SM-84-3

A Series of Occasional Papers in Draft Form Prepared by Members of the Research Department for Review and Comment.

STAFF MEMORANDA

CONSEQUENCES OF DEREGULATION FOR COMMERCIAL BANKING

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FEDERAL RESERVE BANK OF CHICAGO

SM84-3
May 1984

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A revised and expanded version of a paper prepared for a joint session of the American Finance Association and American Economic Association, San Francisco, California, December 29, 1983.

Consequences of Deregulation for Commercial Banking

Over the past two decades the markets for financial services have provided a fascinating laboratory in which to observe the interplay of market forces, political responses to periodic crises, and the maneuvering of interested parties in shaping public policy toward an entire industry. In the process, a regulatory framework put in place a half century ago has been partly dismantled and is likely to be modified further, perhaps even more dramatically, in the years to come. This paper reviews the progress of deregulation to date, attempts to discern its implications for the future shape of the financial system, in particular, commercial banking, and poses several questions of public policy.

I. Summary of Recent Developments

A. The Legacy of the 1930s

The current organizational and regulatory structure of the financial services industry, broadly defined, is one of the major remaining legacies of the banking collapse and depression of the 1930s. In the wake of the failure of some 9,000 banks, the federal government was understandably under pressure to take timely actions to forestall a recurrence of financial disaster--even if those actions were based on an imperfect analysis of the problem and had undesirable secondary effects. The popular diagnosis at the time was that the bank failures had resulted from excessive competition in combination with managerial errors and abuses. Thus, the Banking Acts of 1933 and 1935 introduced a large array of restrictions on banking designed to shelter banks

both from excessive competition and from the errors and poor judgment of their own managements.

With the advantage of hindsight and the results of a number of careful studies of the causes of the depression and the banking crisis completed over subsequent decades, one can conclude with some confidence that the diagnosis and cures adopted in the 1930s were, for the most part, incorrect and inappropriate. There was no spontaneous eruption of destructive competition in the 1930s (Cox, 1966). The depression and banking collapse were largely the consequence of a series of adverse developments abroad and policy mistakes at home that cumulated in the longest, and one of the sharpest, economic declines in our history (see Friedman and Schwartz, 1963).

Whether based on a sound diagnosis or not, the regulatory structure put in place at that time survived largely intact for half a century. That it caused relatively few problems during the years immediately following its introduction was due largely to the fact that much of it was nonbinding in an industry made conservative by the memory of the banking crisis and in an economy characterized by low inflation and interest rates. Some regulations, including tightened chartering restrictions and the separation of commercial and investment banking, were effective from the start. But it was not until 1957 that an appreciable number of banks were constrained by deposit rate ceilings, and the problem did not become acute until the mid-1960s, when sharply rising interest rates and more aggressive competition for funds produced a sharp confrontation between regulation and market forces.

B. The Revival of Competition

The decades of the 1960s and 1970s, respectively, corresponded roughly with two evolutionary stages in the responses of bank regulators to the problem posed by increasingly binding regulation. As we have observed elsewhere, "the decade of the 1960s began as a period of growing frustration for commercial bankers; it ended in frustration for financial regulators." (Kaufman, Mote, and Rosenblum, 1983) Initially, banks found themselves increasingly squeezed by deposit rate regulations and restrictions on activities that hindered them in the pursuit of profitable opportunities. Their response was to seek ways around the regulatory obstacles. The result was the now familiar "regulatory dialectic" in which the regulators responded by trying to plug every new leak in the dike of regulation as it opened up, only to find new leaks elsewhere (Kane, 1977). By the end of the 1960s the task had become almost hopeless.

C. Regulatory Adaptation

Regulation in the 1970s, by contrast, was characterized by a policy of accommodating competition and expansion as far as current law permitted. Even so, regulation tended to lag developments in the financial markets, and much effort was spent simply in bringing regulation de jure into alignment with the situation de facto. The states played a leading role in the development of this new regulatory attitude. Massachusetts' 1972 authorization of the offering of NOW accounts by mutual savings banks proved to be a major step along the road toward deregulation. Many of the subsequent administrative and legislative actions taken in the 1970s--the 1974 legislation extending NOW account powers to commercial banks, savings and loans, and mutual savings

banks in all New England states; the authorization of ATMs for national banks in the same year; and the authorization of money market certificates in 1978--were more visible extensions of a policy trend already established.

