For release on delivery
1:00 PM (EDT)
October 17, 1995

Testimony by

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before the

Subcommittee on Financial Institutions and Consumer Credit
of the Committee on Banking and Financial Services

U.S. House of Representatives

October 17, 1995

I am pleased to appear before this Subcommittee on behalf of the Federal Reserve Board to discuss issues related to mergers among U.S. banking organizations. The last fifteen years have seen considerable consolidation of our banking system, a process that probably will continue for some time. This ongoing consolidation is in many ways a natural response to the changing banking environment. However, the very large bank mergers that have been consummated or announced in recent years, and particularly in recent months, have raised a number of public policy questions and concerns. In the Board's view, the primary objectives of public policy in this area should be to help manage the evolution of the banking industry in ways that preserve the benefits of competition for the consumers of banking services, and ensure a safe and sound banking system. My statement today will focus on how, within the context of existing law, the Federal Reserve is pursuing these goals, and will review the potential economic effects of bank mergers.

Trends in Mergers and Banking Structure

It is useful to begin a discussion of the public policy and other implications of bank mergers with a brief description of recent trends in merger activity and overall U.S. banking structure. The statistical tables in the appendix of my statement provide some detail that may be of interest to the Subcommittee.

Bank Mergers: From a variety of perspectives, the pace of bank mergers (including mergers of banks and bank holding companies and acquisitions of banks by bank holding companies) has accelerated since 1980 (table 1). For example, excluding acquisitions of failed or failing banks by healthy banks and bank holding companies, in 1980 there were less than 200 bank mergers involving some $10 billion in acquired assets; by 1987 the annual number of mergers reached about 650 with almost $125 billion of acquired assets. In 1989, the number of mergers dropped back to 350 involving about $43 billion of bank assets acquired. In the 1990s, however, the number of mergers began to rise again, to nearly 450 in 1994 with acquired assets of about $110 billion. Through September 1995, the pace of merger activity has remained high, and there has been an exceptional number of very large bank merger announcements including Chase-Chemical, First Union-First Fidelity, NBD-First Chicago, Fleet-Shawmut, and PNC-Midlantic. Very large mergers occurred with growing frequency after 1980. In 1980, there were no mergers or acquisitions of commercial banking organizations where both parties had over $1.0 billion in total assets (table 2). The years 1987 through 1994 averaged fourteen such transactions per year and--reflecting changes in state law--an increasing number of these reflected interstate acquisitions by bank holding companies. Three of the largest mergers in U.S. banking history took place during 1990-1994--Chemical-Manufacturers Hanover, NCNB-C&S Sovran, and BankAmerica-Security Pacific. These mergers would all be surpassed by the recently announced proposal to merge Chemical and Chase Manhattan.

National Banking Structure: The high level of merger activity since 1980, along with a large number of bank failures, is reflected in a steady decline in the number of U.S. banking organizations from 1980 through 1994 (table 3). In 1980, there were over 12,000 banking organizations, defined as bank holding companies and independent banks; the independent banks and banks owned by bank holding companies numbered nearly 14,500 banks. By 1990 there were about 9,200 banking organizations, and in 1995 the number of organizations had fallen to about 7,700 (including over 10,000 banks)--

declines of over one-third in organizations and over one-fourth in numbers of banks from 1980. These trends have also been accompanied by a substantial increase in the share of total banking assets controlled by the largest banking organizations. For example, the proportion of domestic banking assets accounted for by the 100 largest banking organizations went from just over one-half in 1980, to nearly two-thirds in 1990, to over 70 percent in June 1995 (table 4).

The trends I have just described must be placed in perspective, because taken by themselves they hide some of the key dynamics of the banking industry. As shown in table 5, while there was a large decline in the number of banking organizations over the period 1980-1994, reflecting about 1,500 bank failures and over 6,300 bank acquisitions, some 3,200 new banks were formed, in spite of a sharp decline in formations after 1989. Similarly, while during the period over 13,000 bank branches were closed, the same period saw the opening of well over 28,000 new branches. Perhaps even more importantly, the total number of banking offices increased sharply from about 53,000 in 1980 to over 65,000 in 1994, a 23 percent rise, and the population per banking office declined. Fewer banking organizations clearly has not meant fewer banking offices serving the public.

Data on the nationwide concentration of U.S. banking assets must also be viewed in perspective. The increases in nationwide concentration and mergers reflect to a large degree a response by the larger banking organizations to the removal of legal restrictions on geographic expansion both within and across states. That is, the industry is moving from many separate state banking structures imposed by legal barriers toward more of a nationwide banking structure that long would have been in existence had legal restrictions not stood in the way. The sudden adjustment to a new legal environment should not be a surprise, nor is the large adjustment necessarily one that will continue for an extended period.

