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BANK CONSOLIDATION: A CENTRAL BANKER'S PERSPECTIVE

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Perspective
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ABSTRACT

This paper looks at why bank consolidation has been taking place in the United States and what the structure of the banking industry might look like in the future. It then discusses the implications of bank consolidation for the economy and the challenge it poses for central bankers.

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From the 1930s until the 1980s, the number of commercial banks in the United States was remarkably stable, with the number of banks between the 13,000 and 15,000 level. Yet as Figure 1 shows, beginning in the mid-1980s, the number of commercial banks has begun to fall dramatically. Why has this dramatic decline been taking place?

I.

The Decline in the Number of Banks: the Initial Phase

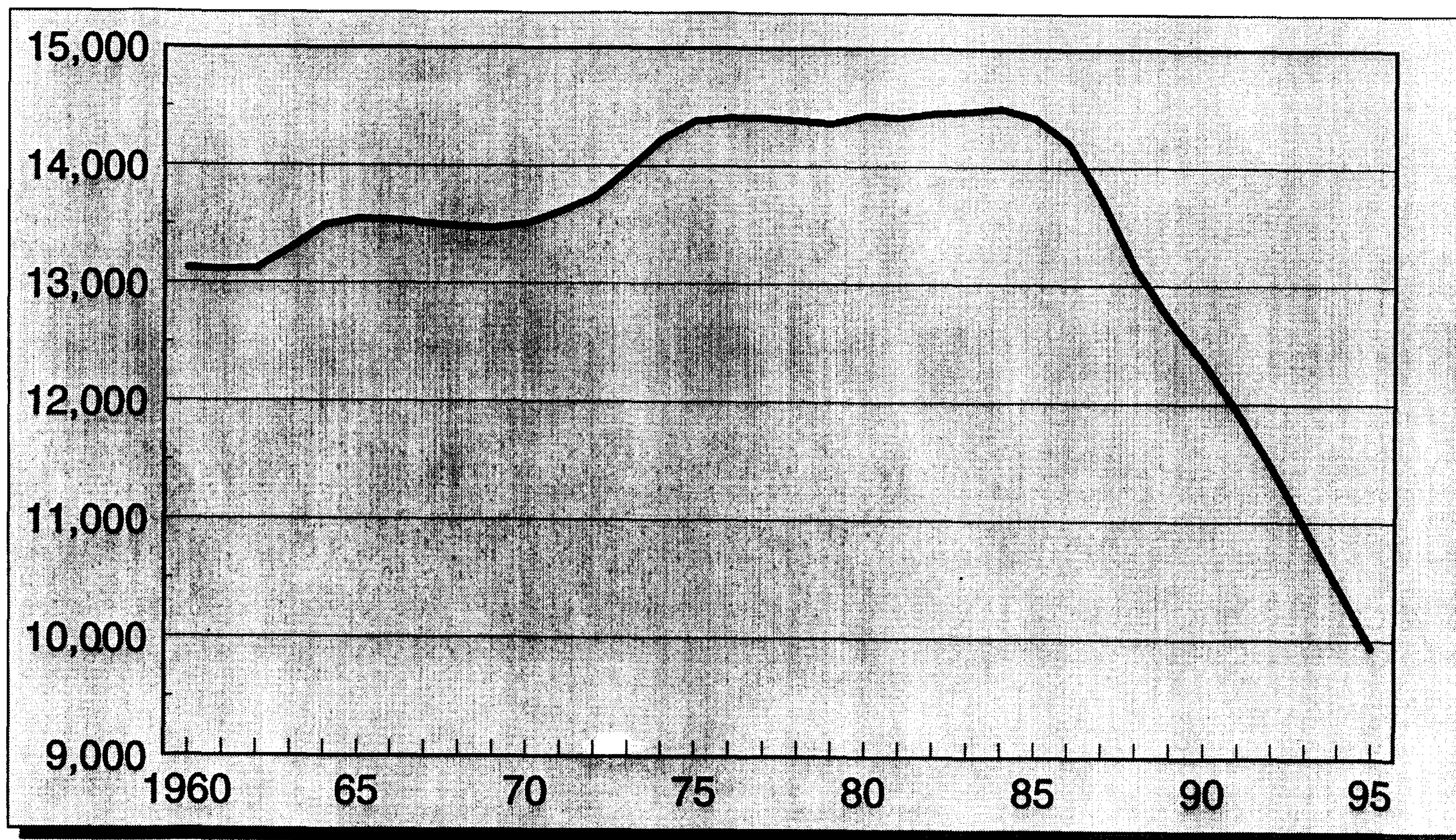
The first phase in the decline in the number of banks occurred when the banking industry hit some hard times in the 1980s and early 1990s. In the United States the importance of commercial banks as a source of funds to nonfinancial borrowers has shrunk dramatically. As we can see in Figure 2, in 1980 commercial banks provided 33% of these funds; yet by 1996, their market share was down to near 25%. Another way of viewing the declining role of banking in traditional financial intermediation is to look at the size of banks' balance-sheet assets relative to those of other financial intermediaries (Table 1). Commercial banks' share of total financial intermediary assets has fallen from around the 40% range in the 1960-80 period to below 30% by the beginning of 1996.

Clearly, the traditional financial intermediation role of banking, in which banks make loans that are funded with deposits, is no longer as important in our financial system. The reason for the decline in the traditional financial intermediation role of banking is that fundamental economic forces have been producing financial innovations which have been eroding the profitability of traditional banking activities. Financial innovations have caused banks to

Figure 1

Number of Commercial Banks in the U.S.

