

Testimony of

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Mr. Chairman and members of the Committee, I appreciate the opportunity to discuss financial services regulatory reform and bank mergers before the Committee today. I believe that it is imperative that we modernize the regulatory system that has governed banking with little change since the 1930s. Each Congress for the last dozen years has made a major attempt to revise our Depression-era banking regulations. Each attempt at fundamental reform has failed. As the proposed merger between Citibank and the Traveler's Group clearly illustrates, the markets simply cannot wait any longer for legislative reform and are taking deregulation into their own hands. Congress must recognize the inadequacy of the current system and address the issues raised in the financial services modernization legislation that is now before the Committee.

While reform of financial services regulation is extremely complex, I believe that 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 commercial 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 these activities should be eliminated. These changes are necessary to provide greater convenience for the consumer as well as to keep financial institutions in the US globally competitive. As Exhibit 1 shows, banks in the US have faced increasing competition from other financial institutions over time and their market share has been declining.

Permitting commercial banking and investment banking under one roof, however, does raise important questions about potential conflicts of interest and about stability and soundness of the financial system. As I argue below, competitive market forces and incentives can address these issues *if* the institutions are sufficiently well 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 they will turn elsewhere. To gain insights into how market forces would shape the involvement of commercial banks in other financial activities, I will draw on some pre-Glass-Steagall evidence to understand how the banks successfully resolved the conflicts of interest issue. They appear to have voluntarily developed effective "firewall" structures that provide lessons for the current debate the appropriate structure of activities in the financial services firm.

The second part of my remarks will focus on the issues raised by the so-called mega-mergers between such banking organizations as BankAmerica-Nationsbank and Banc One-First Chicago. These mergers are part of a broader trend toward consolidation and rationalization of the structure of the U.S. banking system. During the last quarter century, states have been eliminating artificial barriers to the geographic expansion of banks. This regulatory reform culminated at the national level with the Riegle-Neal Interstate Banking and Branching Efficient Act which went into effect in June, 1997, which will now allow the markets to create truly national-wide banks.

As I argue below, the mergers we are witnessing today are simply helping us to create efficient and convenient interstate banking networks that would have arisen 30 years ago if the U.S. had not severely restricted bank branching. Geographic and product line diversification can provide greater stability to the financial system while at the same time enhancing its efficiency and the convenience for consumers. Contrary to the concerns of many consumer and community advocates, it is the traditional U.S. system, which is fragmented both along product lines and geographically, that is fundamentally anti-consumer. The transformation of the banking system illustrated by the recent proposed mergers are good for consumers and for the economy as a whole. I will conclude with some remarks placing the current U.S. system and the regulatory reform debate in an international context.

POTENTIAL CONFLICTS OF INTEREST IN UNIVERSAL BANKING

The issue of 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 twentieth century. Following the First World War, commercial banks became increasingly involved in the securities underwriting business. The Glass-Steagall Act of 1933 halted this evolution by forcing commercial banks to end their corporate securities operations and this separation was further codified in the Bank Holding Company Act of 1956 (see Kroszner 1996).

One of the major motivations for the separation of commercial and investment banking both in the 1930s and today concerns the potential for "conflicts of interest" (Kroszner and Rajan 1994 and 1997): Will the public be harmed by 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 (e.g., Greenspan 1987). Due to the often long-term lending relationship between a bank and a client firm, banks may be better informed than the public investor about a client firm's soundness and prospects. This informational advantage, however, can be a double-edged sword.

On the positive side, given the detailed knowledge of the firm, the 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 if the young firm had to try to start a new relationship with an investment bank. 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. Unlike investment banks, commercial banks might have a greater incentive and greater ability to take advantage of investors. 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 their access to customers. Commercial banks might be able to exploit their information advantage more easily than 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 of the 1920s and 1930s was that not only was there a potential for the conflicts of interest to be important but also that the potential was realized and that the public was systematically fooled by rogue bankers. This view became the received wisdom even

though there had been no systematic study of commercial bank involvement in underwriting during the period. My research with my colleague Professor Rajan has tried to discover what occurred prior to Glass-Steagall (Kroszner and Rajan 1994 and 1997). Investigating this historical episode is crucial because it continues to be a major factor in the policy debates over Glass-Steagall reform will affect small investors (see Greenspan 1987) and because it suggests how the unregulated market may address conflict of interest problems if Glass-Steagall were repealed.