The removal of legal restrictions on geographic diversification began in earnest during the mid-1980s, as did the merger movement. For example, twenty-two states during the 1980s reduced branching restrictions compared with only six states during the 1970s. Also during the 1980s, most states passed laws allowing the acquisition of in-state banks by out-of-state organizations. As a result, while in 1987, only about 11 percent of banking assets were owned by out-of-state organizations, by mid-1995 that figure had risen to over one-fourth (table 6). Looked at another way, even by 1987 almost 92 percent of U.S. banking assets were open to access by at least some out-of-state bank holding companies, and by September 1995 that proportion had risen to over 99 percent. Passage of the Interstate Banking and Branching Efficiency Act in September 1994 further expanded geographic diversification opportunities--opening up interstate <u>branching</u> by <u>banks</u> and all interstate banking to common rules. It is undoubtedly a major factor behind the several large bank mergers and announcements of mergers during 1995 as firms expand into new areas or respond to the potential for major firms entering their markets.

Other forces have also been transforming the banking landscape, and the resulting acceleration of competitive pressures has encouraged many banks to seek merger partners. Chief among these is technological change: The rapid growth of computers and telecommunications, which has allowed a scale of operations that would not have been manageable previously. Technological change has also encouraged financial globalization, with expanded cross-border asset holdings, trading, and credit flows and, in response, foreign and domestic banks and other financial institutions have increased their cross-border operations. The resulting increase in domestic competition, especially for larger banking organizations, has been intense. Today, for example, over 40 percent of the domestic commercial and industrial bank loan market is accounted for by foreign banks.

Local Market Banking Structure: Given the Board's statutory responsibility to ensure competitive banking markets by applying antitrust standards, it is critical to understand that nationwide concentration statistics are not the appropriate metric for assessing competitive effects. Virtually all observers agree that in the vast majority of cases the relevant issue is competition in local banking markets. From 1980 through 1994 the average percentage of bank deposits accounted for by the three largest firms in both urban and rural markets has remained steady or actually declined slightly even as nationwide concentration has increased substantially. This trend has continued since the mid-1970s. Essentially similar trends are apparent when local market bank concentration is measured by the Herfindahl-Hirschman Index (HHI). Because of the importance of local banking markets, I would like to provide somewhat more detail on the implications of bank mergers for local market concentration.

Metropolitan Statistical Areas (MSAs) and non-MSA counties are often used as proxies for urban and rural banking markets. The average three-firm deposit concentration ratio for urban markets increased by only two-tenths of a percentage point between 1980 and 1994 (table 7). Average concentration in rural counties actually declined by six-tenths of a point. Similarly, the average bank deposit-based HHI for both urban and rural markets fell between 1980 and 1994 (table 8). When thrift deposits are given a 50 percent weight in these calculations, average HHIs are sharply lower than the bank-only HHIs, but the trend becomes somewhat positive. On balance, the three-firm concentration ratios and the HHI data strongly suggest that despite the fact that there were over 6,300 bank mergers between 1980 and 1994, local banking market concentration has remained about the same.

Why haven't all of these mergers increased local market concentration? There are a number of reasons. First, many mergers are between firms operating primarily in different local banking markets. While these mergers may increase national or state concentration, they do not tend to increase concentration in local banking markets and thus do not reduce competition.

Second, as I have already pointed out, there is new entry into banking markets. In most markets new banks can be formed fairly easily, and some key regulatory barriers, such as restrictions on interstate banking, have been all but eliminated. New banks continue to be formed in states throughout the country, although the number of new bank formations has declined sharply during the 1990s.

Third, the evidence overwhelmingly indicates that banks from outside a market usually do not increase their market share after entering a new market by acquisition. An oft-mentioned example here is the inability of the New York City banks to gain significant market share in upstate New York. More general studies indicate that, when a local bank is acquired by a large out-of-market bank, there is normally some loss of market share. The new owners are not able to retain all of the customers of the acquired bank.

Fourth, it is important to emphasize that small banks have been and continue to be able to retain their market share and profitability in competition with larger banks. Our staff has done repeated studies of small banks; all these studies indicate that small banks continue to perform as well as, or better than, their large counterparts, even in the banking markets dominated by the major banks. Indeed, size is not an important determining factor even for international competition. The U.S. has not had any banks among the largest twenty in the world since 1989 and even if all of the proposed mergers were consummated, U.S. banks would still not rank among the largest twenty. Yet those U.S. banks that compete in world markets are consistently among the most profitable in the world and include those that are ranked as the most innovative. It is notable that U.S. banks, in addition to being among the most profitable, have in the 1990s demonstrated their ability to attract capital. When measured by equity, two of the largest ten banks in the world are U.S. banks, and three of the largest ten if the Chemical-Chase merger is consummated.