1960-95

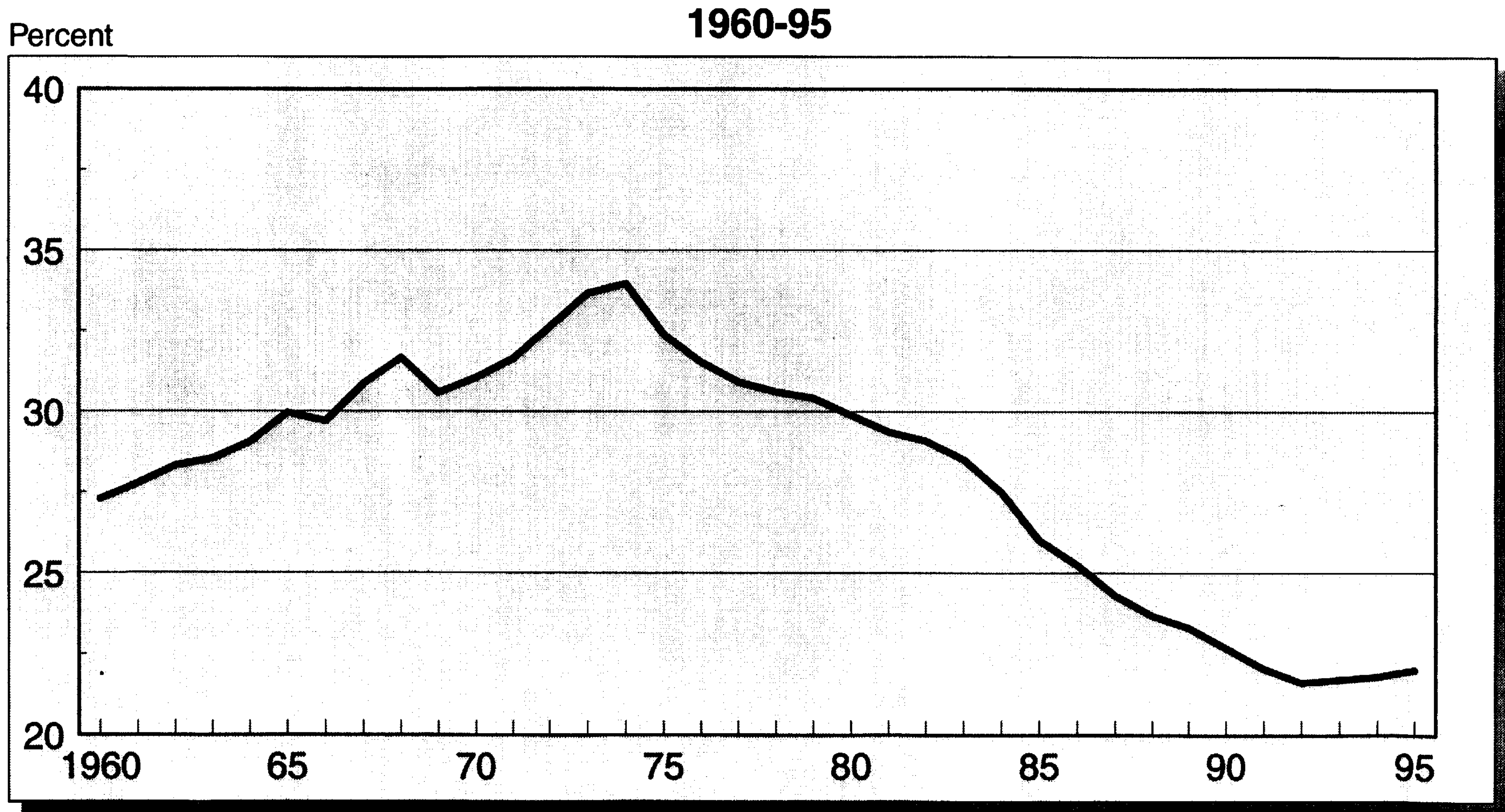


Source: Federal Deposit Insurance Corporation, *Statistics on Banking*.

Note: Number of insured commercial banks and trust companies in the U.S. or its Territories and Possessions.

Figure 2

Commercial Banks' Share of Total Nonfinancial Borrowing



Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts.
Note: The share is the ratio of total credit market assets held by U.S. Commercial Banks to total credit market debt owed by domestic nonfinancial sectors.

Table 1
Relative Shares of Total Financial Intermediary Assets
1960-95

	1960	1970	1980	1990	1995
	(Percent)				
Insurance companies					
Life insurance	19.2	14.9	11.4	12.4	12.8
Other insurance	4.4	3.8	4.5	4.8	4.6
Pension funds					
Private	6.8	9.2	12.4	14.6	16.2
Public (state and local government)	3.3	4.5	4.8	7.4	8.5
Finance companies	4.8	5.3	5.4	6.0	5.3
Mutual funds					
Stock and bond	3.9	3.9	1.7	6.0	12.1
Money market	0.0	0.0	1.9	4.5	4.6
Depository institutions (banks)					
Commercial banks	38.0	38.4	36.5	30.2	27.7
Savings and loans and mutual savings	18.6	18.8	19.5	12.3	6.3
Credit unions	1.0	1.3	1.7	2.0	1.9
Total	100	100	100	100	100

Source: Board of Governors of the Federal Reserve System, Flow of Funds Accounts.
Note: The share is the percentage of the intermediary's total financial assets relative to the sum of total financial assets for all categories listed. The percentages do not add to 100 due to rounding.

suffer declines in their cost advantages in acquiring funds, that is, on the liabilities side of their balance sheet, and have also caused banks to lose income advantages on the assets side of their balance sheet.

Decline in Cost Advantages in Acquiring Funds

Until 1980, banks were subject to deposit rate ceilings that restricted them from paying any interest on checkable deposits and (under Regulation Q) limited them to paying a maximum interest rate of a little over 5% on time deposits. Until the 1960s, these restrictions worked to the banks' advantage because their major source of funds was checkable deposits (over 60%) and the zero interest cost on these deposits meant that the banks had a very low cost of funds. Unfortunately, this cost advantage for banks did not last. The rise in inflation from the late 1960s on led to higher interest rates, which made investors more sensitive to yield differentials on different assets. The result was a process of disintermediation in which households and businesses began to take their money out of banks, with their low interest rates on both checkable and time deposits, and began to seek out higher-yielding investments.

At the same time, attempts to get around deposit rate ceilings and reserve requirements led to the financial innovation of money market mutual funds, which put the banks at an even further disadvantage because depositors could now obtain a high-yielding substitute for a savings account. One manifestation of these changes in the financial system was that the low-cost source of funds, checkable deposits, declined dramatically in importance for banks, falling from over 60% of bank liabilities to around 20% today.

The growing difficulty for banks in raising funds led to their supporting legislation in the 1980s that eliminated Regulation Q ceilings on time deposit interest rates and allowed checkable deposits like NOW accounts that paid interest. Although these changes in regulation helped make banks more competitive in their quest for funds, it also meant that their cost of acquiring funds had risen substantially, thereby reducing their earlier cost advantage over other financial institutions.