To determine how investors fared before Glass-Steagall, we compared the performance of securities underwritten by independent investment banks with those underwritten commercial banks and their affiliates. If the commercial banks did succumb to conflicts of interest, investors would have been lured into purchasing these securities that would have turned out to be poor investments relative to ex ante similar securities underwritten by investment banks. Contrary to the convention wisdom, securities underwritten by the 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 issue of high quality. Relative to the investment banks, commercial banks on average tended to underwrite for larger, older, and better established firms and originated 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. 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 the potential conflicts of interest and to prevent the extension of the government's bank safety net beyond depositor protection (e.g., Greenspan 1997). 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, there was a maximum of 5 percent of the subsidiaries' revenues that could be from otherwise prohibited investment banking activities, and the revenue limit has recently been increased to 25 percent. In addition, the subsidiaries also 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 what market forces would bring with an end to Glass-Steagall type restrictions. Prior to the Glass-Steagall Act, banks entered the securities business in one of two ways: internal departments and separate affiliates (see Kroszner and Rajan 1997). The internal securities departments were organized within the bank, parallel with the bank lending department, much as classic German universal banks have organized themselves. The 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 this movement appears to be concerns about their reputation and credibility with investors. Holding all other factors constant, the investors rewarded the separate affiliates with higher prices for securities they underwrote relative to otherwise similar securities underwritten by the internal departments (Kroszner and Rajan 1997). 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 the separate affiliates. In other words, the market discounted for the greater likelihood of conflicts of interest when lending and underwriting were both done by 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.

A important mechanism by which the affiliates gained greater credibility appears to have been through the use of independent directors on the board of the affiliate (Kroszner and Rajan 1997). 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 higher the proportion of independent directors on the board of the affiliate did lead to higher prices that the affiliate could receive for its securities, holding all other quality factors

constant. The market thus rewarded banks with more credible structures with high prices. Market pressures thus appear to have been the key to determining the extent of the “independence” of the subsidiaries’ boards and of the extent of the firewall separations.

Competitive market forces thus 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 might provide alternative low cost that could effectively address the conflicts issues at the lowest cost.

In summary, the evidence from the recent studies of the pre-Glass-Steagall involvement of commercial banks in investment banking support the repeal of Glass-Steagall. Contrary to the concerns of its defenders, investors were not systematically fooled by commercial banks taking advantage of unsophisticated 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. Unlike in the earlier period, however, deposit insurance and the federal safety net are important factors to consider today. If banks are sufficiently well capitalized and those capital requirements are strictly enforced, then bank owners will have little incentive to take advantage of the safety net. While this is an extremely important issue, it is one that is receiving great attention from the regulators and one that I have examined elsewhere (see Kroszner and Strahan 1996 and Kroszner and Kaufman 1997).

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 now will focus on the likely structure of the banking industry itself as mergers and consolidations continue. As I argue below, we will likely evolve toward a two-tiered banking system in which nation-wide and region-wide banks co-exist with smaller local banks. Although the number of banks in the U.S. will continue its downward trend, small banks will survive. Consumers and small businesses will enjoy greater convenience and a greater array of options

and this will be true in neighborhoods of all income categories.

To project how the U.S. banking system is likely to evolve, I will begin by focusing 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 natural experiment for how the U.S. banking system as a whole will evolve now that artificial barriers to branching across state lines have been eliminated (see Berger, Kashyap, and Scalise 1995). 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 U.S. will ultimately have the structure we see in California today, the number of banks that are likely to exist in the long run in the U.S. 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 U.S. today, this projection implies that the number of banks in the U.S. will shrink by two-thirds. This 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 U.S. is 20 percent, virtually the same as in California. If we sum the deposits held by the five or ten largest banks and thrifts in each state, however, banking in California is *less* concentrated than in the average state in the U.S. Small institutions have survived and will survive in the same markets with the banking giants.