Finally, administration of the antitrust laws has almost surely played a role. At a minimum, banking organizations have been deterred from proposing seriously anticompetitive mergers. And in some cases, to obtain merger approval, banks have divested banking assets and deposits in certain local markets where the merger would have otherwise resulted in substantially more concentrated markets.

Overall, then, the picture that emerges is that of a dynamic U.S. banking structure adjusting to the removal of longstanding legal restrictions on geographic expansion, technological change, and greatly increased domestic and international competition. Even as the number of banking organizations has declined, the number of banking offices has continued to increase in response to the demands of consumers, and measures of local banking structure have remained quite stable. In such an environment, it is potentially very misleading to make broad generalizations without looking more deeply into what lies below the surface. In part for the same reasons that make generalizations difficult, the Federal Reserve devotes considerable care and substantial resources to analyzing individual merger applications.

Federal Reserve Methodology for Analyzing Proposed Bank Mergers

The Federal Reserve Board is required by the Bank Holding Company Act (1956) and the Bank Merger Act (1960) to assess the effects when (1) a holding company acquires a bank or merges with another holding company, or (2) the bank resulting from a merger is a state-chartered member bank. The Board must evaluate the likely effects of such mergers on competition, the financial and managerial resources and future prospects of the firms involved, the convenience and needs of the communities to be served, and Community Reinvestment Act requirements.

This section of my statement briefly discusses the methodology the Board uses in assessing a proposed merger. In light of the Subcommittee's interests, emphasis is placed on competitive factors.

Competitive Criteria: In considering the competitive effects of a proposed bank acquisition, the Board is required to apply the same competitive standards contained in the Sherman and Clayton Antitrust Acts. The Bank Holding Company (BHC) Act and the Bank Merger Act do contain a special provision, applicable primarily in troubled-bank cases, that permits the Board to balance public benefits from proposed mergers against potential adverse competitive effects.

The Board's analysis of competition begins with defining the geographic areas that are likely to be affected by a merger. Under procedures established by the Board, these areas are defined by staff at the local Reserve Bank in whose District the merger would occur, with oversight by staff in Washington. In mergers where one or both parties are in two Federal Reserve Districts, the Reserve Banks cooperate, as required. To ensure that market definition criteria remain current, and in an effort to better understand the dynamics of the banking industry, the Board has recently sponsored several surveys, including the 1988 and 1993 National Surveys of Small Business Finances, a triennial national Survey of Consumer Finances, and telephone surveys in specific merger cases, to assist it in defining geographic markets in banking. These surveys and other evidence continue to suggest that small businesses and households tend to obtain their financial services in their local area. This local geographic market definition would, of course, be less important for the financial services obtained by large businesses.

With this basic local market orientation of households and small businesses in mind, the staff constructs a local market index of concentration, the HHI, which is widely accepted as a sensitive measure of market concentration, in order to conduct a preliminary screen of a proposed merger. The HHI is calculated based on local bank and thrift deposits. The merger would not be regarded as anticompetitive if the resulting market share, the HHI, and the change in that index do not exceed the criteria in the Justice Department's merger guidelines for banking. However, while the HHI is an important indicator of competition, it is not a comprehensive one. In addition to statistics on market share and bank concentration, economic theory and evidence suggest that other factors, such as potential competition, the strength of the target, and the market environment may have important influences on bank behavior. These other factors have become increasingly important as a result of many recent procompetitive changes in the financial sector. Thus, if the resulting market share and the level and change in the HHI are within Justice Department guidelines, there is a presumption that the merger is acceptable, but if they are not, a more thorough economic analysis is required.

Because the importance of the other factors that may influence competition often varies from case to case and market to market, an in-depth economic analysis of competition is required in each of those merger proposals where the Justice Department guidelines are exceeded. To conduct such an analysis of competition, the Board uses information from its own major national surveys noted above, from telephone surveys of households and small businesses in the market being studied, from on-site investigations by staff, and from various standard databases with information on market income, population, deposits, and other variables. These data, along with results of general empirical research by Federal Reserve System staff, academics, and others, are used to assess the importance of various factors that may affect competition. To provide the Subcommittee with an indication of the range of other factors the Board may consider in evaluating competition in local markets, I shall briefly outline these considerations.

Potential competition, or the possibility that other firms may enter the market, may be regarded as a significant procompetitive factor. It is most relevant in markets that are attractive for entry and where barriers to entry, legal or otherwise, are low. Thus, for example, potential competition is of relatively little importance in markets where entry is unlikely for economic reasons, such as in smaller markets. For potential competition to be a significant factor, it will generally be necessary for there to be potential acquisition targets as well as meaningful potential entrants. These conditions are most likely to be relevant in urban markets.