Decline in Income Advantages on Uses of Funds

The loss of cost advantages on the liabilities side of the balance sheet for American banks was one reason that they became less competitive, but they were also hit by a decline in income advantages on the assets side from financial innovations such as junk bonds and securitization and the rise of the commercial paper market.

Improvements in information technology have made it easier for firms to issue securities directly to the public. This has meant that instead of going to banks to finance short-term credit needs, many of the banks' best business customers now find it cheaper to go to the commercial paper market for funds instead. The loss of this competitive advantage for banks is evident in the fact that before 1970, the amount of nonfinancial commercial paper was less than 5% of commercial and industrial bank loans, whereas this percentage has grown to over 20% today.

In addition, this growth in the commercial paper market has allowed finance companies, which depend primarily on commercial paper to acquire funds, to expand their operations at the expense of banks. Finance companies, which lend to many of the same businesses that borrow

from banks, have increased their market share relative to banks: before 1980 finance company loans to business were around 30% of commercial and industrial loans, whereas currently they account for over 60%.

The rise of the junk bond market has also eaten into banks' loan business. Improvements in information technology have made it easier for corporations to sell their bonds to the public directly, thereby bypassing banks. Although *Fortune* 500 companies started taking this route in the 1970s, now lower-quality corporate borrowers are using banks less often because they have access to the junk bond market.

Improvements in computer technology are another source of banks' loss of income advantages in the use of their funds. Low cost computers have promoted securitization, whereby illiquid financial assets such as bank loans or mortgages can be bundled together cheaply and transformed into marketable securities where their interest and principal payments can be passed through to third parties. Computers also have enabled other financial institutions to originate loans because they can now accurately evaluate credit risk with statistical methods. As a result, banks no longer have the same advantage in making loans when default risk can be easily evaluated with computers. Without their former advantages, banks have lost loan business to other financial institutions even though the banks themselves are involved in the process of securitization.

The Impact of the Decline in the Profitability of Traditional Banking

The decline in cost advantages in acquiring funds and income advantages on the uses of

funds was one source of the decline from 1980 to 1992 in bank profitability, both in terms of return on assets and return on equity, that we see in Figure 3. In any industry a decline in profitability usually results in exit from the industry (often by business failures) and a shrinkage of market share. This is exactly what occurred in the banking industry: as we have seen in Figure 1 and Table 1 market share declined precipitously, while bank failures were running at a rate of over one hundred per year in the 1985-1992 period (Figure 4). Bank failures are part of the story explaining the decline in the number of commercial banks, but are by no means the whole story. From 1985 to 1992, when bank failures were running at a high rate, the number of banks declined by about 3,000 while the number of failures added up to around 1,300, less than half of the decline.

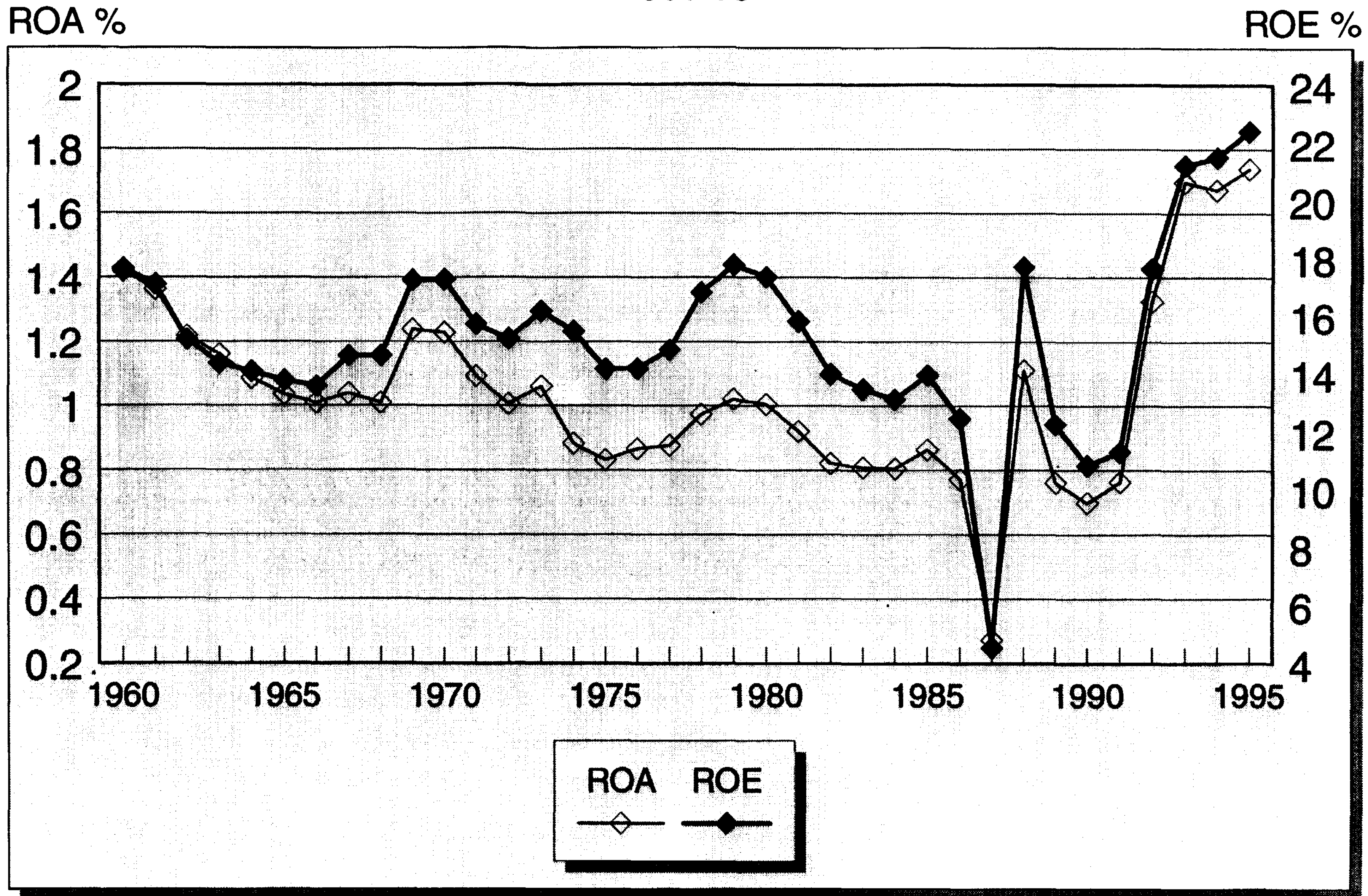
Another explanation of the decline in the number of banks is that in an attempt to survive and maintain adequate profit levels, banks needed to develop more cost-effective structures to deliver their services. Bank consolidation is a natural way of achieving gains in efficiency and it provides an explanation for the additional decline in the number of banks in the 1985-92 period.