Another example where small banks have survived the challenge from large banks is New York (King 1985 and Holdsworth 1993). 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 fifteen markets and showed that NYC-based banks had greater market shares than the local banks and thrifts in only two of the fifteen upstate markets (Holdsworth 1993). After more than twenty 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 concerns 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 others' 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 mega-mergers 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 the majority of their operations are distinct. The effect of these mergers is to create

stronger competitors in each of the markets they initially operated rather than to eliminate a competitor.

Potential and Actual Entry

Even in cases where there might be significant pre-existing overlap of the merging partners, simply counting the number of institutions and measuring concentration measures are not sufficient to understand 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 anticompetitive 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 provide unnecessary obstacles to new entry. As evidence that such costs have not been prohibitive, more than 1,500 charters have been granted during the last decade. During this 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 highest level since 1989. In an environment where barriers to entry are not high, the mergers we are seeing are highly unlikely to generate anticompetitive outcomes.

I believe that most of the future big mergers will continue to be of the network-extension type -- expanding a banking franchise into new markets to provide region-wide and, ultimately, truly nation-wide service. In the next ten years, this process will create the type of banking structure that the U.S. would have developed 30 years ago if not for the branching restrictions. National banking giants such as Citigroup and BankAmerica-Nationsbank will then be facing off in markets throughout the country, unlike today. 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 is an issue that has received much attention. Consumer and community advocates have raised a concern 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 (Board of Governors 1997). Consumer advocates have interpreted tables in the report as suggesting that larger institutions may appear to charge higher fees on some services than smaller institutions.

This 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 it is in the countryside. If one adjusts for whether the bank is located in Metropolitan Statistical Area or not, then the difference between the fees charge by large and small banks disappears (Hannan 1996). 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. Even if some multi-state banks should decide to charge higher fees than are typical in the local markets, these institutions are leaving open a market niche that can then be filled by smaller local institutions.

The types of mergers we are discussing today also are likely to result in lower actual fees being incurred by customers. As in many lines of business, banks often give discounts to their own customers that they do not offer to non-customers. One example is that ATM fees are often lower or zero for consumers who use their own bank's machines, whereas the bank will charge non-customers a higher fee for using the bank's ATM. The mega-mergers are creating multi-state 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 Exhibit 2 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 automated teller machines also has risen rapidly to exceed 125,000 in the U.S. and ATMs have also been spreading internationally (Kroszner and Strahan 1997). Banking by phone and electronically also have increased. Consumer options have thus been rising, not falling, with bank consolidation.

Consumer and community advocates raise issues about the effect of mergers not simply the number of branches also but on the location of the branches. Economists at the Federal Reserve Board have recently developed a new, comprehensive data base to study at the direct impact of mergers on the growth of branches and their locations (Avery et al. 1998). Using detailed data from 1975 to 1995 that classifies branches by postal ZIP codes, they find that mergers of the type we are discussing today -- ones 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. This evidence is inconsistent with the concern that after mergers banks tend to increase service to the relatively affluent areas from the lower income areas.

In fact, mergers of the type we are discussing today 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, paying for postage, waiting for the check to arrive, depositing it, and waiting again for the check to clear. Having a bank with region-wide and nation-wide offices can thus save consumers both time and money.

Effects on Credit Availability to Small Enterprises

Another concern raised about the effects of mergers is the impact on the availability of credit to small firms. The acquisition of small banks by large bank holding companies does not

imply that small business lending declines. First, if small banks have unique and valuable relationships with smaller businesses that cannot be replicated by the large banks, then small banks will survive to serve this market niche. Second, if small borrowers are being underserved, there will be a strong profit incentive for the larger banks or competing financial institutions such as finance companies to lend to these firms. Improvements in credit scoring methods, for example, have increasingly allowed the larger banks to enter this business profitably (Kroszner and Strahan 1997).