Thrift institution deposits are now typically accorded 50 percent weight in calculating statistical measures of the impact of a merger on market structure for the Board's analysis of competition. In some instances, however, a higher percentage may be included if thrifts in the relevant market look very much like banks, as indicated by the substantial exercise of their transactions account, commercial lending, and consumer lending powers.

Competition from other depository and nonbank financial institutions may also be given weight if such entities clearly provide substitutes for the basic banking services used by most households and small businesses. In this context, credit unions and finance companies may be particularly important, and over time, nonbank competition has become substantially more important.

The competitive significance of the target firm can be a factor in some cases. For example, if the bank being acquired is not a reasonably active competitor in a market, its market share might be given a smaller weight in the analysis of competition than otherwise.

Adverse structural effects may be offset somewhat if the firm to be acquired is located in a declining market. This factor would apply where a weak or declining market is clearly a fundamental and long-term trend, and there are indications that exit by merger would be appropriate because exit by closing offices is not desirable and shrinkage would lead to diseconomies of scale. This factor is most likely to be relevant in rural markets.

Competitive issues may be reduced in importance if the bank to be acquired has failed or is about to fail. In such a case, it may be desirable to allow some adverse competitive effects if this means that banking services will continue to be made available to local customers rather than be severely restricted or perhaps eliminated.

A very high level of the HHI could raise questions about the competitive effects of a merger even if the change in the HHI is less than the Justice Department criteria. This factor would be given additional weight if there has been a clear trend toward increasing concentration in the market.

Finally, other factors unique to a market or firm would be considered if they are relevant to the analysis of competition. These factors might include evidence on the nature and degree of competition in a market, information on pricing behavior, and the quality of services provided.

Some merger applications are approved only after the applicant proposes the divestiture of offices in local markets, retention of which would otherwise violate Justice Department guidelines, and where the merger cannot be justified using any of the criteria I have just discussed. We believe that such divestitures have provided a useful vehicle for eliminating the potentially anticompetitive effects of a merger in specific local markets while allowing the bulk of the merger to proceed.

Safety and Soundness Criteria: In acting upon merger applications, the Board is required to consider financial and managerial resources and the future prospects of the firm. In doing so, the Board's goal is to promote and protect the safety and soundness of the banking system, and to encourage prudent acquisition behavior by applicant banking organizations. Indeed, except in very special circumstances, usually involving failing banks, the Board will not approve a merger or acquisition unless the resulting organization is expected to be strong and viable.

The Board expects that holding company parents will be a source of strength to their bank subsidiaries. In doing so, the Board generally requires that the holding company applicant and its subsidiaries be in at least satisfactory overall condition, and that any weaknesses be addressed prior to Board action on a proposal. The holding company applicant must be able to demonstrate the ability to make the proposed acquisition without unduly diverting financial and managerial resources from the needs of its existing subsidiary banks.

These general principles apply regardless of the size or type of acquisition--banking or nonbanking. The financial and managerial analysis of an application includes an evaluation of the existing organization, including bank and nonbank subsidiaries, the parent company, and the consolidated organization, as well as an evaluation of the entity to be acquired. Also included in this analysis are the financial and accounting effects of the transaction, that is, the purchase price, the funding and sources thereof, and any purchase accounting adjustments. Numerous factors are analyzed for strengths and weaknesses, including earnings, asset quality, cash flow, capital, risk management, internal controls, and compliance with law and regulation. As the size of the applicant or resulting organization increases due to mergers or internal growth, so generally does the complexity of this analysis. Additionally, areas where weaknesses or potential issues are identified receive more intense scrutiny. The financial condition and management of the resulting organization are expected to be satisfactory, and financial and managerial resources to be sufficient in relation to the risk of the transaction; thus, significant problems or issues must be resolved for favorable action.

Community Reinvestment Act Criteria: The Community Reinvestment Act (CRA) performance of banking organizations that seek the Board's approval to acquire a bank or thrift is a major component of the "convenience and needs" criteria that must be considered by the Board. In making its judgments, the Board pays particular attention to CRA examination findings. In addition, any comments received from the public regarding an applicant's CRA performance become part of the official record, and such comments are reviewed carefully. The Board has developed a substantial record in this area.

Banks supervised by the Federal Reserve System--regardless of the size or the geographic scope of a bank's operations--are examined for CRA purposes generally every eighteen months. Banking organizations with identified weaknesses in their consumer compliance are examined even more frequently. Our practice is to review the performance of banks with large intrastate branching systems by examining a sample of branches, which consists of all major branches plus one-tenth of all small branches selected on a rotating basis. The agencies will need to develop a similar procedure for large, interstate branch systems as well. Some adjustments may be necessary, though, to ensure that the CRA examination process continues to work well for banking organizations that span several states.