Banks also could attempt to maintain their profitability by expanding into new, riskier, areas of lending. For example, U.S. banks increased their risk-taking by placing a greater percentage of their total funds in commercial real estate loans, traditionally a riskier type of loan. In addition, they increased lending for corporate takeovers and leveraged buyouts, which are highly-leveraged transactions loans. The decline in the profitability of banks' traditional business may thus have helped lead to the large loan losses in the late 1980s and early 1990s, which were an important source of the decline in bank profits (Figure 3) and bank failures

Figure 3

Return on Assets and Equity for Commercial Banks

1960-95



Source: Federal Deposit Insurance Corporation, *Statistics on Banking*.

(Figure 4).[1]

An alternative way banks sought to maintain former profit levels is to pursue new, off-balance sheet, activities that are more profitable. As we see in Figure 5, U.S. commercial banks did begin this process starting in the early 1980's, nearly doubling the share of their income coming from off-balance sheet, noninterest-income, activities by the 1990s.[2] If profitability in these new activities required larger banking units, this would have been a further impetus to bank consolidation in this period.

II.

The Decline in the Number of Banks: the Next Phase

The next phase in bank consolidation cannot be explained by poor profitability. As we can see in Figure 2, since 1992 the banking industry has returned to health, with record profits being reported. Yet in the period from 1992 to 1996, despite the turnaround, the number of

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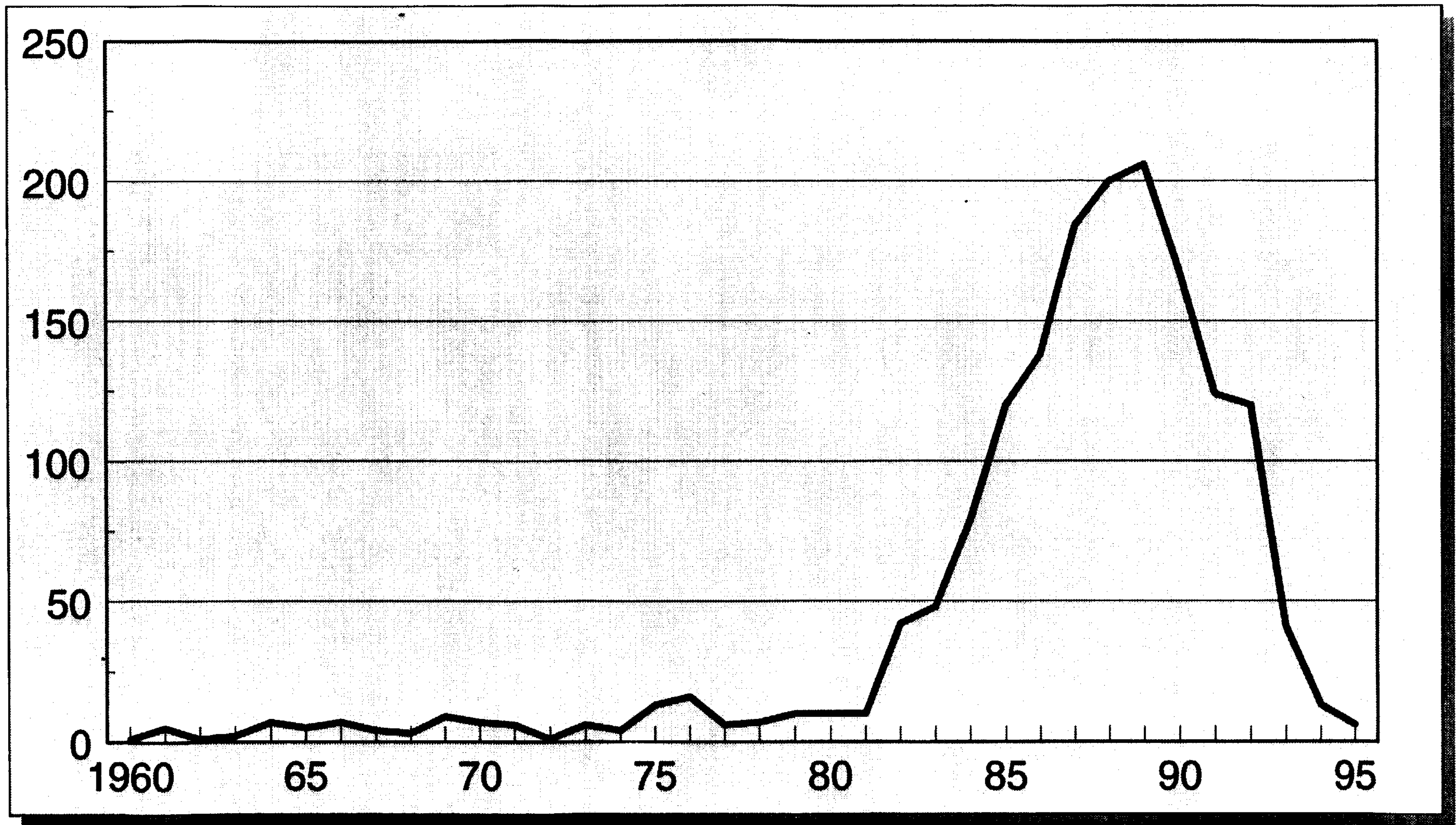
[1] U.S. banks have an incentive to take additional risk because of federal deposit insurance. Insured depositors have little incentive to monitor banks and to penalize them for taking too much risk. This moral hazard problem was compounded by the de facto "too-big-to-fail" policy for large banks. Although the 1991 Federal Deposit Insurance Corporation Improvement Act (FDICIA) has a least-cost resolution provision that makes it harder to bail out large depositors, there is an exception to the provision whereby a bank would be in effect declared too-big-to-fail so that all depositors would be fully protected if two-thirds majority of both the Board of Governors of the Federal Reserve System and the Directors of the FDIC as well as the secretary of the Treasury agreed. Thus, the moral hazard problem created by too-big-to-fail has been reduced but not entirely eliminated by the 1991 FDICIA legislation.

