evidence from Bank Securities Activities before the Glass-Steagall Act," Journal of Monetary Economics 39 (August 1997): 475-516.

4. See, for instance, Alan Greenspan, "Statement of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Senate Committee on Banking, Housing, and Urban Affairs," Federal Reserve Bulletin, December 1987.

5. Kroszner and Rajan, "Is the Glass-Steagall Act Justified?" and Kroszner and Rajan, "Organization Structure and Credibility," compare the performance of securities underwritten by commercial banks and their affiliates with that of securities underwritten by investment banks before Glass-Steagall.

6. See, for instance, Greenspan, "Statement before the Senate Committee on Banking, Housing, and Urban Affairs."

7. See, for instance, Alan Greenspan, "Statement of Alan Greenspan, Chairman, Board of Governors of the Federal Reserve System, before the Subcommittee on Finance and Hazardous Materials of the Committee on Commerce, U.S. House of Representatives," July 17, 1997.

8. See Kroszner and Rajan, "Organization Structure and Credibility."

9. This section draws on George Kaufman and Randall Kroszner, "How Should Financial Institutions and Markets Be Structured?" in Safe and Sound Financial Systems: What Works for Latin America? ed. Liliana Rojas-Suarez (Washington: Inter-American Development Bank, 1997), pp. 97-122; and Kroszner, "Rethinking Bank Regulation."

10. See Douglas Diamond and Philip Dybvig, "Bank Runs, Deposit Insurance, and Liquidity," Journal of Political Economy 91 (June 1983): 401-19.

11. See Robert Litan, What Should Banks Do? (Washington: Brookings Institution, 1987).
12. See, for instance, George Benston and George Kaufman, "Is the Banking and Payments System Fragile?" Journal of Financial Services Research 9 (1995): 209-40; Gillian Garcia, "Comparing and Confronting Recent Banking Problems in Foreign Countries," Working Paper, International Monetary Fund, Washington, 1996; Edward Kane, The S&L Insurance Mess: How Did It Happen? (Washington: Urban Institute, 1989); George Kaufman, "The U.S. Banking Debacle of the 1980s: An Overview and Lessons," Financier 2 (1995): 9-26; and Randall S. Kroszner and Philip E. Strahan, "Regulatory Incentives and the Thrift Crisis: Dividends, Mutual-to-Stock Conversions, and Financial Distress," Journal of Finance 51 (September 1996): 1285-1320.
13. See George Kaufman, "Bank Fragility: Perception and Historical Evidence," Working Paper, Federal Reserve Bank of Chicago, 1996.
14. See Sam Peltzman, "Capital Investment in Commercial Banking and Its Relationship to Portfolio Regulation," Journal of Political Economy 78 (1970): 1-26. See also Garcia; and Kroszner and Strahan, "Regulatory Incentives and the Thrift Crisis."
15. Charles Calomiris and Joseph Mason, "Contagion and Bank Failures during the Great Depression: The June 1932 Chicago Bank Panic," American Economic Review (December 1997): 863-83.
16. See, for example, Tyler Cowen and Randall S. Kroszner, "Scottish Banking before 1845: A Model for Laissez-Faire?" Journal of Money, Credit, and Banking 21 (May 1989): 221-31; Randall S. Kroszner, "Free-Banking: The Scottish Experience as a Model for Emerging Market Economies," in Reforming Financial Systems: Historical Implications for Policy, ed. G. Caprio and D. Vittas (New York: Cambridge University Press, 1997), pp. 41-64; and Lawrence H. White, Free Banking in Britain, 1800-1845 (Cambridge: Cambridge University Press, 1984).
17. Eugene White, "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks," Explorations in Economic History 23 (1986): 33-55.
18. See James R. Barth and R. Dan Brumbaugh, Jr., "Moral-Hazard and Agency Problems: Understanding Depository Institution Failure Costs," in Research in Financial Services, vol. 6, ed. George G. Kaufman (Greenwich, Conn.: JAI Press, 1994), pp. 61-102; Edward Kane and Min-Teh Yu, "How Much Did

Capital Forbearance Add to the Tab for the FSLIC Mess?" Paper presented at Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago, 1994; Kaufman, "The U.S. Banking Debacle of the 1980s"; and Kroszner and Strahan, "Regulatory Incentives and the Thrift Crisis."

19. Ibid.

20. See George Benston and George Kaufman, Risk and Solvency Regulation of Depositor Institutions: Past Policies and Current Options (New York: Salomon Brothers Center, Graduate School of Business, New York University, 1988); and Kroszner and Strahan, "Regulatory Incentives and the Thrift Crisis."

21. See Benston and Kaufman, Risk and Solvency Regulation of Depositor Institutions; Kaufman, "The U.S. Banking Debacle of the 1980s"; Kaufman, "Bank Fragility"; and Kroszner and Strahan, "Regulatory Incentives and the Thrift Crisis."

22. This section draws on Randall S. Kroszner, "Testimony before the Committee on Banking and Financial Services, U.S. House of Representatives," April 29, 1998.

23. See Allen Berger, Anil Kashyap, and Joseph Scalise, "The Transformation of the U.S. Banking Industry: What a Long, Strange Trip It's Been," Brookings Papers on Economic Activity 2 (1995): 55-218.

24. See, for instance, B. Frank King, "Upstate New York: Tough Markets for City Banks," Federal Reserve Bank of Atlanta Economic Review, June-July 1985; see also David Holdsworth, "Is Consolidation Compatible with Competition? The New York and New Jersey Experience," Federal Reserve Bank of New York, Research Paper no. 9306, May 1993.

25. See *ibid.*

26. Board of Governors of the Federal Reserve System, "Annual Report to Congress on Retail Fees and Services of Depository Institutions," June 1997.

27. See Timothy Hannan, "Bank Fees and Their Variation across Banks and Locations," Federal Reserve Board, December 1996.

28. See Randall Kroszner and Philip Strahan, "What Drives Deregulation? Economics and Politics of the Relaxation of Bank Branching Restrictions," Quarterly Journal of Economics, forthcoming.

29. See Robert Avery, Raphael Bostic, Paul Calem, and Glenn Canner, "Consolidation and Depositor Services," Federal Re-

serve Board Working Paper, forthcoming in Journal of Banking and Finance 23 (1999).

30. See, for instance, James Barth, Daniel Nolle, and Tara Rice, "Commercial Banking Structure, Regulation, and Performance: An International Comparison," Office of the Comptroller of the Currency, Working Paper 97-6, February 1997.

Published by the Cato Institute, Cato Briefing Papers is a regular series evaluating government policies and offering proposals for reform. Nothing in Cato Briefing Papers should be construed as necessarily reflecting the views of the Cato Institute or as an attempt to aid or hinder the passage of any bill before Congress. Contact the Cato Institute for reprint permission. Printed copies of Cato Briefing Papers are \$2.00 each (\$1.00 each for five or more). To order, or for a complete listing of available studies, write the Cato Institute, 1000 Massachusetts Avenue, NW, Washington, DC 20001-5403, call (202) 842-0200, fax (202) 842-3490, E-mail cato@cato.org, or visit our World Wide Web site at <http://www.cato.org>.