The Board expects that banking organizations will have policies and procedures in place and working well to address and implement their CRA responsibilities prior to Board consideration of bank expansion proposals. The Board generally does not accept promises for future action in this area as a substitute for a demonstrated record of performance. Instead, the Board has accepted commitments for future action as a means of addressing areas of weakness in an otherwise satisfactory record. Where commitments have been accepted, the Board monitors progress in implementing the proposed actions, both through reports and through the application process.

Potential Implications of Bank Mergers

The increased rate of bank mergers has raised a number of concerns regarding the potential effects of banking consolidation on those consumers whose demands for banking services are primarily local in nature and on the performance of the merged banks (including prices paid by consumers at those banks).

Effects of Mergers on Locally Limited Customers: The current merger wave in the banking industry is likely to have only modest effects on the availability of services to households and small businesses that rely primarily on local providers for their financial services, and often have few convenient alternatives for such services. There are two reasons for this: (1) to date, most mergers have not been between banks operating primarily in the same local banking markets; and (2) the effects of intramarket mergers can be, and thus far have been, limited by both market forces and antitrust constraints on such mergers.

Even in those places where in-market mergers have occurred, the effect on competition has on average not been substantial. This, of course, does not mean that users of bank services will never be harmed by mergers. No policy can guarantee that result. But, the trends in local market concentration I discussed earlier indicate that the Board's application of antitrust standards to within-market merger applications generally has preserved competition. In addition, the Board's policies have almost certainly discouraged some potential bank mergers before an application was ever filed. Moreover, considerable intramarket consolidation could occur without significant anticompetitive effects. Many urban markets could see a relatively large number of in-market mergers before antitrust guidelines would be violated. Furthermore, legislation passed during the 1980s made thrift institutions more important competitors for banking services, and this has helped to reduce concerns about anticompetitive effects from intramarket bank mergers. Proposed legislation before this Subcommittee may make thrifts even more bank-like, encouraging even greater competition.

Although many small banks remain viable competitors in markets after larger bank mergers, some research suggests that large banks may adopt new banking technologies--such as automated teller machines and bank credit cards--more rapidly than small banks. Thus, bank mergers may enhance consumer convenience. On the other hand, in-market bank mergers often lead to some branch closings, raising concerns that consumer convenience may be harmed. Indeed, one of the factors reviewed in a CRA examination is the bank's record of opening and closing offices. However, as I pointed out earlier, there has been a substantial increase in the number of bank offices in the U.S. in recent years, and the number of ATMs has increased dramatically (from almost 14,000 in 1980 to almost 110,000 in 1994). More important, there is no reason to suspect that the market factors that have led to this increase in the number of offices and ATMs have changed. Indeed, the abolition of constraints on interstate branches will greatly facilitate this process. That is, if merging banks should close branches, the opening of branches by existing competitors or by new entrants to the market is likely to occur as new profit opportunities arise. Such opportunities should become even easier with full interstate branching, which will take effect in June 1997 under the Interstate Banking and Branching Efficiency Act of 1994. If consumers demand locational convenience, banks of all sizes will need to be responsive if they expect to remain viable competitors for retail customers.

Effects of Mergers on Bank Performance: Federal Reserve System staff and others have conducted numerous studies over many years on the effects of bank mergers and acquisitions. Some of these studies have focused on the effect of mergers on bank profits and prices, while others have looked at the potential for cost savings and efficiencies derived from mergers.

Of those studies concerned with profits and prices, some have looked directly at the effects of mergers, while a majority have approached this issue more indirectly by examining how bank profits and prices differ across banking markets. Each type of study is relevant to an assessment of the impact of bank mergers on performance.

Studies of differences in bank profitability across markets with varying degrees of concentration represent the oldest type of study relevant to the issue. Typically, such studies have found that banks operating in more concentrated markets exhibit somewhat higher profits than do banks in less concentrated markets. These higher profits may reflect the lesser degree of competition in more concentrated markets. Many have argued, however, that they are simply an indication of the greater efficiency and lower costs of the largest firms in such markets. This challenge is suspect because if a market is competitive, above-normal profits, whatever their origin, should be driven down to a competitive level.

Other studies have looked across banking markets for differences in the prices that banks charge their loan and deposit customers. For the most part, such studies have found that banks located in relatively concentrated markets tend to charge higher rates for certain types of loans, particularly small business loans, and tend to offer lower interest rates on certain types of deposits, particularly transactions accounts, than do banks in less concentrated markets. These studies have been less subject to question than profit studies, and therefore tend to be clearer in terms of their implications for merger policy. In particular, they suggest that mergers resulting in relatively high levels of local banking market concentration can adversely affect local bank customers. That is, these studies support the need to maintain antitrust constraints if locally limited bank customers are to continue to receive competitively priced banking services.

A related issue relevant to the effect of mergers concerns the prospect that, through merger, greater bank efficiency can be achieved, thus yielding a healthier, more competitive banking firm. Studies that are relevant to the effect of mergers on bank efficiency may be divided into those that do and those that do not look directly at the effects of mergers.