[2] Note that some off-balance sheet activities such as loan commitments and letters of credit which produce fee income can be classified as traditional banking business. The data in Figure 3 therefore overstate somewhat non-traditional banking business.

Figure 4

Bank Failures

1960-95

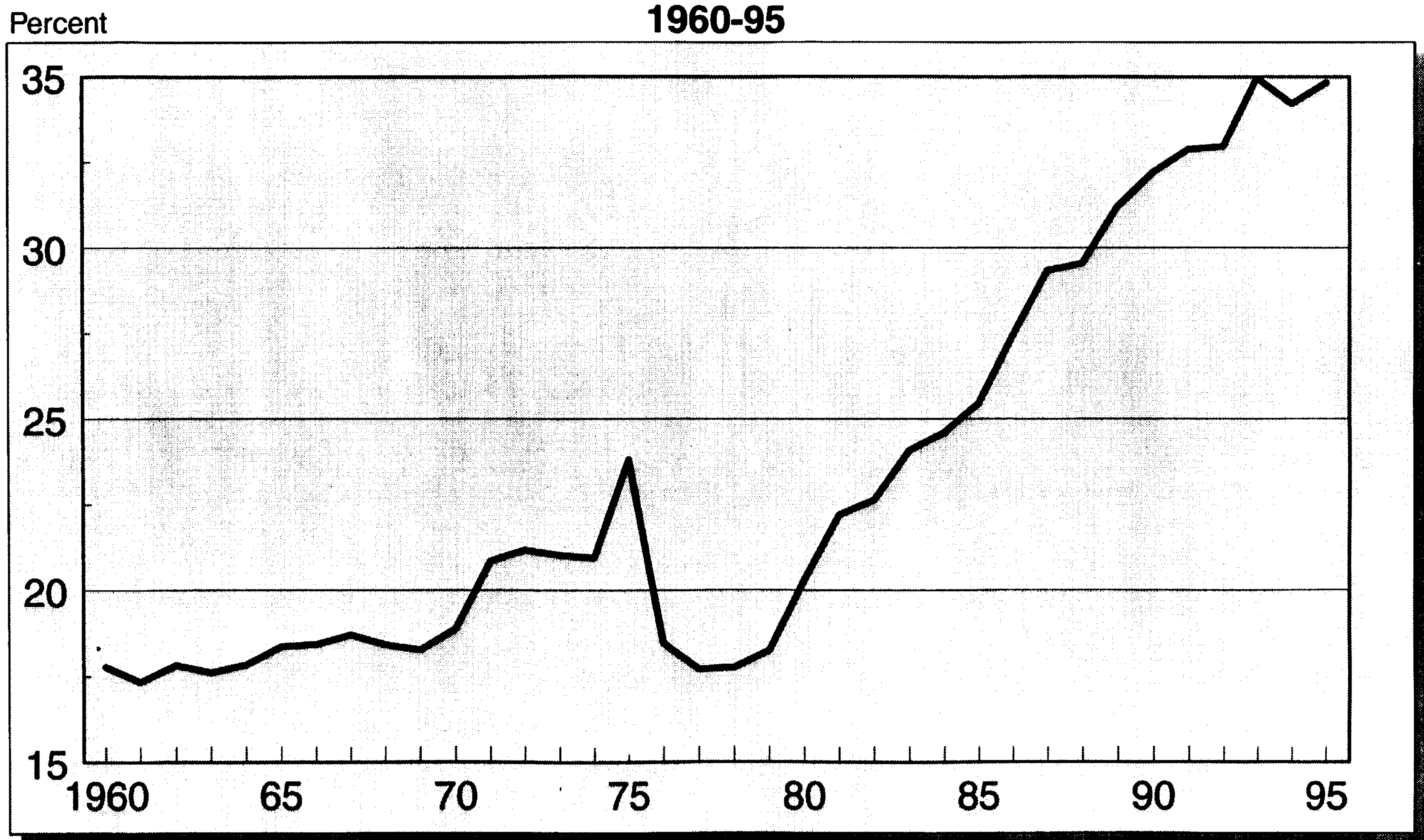


Sources: Federal Deposit Insurance Corporation, *1994 Annual Report*, and *Quarterly Banking Profile.*
Note: Number of failed FDIC-insured and Bank Insurance Fund-Member Depository Institutions.

Figure 5

Share of Noninterest Income in Total Income for Commercial Banks

1960-95



Source: Federal Deposit Insurance Corporation, *Statistics on Banking*.

Note: The share is the ratio of total noninterest income to the sum of net interest income and total noninterest income.

commercial banks declined by a little over 1,500; of these, less than 200 were bank failures (less than 15 percent of the decline) and most failures were of small banks.

The continued need for more cost-effective distribution networks and banks' new nontraditional activities have maintained the incentive for banks to form larger units, through both mergers of banks held by the same holding company and through mergers of the holding companies themselves. This process has been stimulated by deregulation of restrictions on both interstate banking as well as deregulation of within-state branching.

As of the middle of the 1970s, banks faced limits on geographic expansion. The McFadden Act of 1927 prohibited national banks from branching across state lines, while the Douglas Amendment to the 1956 Bank Holding Company Act prevented bank holding companies from acquiring out-of-state banks unless the target bank's state explicitly allowed such acquisitions by statute. Since none did as of the mid-70s, bank holding companies were effectively prohibited from operating across state lines. Similarly, about two-thirds of the states had laws that limited or prohibited branch banking.[3] Most of these states, however, permitted bank holding companies to own a controlling interest in several banks even if intrastate branching was not permitted. Thus, even if banks could only operate in one city or county, bank holding companies could still reap the risk-reducing benefits of diversification and cost-reducing benefits of scale economies by owning banks throughout a state.

Two important developments enhanced bank holding companies' ability to expand geographically. First, the Garn St Germain Act of 1982 amended the Bank Holding Company

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[3] For a description of the history of branching and interstate banking laws, see Kane (1996).

Act to permit bank holding companies to purchase failing out-of-state banks. As a consequence, bank holding companies headquartered in New York, Ohio, North Carolina, Michigan and California gained entry into the Texas market by purchasing failing institutions. The result was that some bank holding companies were able to operate across state lines.