The evidence suggests that small business lending in fact does not decline in the years following mergers (see Strahan and Weston 1996 and Berger, Saunders, Scalise, and Udell 1998). Some earlier studies had focused on the fact that large banks devote a lower share of their total lending to small enterprises than small banks do to argue that small business lending would fall after mergers (e.g., Berger, Kashyap, and Scalise 1995). As Berger, Saunders, Scalise, and Udell (1998) note: “However, such analysis ignores the basic nature of mergers & acquisitions as dynamic events which take place for the purpose of changing the focus of the participants, as well as to increase size. It also neglects the reaction of other potential lenders that could offset any reduction in the supply of small business loans by the merger and acquisition participants.... Without taking into account the reaction of other banks, it is impossible to draw conclusions about the overall impact of consolidations on the supply of small business credit.”

Analyzing more than 6,000 bank mergers during the last 20 years (nearly all bank mergers in the US during the period), Berger, Saunders, Scalise, and Udell (1998) find that these dynamic effects are important. Banks involved in acquiring smaller institutions tend to change their strategy to increase the proportion of their assets devoted to small business lending and other banks and financial institutions not involved in the merger tend to increase their small business lending to offset reductions that might occur from the merged institutions. Bank consolidation thus does not appear to be a threat to the availability of credit to small enterprises.

International context

The expansion of bank powers and expansion of 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 for the United States permit commercial banks to underwrite and deal in private securities (Barth, Nolle, and Rice 1997). All but four of these

countries (Belgium, Canada, Greece, and Japan) permit the bank to conduct securities activities directly in the bank; the four other countries require some type of subsidiary structure, similar to the section 20 subsidiaries that have been permitted in the US during the last 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 US may not be as “mega” as it might seem when they are considered in an international context. Exhibit 3 compares the structure of the banking systems in the G-7 countries. Relative to the other major industrialized nations, the US has far more banks per person (that is, lower population per bank) than any of the other major industrialized nations. If the number of banks in the US were reduced to about 2,800, as I believe will eventually occur, 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 in Germany, Canada, and Japan. The US also has a relatively high number of bank offices per person (that is, lower population per banking office); only Italy and Canada have more bank offices per person among the G-7 nations.

The final columns of Exhibit 3 demonstrate the very low level of banking concentration in the US relative to the G-7 countries. The biggest three US banks control roughly 13 percent of the all banking assets in the US, 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 US. In addition, banking system assets as a fraction of total GDP is relatively low in the US compared with the industrialized countries. Banking system assets are roughly 59 percent of GDP in the US, which is roughly half of the fraction in the average of the other six countries in the G-7. When seen in a global context, even the largest combinations being created through the so-called mega-mergers in the US are not generating institutions that are unusually large either relative to the banking system or the economy as a whole.

SUMMARY AND CONCLUSIONS

In brief, I would like to reiterate that addressing financial services regulatory reform is very important to permit and 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 harms 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. We are in the midst of the transformation of the U.S. banking system from one that is effectively unfriendly toward the consumer to one that is much more so. Obstacles such as the Glass-Steagall Act should be dismantled and no new obstacles to consolidation and rationalization of the financial services industry should be entertained.

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Exhibit 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 (percent)	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

^a Data not available.

Sources: See Kroszner (1996). Data for 1860-1948 (except 1922) from Goldsmith (1969, Table D-33, pp. 548-9); data for 1922 from Goldsmith (1958, Table 10, pp. 73-4); and data for 1960-1993 from Board of Governors of the Federal Reserve System, "Flow of funds accounts," various years. The table is expanded from Kaufman and Mote (1994).