A large number of studies have sought to determine whether larger banking organizations exhibit lower average costs than do smaller organizations. In general, these studies of "scale economies" find that cost advantages of large firms either do not exist or are quite small, and most do not find scale economies to exist beyond the range of a small- to medium-sized bank. Thus, simply by achieving larger size, mergers seem unlikely to yield greater efficiency.

Another strand of research has attempted to discover whether there are important differences in the efficiency with which banks use inputs to produce a given level of services. These studies, which essentially focus on the efficiency effects of management skills, suggest that some banks, both large and small, are just a lot better than others at using their inputs, such as labor and capital, in a productive way. Indeed, estimates of these so-called cost efficiencies suggest that management skills dominate any benefits from economies of scale. In addition, there is some evidence that these differences in management efficiencies play a role in the incidence of bank failure. It is estimated that over 50 percent of the bank failures in the 1980s came from the highest (noninterest) cost quartile of banks, while fewer than 10 percent are estimated to have occurred in the lowest cost quartile.

In the past several years, numerous researchers have sought to determine whether past mergers have resulted in cost savings. Many such studies examine the changes in noninterest expenses observed before and after the merger and, in some cases, compare them to the same changes observed concurrently in banks that did not participate in mergers. Other research has used the event study methodology to examine how the stock market reacted to merger announcements. The great majority of these studies have not found evidence of substantial efficiency gains from mergers. Evidence on the relative efficiency of acquiring and acquired firms is mixed.

Let me emphasize that most of these studies are based on many mergers and thus provide the basis for statistically valid generalizations. However, in some individual merger cases, cost savings and improved efficiency have been reported. Furthermore, the previously noted evidence indicating substantial differences in the relative efficiency of banks suggests that substantial cost savings are theoretically possible for many banks. For example, a study done at the Board a few years ago estimated that annual cost savings on the order of $17 billion would result if the lowest cost banks in the country were to acquire the highest cost banks, and if the costs of the acquired banking organizations were subsequently reduced to the level of the acquiring banks. While some of these cost differences may simply reflect differences in the level and types of services offered to the public, such results are nevertheless suggestive of potential gains from acquisitions of inefficient firms by efficient ones. In addition, it appears that in the evolving world of high technology and global markets for corporate banking, there is greater emphasis on efficiency in order to survive. This has probably played a role in the efficiency gains noted in some of the individual recent large mergers. On balance, a possible future scenario is that it may become increasingly common for relatively efficient banks to take over relatively inefficient ones and convert the more poorly performing institutions into viable, low-cost competitors. Surely consumers of financial services could only be better off if such a future were to occur, and competitive markets are maintained.

Conclusion

The recent wave of large mergers and merger announcements reflect to a large degree a natural response to new opportunities for geographic expansion as legal restraints are removed. The industry is moving away from a legally fragmented banking structure toward a nationwide banking structure. Rapid technological changes and global competition in corporate banking are almost certainly a motivating factor for the very large banks.

The increased pace of bank mergers since the early 1980s has greatly reduced the number of U.S. banking organizations, and resulted in a substantially higher nationwide concentration of banking assets at the 100 largest banks. However, concentration in local banking markets, which is normally considered most important for the analysis of possible competitive effects, has remained virtually unchanged. In addition, there continues to be new bank entry and there is a continuing increase in the number of banking offices. This illustrates that the U.S. banking structure is highly dynamic, and that sweeping generalizations are extremely difficult to make.

The dynamic nature of U.S. banking means that analysis of the potential competitive and other effects of individual bank mergers must be done on a case-by-case, market-by-market, basis. The Federal Reserve devotes considerable resources to this end. Many factors are considered in the analysis including actual competition from bank and nonbank sources, potential competition, the general economic health of the market, and a variety of other factors unique to a given market. In addition, safety and soundness and CRA concerns are highly relevant.

To date, the available evidence suggests that recent mergers have not resulted in adverse effects on the vast majority of consumers of banking services. It is certainly possible that some customers have been disadvantaged by some mergers. And, mergers can no doubt be very disruptive to bank employees as functions are consolidated and reorganized. But these disruptions do not appear to differ substantively from similar disruptions in other industries that have experienced or are undergoing fundamental change.

It is also clear that substantial harm to consumers would occur if mergers were allowed to decrease competitive pressures significantly. However, market developments and the removal of geographic restrictions on banks have significantly lessened the chances for anticompetitive effects. In addition, the antitrust standards enforced by the bank regulatory agencies and the Department of Justice have helped to ensure the maintenance of competition.