Second, bank holding companies began avoiding interstate banking and branching restrictions by exploiting a provision of the Bank Holding Company Act which defined a bank as a financial institution that accepts demand deposits *and* makes commercial and industrial (C&I) loans. Bank holding companies realized that they could expand across state lines by opening limited service banks that either took demand deposits but made no C&I loans, or made C&I loans but took no demand deposits. The Competitive Equality in Banking Act of 1987, however, placed a moratorium on these limited service banks, thus closing this loophole.

Another financial development that helped banks get around restrictions on geographic expansion was the automatic teller machine (ATM). Banks realized that if they did not own or rent the ATM but instead paid a fee to the owner for each transaction, then the ATM would not be considered a branch. This is exactly what the regulatory agencies and courts in most states concluded. Because they enabled banks to widen their markets, a number of these shared facilities (such as Cirrus and NYCE) have been established nationwide. Furthermore, even when an ATM is owned by a bank, states typically have special provisions that allow wider establishment of ATMs than is permissible for traditional "brick and mortar" branches.

While banks and bank holding companies found ways to avoid restrictions on expansion across state lines, some were still unable to achieve their aims. Many banking companies, particularly large, expansion-minded bank holding companies, therefore argued that these

restrictions ought to be dismantled. While some banks -- mainly the smaller ones -- benefitted from these restrictions, their resistance to deregulation began to weaken as it became increasingly clear that bank holding companies were finding ways to get around the laws.[4] Moreover, the banking industry as a whole began to face increasing competitive pressures from nonbank financial companies not subject to geographical restrictions. In some states, for example, thrifts were permitted to branch while banks were not.

The views of other interested parties, such as businesses relying on local banks for credit and households relying on local banks for transaction services, also played a role in shaping the political forces leading to deregulation. For instance, middle-market and large borrowers may have pushed for deregulation as a way to encourage the expansion of large banks, who were more able to provide the wide array of services demanded by larger firms. On the other hand, small firms, traditionally served by small banks, may have had less at stake in the deregulation debate.

As a result of these pressures, states began to relax their restrictions on branching. Typically, a state would first permit its banks to branch statewide only by purchasing existing banks or their branches. In this way the incumbent banks, potentially threatened by increased competition, could at least sell out to the new entrants. Only later did most states permit *de novo* branching statewide.

The particular factors leading to branching deregulation differed across states. For instance, the Pennsylvania legislature faced lobbying pressure from large bank holding companies such as Mellon Bancorp, which argued that "they needed powers to meet challenges

[4] Flannery (1984) found that unit banks' profits were enhanced by branching restrictions.

from national financial institutions and to bolster themselves to compete in an anticipated era of interstate banking."[5] In six states the relaxation of branching restrictions was initiated by a national bank regulator, the Office of the Comptroller of the Currency (OCC). Based on a provision of the National Bank Act of 1864, the OCC ruled that national banks could branch to the same extent as thrifts.[6] After the OCC ruling was upheld by the courts, state-chartered banks asked for and won similar rights. By the early 1990s, almost all states permitted relatively unrestricted statewide branching.

The process of interstate banking deregulation followed a similar pattern. In 1975 Maine enacted the first interstate banking legislation which allowed out-of-state bank holding companies to purchase Maine banks. Again, by forcing out-of-state bank holding companies to buy their way into the market, incumbent banks in Maine could reap the benefits of selling out to the highest bidder. In 1982, Massachusetts enacted a regional compact with other New England states to allow interstate banking. Some states relaxed restrictions on interstate banking to encourage economic activity. South Dakota, for instance, permitted out-of-state bank holding companies to set up two limited-service *de novo* banks to encourage entry by credit card banks. During the middle of the 1980s, many other regional compacts were adopted until, by the early 1990s, almost all states allowed some form of interstate banking.

While similar forces that led states to deregulate branching also led them to deregulate

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[5] *Wall Street Journal*, 3/5/82.

[6] Banks achieved the right to branch statewide in this way in Texas, Florida, Mississippi, Tennessee, Louisiana and New Mexico. For descriptions of the OCC decision and its court challenges, see "Texas Get Statewide Branching," *American Banker*, 6/27/88 and "National Banks Can Branch Statewide in Mississippi," *Banking Expansion Reporter*, 3/2/87.

interstate banking restrictions, increased financial distress experienced by the banking industry in the 1980s probably provided further motivation. Proponents of interstate banking would be supported by nonbank business interests that feared that they would be harmed by weak or failing local banks. Moreover, by entering an interstate banking arrangement, a state could increase the potential number of bank holding companies which could acquire its weak or failing banks, thereby reducing the cost of recapitalizing its banking system.[7]

With barriers to interstate banking and branching breaking down in the 1980s, banks and bank holding companies recognized that they could gain the benefits of diversification because they would now be able to make loans in many states rather than just one. This gave them the advantage that if one state's economy was weak, another in which they operated might be strong, thus decreasing the likelihood that loans in different states would default at the same time. In addition, allowing bank holding companies to own banks in multiple states meant that they could take advantage of economies of scale, both by increasing their size through out-of-state acquisitions and by merging the banks operating in the same state into a single bank with many branches. Another result of the loosening of restrictions on interstate banking is the development of a new class of institutions, the so-called *superregionals* such as Nationsbank and BancOne, which are bank holding companies that have begun to rival the money centers in size but whose headquarters are not in one of the money center cities (New York, Chicago and San Francisco).

Banking consolidation has been given further stimulus by the passage of the 1994 Riegle-

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[7] For a more detailed description of interstate banking restrictions and the deregulation process during the 1980s, see Savage (1993).

Neal Interstate Banking and Branching Efficiency Act (IBBEA). This law expands the regional compacts to the entire nation, thereby overturning the McFadden Act and the Douglas Amendment to the Bank Holding Company Act. Moreover, IBBEA allows interstate *branching* by allowing bank holding companies to merge banks they own in separate states into a single bank with branches in different states beginning June 1, 1997. States do have the option of allowing interstate branching to occur earlier than this date, and several have done so, while they may also opt out of interstate branching, a choice only Texas has made.

III.

What Will the Structure of the U.S. Banking Industry Look Like in the Future?

With true nationwide banking becoming a reality, the benefits of bank consolidation for the banking industry have increased substantially, thus driving the next phase of mergers and acquisitions and accelerating the decline in the number of commercial banks. Great changes are occurring in the structure of this industry and the natural question arises: What will the industry look like in say ten years or so?