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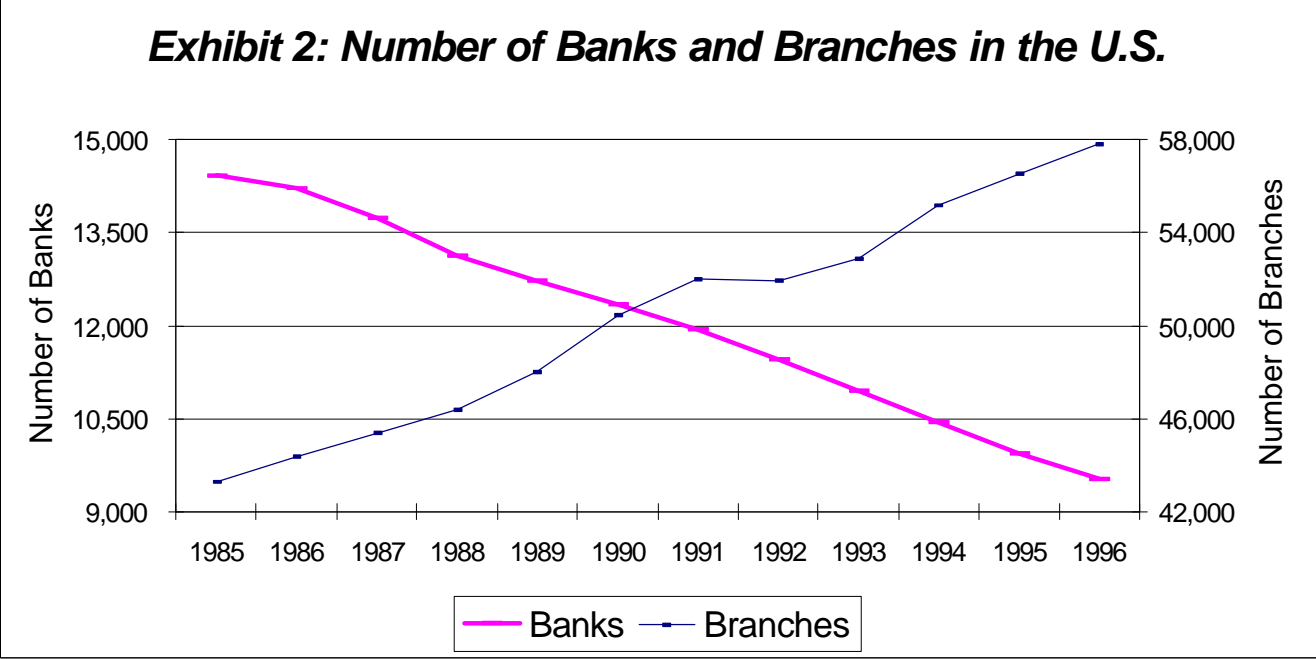


Exhibit 3: A Comparison of the Structure of Banking Systems in the G-7 Countries, 1993.

Countries	<i>Number of Commercial Banks</i>	<i>Number of Banking Offices⁴</i>	<i>Total Population (‘000s)</i>	<i>Population per Bank</i>	<i>Population per Banking Office</i>	<i>Total Banking Assets (bil. US\$)</i>	<i>Banking Assets per US\$ of GDP</i>	<i>Market Share of Top Three Banks (%)⁵</i>
France	425	10867	57530	135365	5294	1379.4	0.91	63.6
Germany	330	7934	80975	245379	10206	963.2	0.5	89.5
Italy¹	315	20037	56960	180825	2843	964.1	0.97	35.9
United Kingdom	491	13291	58099	118328	4371	2189.4	2.33	29.1
Canada	60	7804	28798	479967	3690	567.6	1.04	65.2
Japan²	150	15147	124764	831760	8237	6130.2	1.46	28.3
United States³	10971	65100	257908	23508	3962	3707.2	0.59	13.3

Source: Barth, Nolle, Rice (1997, Table 3).

Notes: 1) Figures include commercial banks and former savings banks but exclude rural and artisanal banks and central institutions.

2) City banks, regional banks, trust banks, and long-term credit banks.

3) FDIC-insured commercial banks.

4) Total number of bank main offices plus bank branch offices.

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