The evidence to date does not indicate that, on average, substantial efficiency improvements have resulted from bank mergers. However, in recent years, there appear to have been some cases of improvements in efficiency, and our staff work does suggest the potential for such savings if well-managed entities acquire and modify the operations of high-cost organizations. Given the continuing pressures for cost minimization in banking, it certainly seems possible that some of this potential will be realized in the future.

In sum, law, regulation, and market forces have so far kept banking markets competitive, and the same forces should continue to do so as banks adjust to a new legal and more competitive environment. Bank consolidation to date has not reduced competition in any meaningful way and we see no reason why it should begin to do so. While there have been only a few cases of demonstrable efficiency gains from past mergers, there is reason to expect that there may be a higher incidence of such gains in the future. Given that potential, and the antitrust laws protecting competition, the Board sees no reason to be concerned if a banking organization's management and stockholders choose to respond to the changing environment by consolidating with other such organizations.

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APPENDIX

STATISTICAL TABLES

(Data in these tables are only for commercial banks and bank holding companies)

Table 1

Bank Mergers and Acquisitions, 1980-1994

Year	Number of bank mergers	Bank assets acquired*
1980	190	$10.18
1981	359	34.07
1982	420	40.87
1983	428	50.05
1984	441	69.82
1985	475	67.12
1986	573	94.41
1987	649	123.29
1988	468	87.71
1989	350	43.39
1990	366	43.74
1991	345	150.29
1992	401	165.42
1993	436	103.05
1994	446	111.76
Total	6,347	$1,195.17

* Asset values in billions of dollars.

Source: Stephen A. Rhoades, "Mergers and Acquisitions by Commercial Banks, 1980-1994," Staff Study, Federal Reserve Board (forthcoming, 4th Quarter, 1995).

Table 2

Number of Large Mergers, 1980-1994*

Year	Number of large mergers	Number of large interstate mergers
1980	0	0
1981	1	0
1982	2	0
1983	5	0
1984	6	0
1985	9	4
1986	9	6
1987	18	11
1988	14	7
1989	3	2
1990	6	2
1991	16	12
1992	23	15
1993	15	10
1994	15	11
Total	142	80

* Where the acquiring firm and target bank are over $1 billion in assets.

Source: Stephen A. Rhoades, "Mergers and Acquisitions by Commercial Banks, 1980-1994," Staff Study, Federal Reserve Board (forthcoming, 4th Quarter, 1995).

Table 3

Number of Banks, Banking Organizations, and Offices, 1980-1995[1]

Year	Banks[2]	Banking organizations[2]	Number of banking offices[3]	Population per banking office[4]
1980	14,407	12,335	52,710	4,307
1981	14,389	12,177	54,734	4,184
1982	14,406	11,924	53,826	4,310
1983	14,405	11,669	55,109	4,246
1984	14,381	11,353	56,051	4,211
1985	14,268	11,019	57,417	4,145
1986	14,052	10,510	58,182	4,125
1987	13,542	10,099	58,821	4,114
1988	12,967	9,719	59,569	4,113
1989	12,556	9,457	61,219	4,035
1990	12,195	9,224	63,393	3,928
1991	11,791	9,010	64,681	3,896
1992	11,350	8,734	65,122	3,916
1993	10,869	8,324	63,658	4,053
1994	10,362	7,902	65,100	3,994
1995	10,083	7,715	n.a.	n.a.

1. Banks are defined as insured commercial banks; banking organizations are defined as bank holding companies and independent commercial banks; and banking offices are defined as insured U.S. commercial banks plus branches owned by insured commercial banks.

2. Source: NIC Database, Reports of Condition and Income.

3. Number of banking offices=number of insured U.S. commercial banks+number of branches owned by insured U.S. commercial banks. The source of the branch figures is the Annual Statistical Digest published by the Board of Governors of the Federal Reserve System, with preliminary data for 1994.

4. Population data for 1980-1993 are from the U.S. Department of Commerce (Bureau of Economic Analysis). The 1994 data are estimated.

Table 4

Shares of Domestic Commercial Banking Assets Held by Largest Banking Organizations, 1980-1995

Year	Top 5	Top 10	Top 25	Top 50	Top 100
1980	13.5	21.6	33.1	41.6	51.4
1981	13.2	21.1	33.2	41.6	51.6
1982	13.4	21.8	34.2	43.0	53.6
1983	13.2	21.0	34.0	43.3	54.3
1984	13.0	20.4	33.3	43.7	55.4
1985	12.8	20.4	33.2	45.8	57.9
1986	12.7	20.2	34.1	47.3	60.4
1987	12.6	19.9	34.8	48.5	61.9
1988	12.8	20.4	35.7	51.1	64.0
1989	13.3	21.7	36.9	51.8	64.7
1990	13.1	21.8	37.8	52.7	65.4
1991	16.0	24.4	40.3	53.4	65.5
1992	17.3	25.6	41.8	55.6	67.1
1993	17.6	26.9	43.8	58.0	69.2
1994	18.2	27.9	45.7	59.9	71.3
June 1995	17.6	27.1	45.3	60.0	71.5

Sources: NIC Database, Reports of Condition and Income.