One view is that the industry will consolidate to only a couple of hundred commercial banks. A more extreme view is that industry will look like that of Canada or the United Kingdom with a few large banks dominating the industry. Research on this question, however, comes up with a different answer. The structure of the U.S. banking industry will still be

unique, but not as unique as it once was. Most experts see the bank consolidation surge as settling down with the U.S. banking industry having several thousand, rather than several hundred banks. One simple way of seeing why the number of banks will continue to be substantial is to recognize that California, which has unrestricted branching throughout the state, has close to 400 commercial banks. Blowing up the number of banks by the share of banking assets in California relative to the whole country, produces an estimate of the number of banks with unrestricted nationwide branching on the order of 4,000. More sophisticated research suggests that the number of banks in the U.S. will probably be somewhat smaller than this, but not by much.[8]

Banking consolidation will not only result in a smaller number of banks, but as the recent merger between Chase Manhattan Bank and Chemical Bank suggests, a shift in assets from smaller banks to larger banks as well. Within ten years, the share of bank assets in banks with less than $100 million in assets is expected to halve, while the amount at the so-called megabanks, those with over $100 billion in assets, is expected to more than double.[9]

Important developments in the banking industry that will affect the course of consolidation are the major changes that are occurring in retail distribution networks as a result of the ability to provide low-cost remote delivery of banking services using modern computer technology. The largest retail banks are restructuring by developing electronic channels to

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[8] Berger et al (1995) project the distribution of banks based on historical trends. They estimate that the number of banks will fall to 3,849 (Table 10). Amel (1995) finds evidence that the banking system is evolving toward one with a small number of very large banks and a large number of small banks.

[9] See Berger et al (1995).

deliver retail banking services to the household sector, such as phone centers, home banking using PCs, and ATMs. Bank of America, for example, has indicated that in 1995 it conducted twice as many ATM transactions with its customer base than it did with face-to-face transactions at its branches.[10] Banks are also using technology to develop new designs for branch offices, such as supermarket (or in-store) branches and one-stop financial centers.

The effect of these developments on bank consolidation cuts both ways. Some of them yield cost advantages to larger banks and therefore will further encourage bank consolidation. For example, since there are a very limited number of large supermarket chains in any state or metropolitan area (usually two or three) and alliances are typically exclusive, small banks may not be able to develop supermarket branches. Indeed, so far, supermarket branches have been set up between the largest players, both supermarkets and banks, in a géographic area.

On the other hand, over time banks have been switching to electronic, shared distribution channels which provide opportunities for small banking institutions. In operation now are national and regional ATM networks and credit card networks organized by Visa and MasterCard. It is likely that home banking will not only be available from individual banks, but also from software firms, regional ATM networks, national credit card associations like Visa and MasterCard and consortiums of banks. As in the case of ATM networks, these electronic distribution channels will not be owned and operated by individual banks but by combination of banks or third parties. The growing use of shared distribution networks thus means that economies of scale may be available to small banks, and this decrease the incentives for bank

[10] *1995 Annual Report of BankAmerica Corporation*, page 7. Other sources estimate that between 50 and 70 percent of total retail transactions take place outside the branches of large banks.

consolidation.

New branch designs and electronic delivery channels therefore introduce considerable uncertainty into projections of consolidation trends in the banking industry. Econometric studies of the economies of scale and scope use data from an era when banks had an extensive network of traditional branch offices and most transactions were conducted face-to-face with branch personnel. If in the future banks shed many of their branches for electronic delivery systems or switch to a new low-cost type of branch offices, the findings of these studies may not give reliable indications of economies of scale in banking, from which we infer the minimum size needed for a bank to be viable, the number of banks that will be in operation, and the concentration of assets among the largest. Furthermore, currently it is hard to predict which new technologies in financial services will be cost effective for banks and widely accepted by the public. Banks are exploring many different new ideas, and which will come to dominate the industry is far from clear.

Thus the brave new world of retail banking that is current under development makes predicting how much bank consolidation will take place in the United States in the future highly speculative. What does seem clear, however, is that the number of banks twenty years from now is likely to be less than half the quantity today, but is also likely to be substantially greater than the couple of hundred found in some countries.

IV.

Is Bank Consolidation and Nationwide Banking a Good Thing?

Advocates of nationwide banking believe that it will produce more efficient banks and a healthier banking system less prone to bank failures. However, critics of bank consolidation and nationwide banking fear that it will eliminate small (community) banks and that this will result in less lending to small businesses. In addition, they worry that a few banks will come to dominate the industry, making the banking business less competitive.

I am skeptical of the above criticisms of bank consolidation. As we have seen above, research indicates that even after bank consolidation is completed, the U.S. will still have plenty of banks. Furthermore, megabanks will not dominate the banking industry. Research such as that by Berger et al (1995) suggest that there will be more than ten banks with assets over $100 billion, and their share of bank assets will be less than 50%. The banking industry will thus remain highly competitive, probably even more so than now since banks which have been protected from competition from out-of-state banks will now have to compete vigorously with out-of-state banks to stay in business.

It also does not look as though community banks will disappear. When New York State liberalized branching laws in 1962, there were fears that community banks upstate would be driven from the market by the big New York City banks. Not only did this not happen, but some of the big boys found that the small banks were able to run rings around them in their local markets. Similarly, California, which has had unrestricted statewide branching for a long time, continues to have a vibrant set of community banks. Community banks are likely to remain viable because they serve a niche in the market which larger banks cannot fill: some segments of the public are willing to pay more for dealing with a small local institution that has a personal touch with the customer, and, furthermore, community banks may have better

information about small businesses which gives them inherent advantages in small business lending.

As an economist, it is hard not to see some important benefits of bank consolidation and nationwide banking. The elimination of geographic restrictions on banking will increase competition and drive out inefficient banks out of business, thus raising the efficiency of the banking sector. The move to larger banking organizations also means that there will be some increase in efficiency because of economies of scale. Indeed, some of the new distribution networks mentioned in the previous section may be particularly efficient if they are spread nationwide, and the elimination of geographic restrictions will allow banks to take full advantage of these new technologies.