Table 5

Entry and Exit in Banking, 1980-1994

Year	Number				
				Bank branches	
	New banks	Failure of FDIC-insured banks	Mergers and acquisitions	Openings	Closings
1980	206	10	190	2,397	287
1981	199	10	359	2,326	364
1982	316	42	420	1,666	443
1983	366	48	428	1,320	567
1984	400	79	441	1,405	889
1985	318	120	475	1,480	617
1986	248	138	573	1,387	763
1987	212	184	649	1,117	960
1988	234	200	468	1,676	1,082
1989	204	206	350	1,825	758
1990	165	168	366	2,987	926
1991	106	124	345	2,788	1,456
1992	96	120	401	1,755	1,435
1993	76	42	436	1,909	1,493
1994	66	13	446	2,461	1,146
Total	3,212	1,504	6,347	28,499	13,186

Sources: Failure data are from Annual Report of the Federal Deposit Insurance Corporation and statistical releases. Mergers and acquisitions data are from Stephen A. Rhoades, "Mergers and Acquisitions by Commercial Banks, 1980-1994," Staff Study, Federal Reserve Board, forthcoming (4th quarter, 1995). New bank and branch openings and closings are from the Federal Reserve Board, Annual Statistical Digest, relevant years.

Table 6

Share of U.S. Bank Assets held by Out-of-State Banking Organizations

Year	Share of U.S. banking assets in banks owned by out-of-state banking organizations (in percent)	Share of U.S. banking assets open to out-of-state ownership
1987	10.59	91.69
1988	13.72	96.11
1989	15.32	96.98
1990	15.88	97.37
1991	16.89	98.51
1992	19.74	99.28
1993	24.56*	99.49
1994	24.43*	99.53
September 1995	27.10*	99.55**

NOTES:

a. Data are from tables constructed for December of each year. Structure reflects acquisitions that have been approved by the Board and published in the Federal Reserve Bulletin by December. Asset data are based on September Call Reports. For September 1995, structure data reflects acquisitions published in the Federal Reserve Bulletin by September 1995 and financial data are for June 1995. September 1995 data include interstate branches as of September 1995 using Summary of Deposits data for June 1994.

b. Includes only insured domestic commercial banking assets. Special purpose banks are excluded.

* Changed to domestic deposits rather than assets due to the existence of some interstate branching.

** June 1995

Table 7

Average Three-firm Deposit Concentration Ratio (in percent) based on Insured Commercial Banking Organizations, 1976–1994

Year	Metropolitan statistical areas	Non-metropolitan counties
1976	68.4%	90.0%
1977	67.8	89.9
1978	67.2	89.9
1979	66.7	89.7
1980	66.4	89.6
1981	66.0	89.4
1982	65.8	89.3
1983	65.9	89.4
1984	66.3	89.4
1985	66.7	89.4
1986	67.5	89.5
1987	67.7	89.5
1988	67.8	89.7
1989	67.5	89.7
1990	67.5	89.6
1991	66.7	89.3
1992	67.5	89.2
1993	66.8	89.2
1994	66.6	89.0

Source: Summary of Deposits, 1976–1994.

Table 8

Average Herfindahl-Hirschman Indexes (HHI) of Metropolitan Statistical Areas and Rural (Non-MSA) Counties, 1976-1994

Year	Insured commercial banks only		Insured commercial banks plus 50% of savings banks and savings and loan deposits	
	MSAs	Non-MSA counties	MSAs	Non-MSA counties
1976	1,951	4,504	N.A.	N.A.
1977	1,911	4,476	N.A.	N.A.
1978	1,884	4,451	N.A.	N.A.
1979	1,856	4,417	N.A.	N.A.
1980	1,843	4,396	N.A.	N.A.
1981	1,830	4,351	N.A.	N.A.
1982	1,845	4,340	N.A.	N.A.
1983	1,833	4,330	N.A.	N.A.
1984	1,848	4,341	1,356	3,782
1985	1,878	4,340	1,360	3,764
1986	1,911	4,325	1,388	3,744
1987	1,910	4,317	1,396	3,753
1988	1,912	4,292	1,400	3,726
1989	1,901	4,294	1,423	3,761
1990	1,906	4,266	1,468	3,788
1991	1,874	4,230	1,511	3,831
1992	1,906	4,189	1,563	3,832
1993	1,842	4,175	1,584	3,880
1994	1,825	4,142	1,602	3,873

Sources: Summary of Deposits data for banks and Survey of Savings data for thrifts. Pre-1985 HHIs calculated using 1985 MSA definitions.