Even more important from the perspective of a central banker who has to worry about banking and financial crises, the increased diversification of banks' loan portfolios may lower the probability of a banking crisis in the future. One of the features in the banking crisis in the United States was that bank failures were often concentrated in states with weak economies. For example, after the decline in oil prices in 1986, all the major commercial banks in Texas, which had been very profitable, found themselves in trouble. At that time, banks in New England were doing fine. However, when the 1990-91 recession hit New England very hard, it was the turn of the New England banks to start failing. With nationwide banking, a bank could make loans in both New England and Texas, and would thus be less likely to fail because when the loans were going sour in one location, they would likely be doing well in the other. Thus nationwide banking is a major step toward creating a healthier banking system that is less prone to banking crises.

One potential negative to bank consolidation is that it might lead to a reduction in bank lending to small businesses because of the reduction in assets at small banks. Small banks specialize in small business lending because restrictions on the fraction of their capital that can be lent to any one borrower necessarily mean that they cannot make large loans, which is what is often required by big businesses. The fear is that an acquisition of a small bank by a larger bank will result in a decline in lending to small businesses because the large bank pays less attention to this kind of lending. Because small businesses may be particularly dependent on bank lending to finance their activities, the reduction in small business lending to banks could hurt the efficiency of the economy.[11]

The evidence on whether bank consolidation will lead to a reduction in small business lending is however quite mixed. The fact that large banks have a smaller fraction of their business devoted to small business lending does not mean that when they acquire smaller banks they will reduce this lending if it is profitable. Some research finds that small bank lending is unlikely to be reduced as a result of bank consolidation while other research comes to the opposite conclusion.[12] However, even researchers who point out that bank lending to small business might decline are not sure that this would reduce economic efficiency. The restrictions on competition in the past which helped many small banks stay in business may have produced

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[11] Recent evidence from the National Survey of Small Business Finance confirms that small businesses use banks for credit more than they use nonbank sources of credit. See Cole and Wolken (1995).

[12] Strahan and Weston (1996) find no decline in small business lending, on average, following bank mergers that occurred between 1993 and 1994. On the other hand, Peek and Rosengren (1995) find a decline in small business lending for a small sample of bank mergers that occurred in New England during this period.

more small business lending than is socially optimal. The implicit subsidy to small banks from the restrictions on competition might have been passed onto some small businesses who would not have obtained loans otherwise.

A second possible negative to bank consolidation is that the rush of banks to expand into new geographic markets might lead them into increased risk taking which might lead to bank failures. Particularly worrisome would be banks that take on excessive risks by expanding extremely rapidly through acquisitions without having the managerial capital to manage this expansion successfully. Although a central banker needs to worry about this possibility, the job of our prudential supervisors is to prevent this occurrence.

In the past, much of bank supervision focused on assessment of the quality of the bank's balance sheet at a point in time and whether it complies with capital requirements and restrictions on asset holdings. Although the traditional focus is important for reducing excessive risk-taking by banks, it is no longer felt to be adequate in today's world in which financial innovation has produced new markets and instruments which make it easy for banks and their employees to make huge bets both easily and quickly. In this new financial environment, a bank that is quite healthy at a particular point in time and can be driven into insolvency extremely rapidly from trading losses, as has been forcefully demonstrated by the failure of Barings in 1995. Thus an bank supervision which focuses only on a bank's position at a point in time, may not be effective in indicating whether a bank will in fact be taking on excessive risk in the near future.

This change in the financial environment for banking institutions has resulted in a major shift in thinking about the bank supervisory process both in the United States and throughout the

world. Bank examiners are now placing far greater emphasis on evaluating the soundness of bank's management processes with regard to controlling risk. This shift in thinking was reflected in a new focus on risk management in the Federal Reserve System's 1993 guidance to examiners on trading and derivatives activities. The focus was expanded and formalized in the Trading Activities Manual issued early in 1994, which provided bank examiners with tools to evaluate risk management systems. In late 1995, the Federal Reserve and the Comptroller of the Currency announced that they would be assessing risk management processes at the banks they supervise. Now bank examiners separately evaluate risk management which feeds into the overall management rating as part of the CAMEL system. Four elements of sound risk management are assessed to come up with the risk management rating: 1) The quality of oversight provided by the board of directors and senior management, 2) the adequacy of policies and limits for all activities that present significant risks, 3) the quality of the risk measurement and monitoring systems, and 4) the adequacy of internal controls to prevent fraud or unauthorized activities on the part of employees. With this new focus of bank supervision on evaluating the soundness of bank management processes, bank supervisors can help prevent the dangers of banks expanding too rapidly without the proper management expertise in place.

V.

Conclusion

Bank consolidation is the result of fundamental economic forces which have increased competition and improved the efficiency of our financial system. Thus, it would be problematic

for central bankers to stand in the way of the bank consolidation trend. Furthermore, because nationwide banking and bank consolidation will increase diversification of banks' portfolios, it makes it less likely that we will have bank collapses of the type that occurred in Texas in the mid 1980s and New England in the early 1990s. The increased diversification resulting from bank consolidation should therefore make for a healthier banking system which is less prone to banking crises.

Nevertheless, bank consolidation and the increasingly competitive environment which the banking system finds itself in does present central bankers with some challenges. Central bankers need to be vigilant to make sure that bank consolidation does not result in excessive risk taking by banks which seek out excessive growth through bank acquisitions or unhealthy concentrations in certain activities. As we are well aware, banks have made mistakes in the past, such as their excessive exposure in commercial real estate lending in the 1980s, and they may make mistakes in the future. Although we need to carefully monitor banks in order to spot whether they are taking on excessive risks in the course of consolidating and restructuring, it does not make sense for us to micromanage the strategic plans for banks. Banks know how to run their own businesses better than we do, and it would be highly undesirable if the regulatory/supervisory process ended up stifling the creativity and drive for efficiency that the capitalist system generates in the financial sector.

One result of bank consolidation is that it will lead to more very large banks. The presence of larger banks does present a challenge because the failure of a very large bank may put substantial strain on the banking system. The problem of the danger from the failure of a very large bank has been with us for a long time, and bank consolidation does not present us

with a new problem. The presence of very large banks in the past and the possibility for greater numbers of them in the future means that supervision of these institutions to ensure that they are healthy and are not engaging in excessive risk taking is extremely important. This is a job that we would have to do even in the absence of bank consolidation, but it is likely to be even more imperative in the future.

With the appropriate bank supervision, bank consolidation and the increasingly competitive environment of the banking industry will promote economic efficiency and benefit both consumers and businesses.

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