The pressures that gradually nudged the regulators toward a more accommodative stance continued unabated throughout this period. Foremost among them were the higher and more volatile interest rates that caused the deposit rate ceilings to bind and led to progressively more severe bouts of disintermediation; the related emergence of new, less stringently regulated institutions and instruments, of which the money market mutual fund is the most prominent example; and technological advances in the processes of collecting, storing, manipulating, and transmitting data, which have revolutionized cash management and greatly facilitated efforts to circumvent regulation.

In April 1979, a decision of the U.S. Court of Appeals for the District of Columbia enjoined depository institutions from offering NOW accounts or share drafts and from establishing remote service units--devices by which depository institutions had circumvented the prohibition of interest on demand deposits and restrictions on branching. The court ruled that the regulatory agencies had overstepped their legislative authority in authorizing these services. By delaying the effective date of its order for six months (later extended another three months), the court effectively set a deadline for congressional action to avoid the disruptions that compliance with the decision would otherwise produce. Pressured by this deadline and by a near-crisis in financial markets in the winter of 1979, the Congress enacted the Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980. This was a landmark piece of legislation that implemented many of the recommendations

made over two decades by a series of study commissions beginning with the Commission on Money and Credit in 1960. DIDMCA provided for a phased elimination of most ceilings on deposit interest rates, authorized depository institutions nationwide to offer interest-bearing NOW accounts or their equivalent, enlarged the asset powers of thrift institutions, and preempted state usury ceilings on certain types of loans. Only two years later, an intensification of the distress in the thrift industry led to the enactment of the Depository Institutions Act of 1982 (Garn-St Germain Act). Several provisions of the act authorized emergency powers enlarging the options open to regulators in dealing with crisis situations, including the possibility of interstate mergers of closed or financially endangered institutions. Other provisions extended and accelerated the process of deregulation, broadening the asset powers of savings and loan associations and authorizing depository institutions to offer money market deposit accounts.

Given the absence of any new crisis and the short-term difficulties of adjusting to the changes already enacted, it is not surprising that no additional major legislation affecting the financial industry was passed in 1983. But the Administration introduced a bill that would have greatly enlarged bank powers to carry on, through a holding company subsidiary: (1) securities activities, including full-service securities brokerage, underwriting of all types of municipal revenue bonds, and the operation of mutual funds; (2) insurance underwriting and brokerage, and (3) real estate activities, including investment, development, and brokerage. However, that bill failed to pass in 1983 and is unlikely to be enacted, except in greatly modified form, any time in the near future. Another bill, introduced by

Senator Garn in November 1983, also would allow bank holding companies to offer an expanded list of securities activities, including the underwriting of mortgage-backed bonds, through securities affiliates. In addition, it would eliminate the prohibition of interest on demand deposits, preempt state usury ceilings on agricultural and business credit, and authorize reciprocal interstate banking. Though approved by the Senate, the Garn bill has met determined opposition in the House from members favoring a more cautious approach to liberalization of restrictions on bank activities. This opposition was strengthened by the difficulties experienced by Continental Bank.

D. The Current Situation

The financial system is still in the process of digesting the changes that have already occurred. So far as prices paid and charged by depository institutions are concerned, deregulation has nearly run its course. Only the interest rate ceilings on NOW accounts and passbook savings accounts, the prohibition of interest on corporate demand deposits--which is already largely nullified by repurchase agreements, improved cash management, and various devices for paying implicit interest--and state usury laws remain to be eliminated. Geographic expansion is still restricted by the McFadden Act and the Douglas Amendment to the Bank Holding Company Act, but these restrictions have become less and less meaningful as banks have used nonbank subsidiaries of bank holding companies (including "nonbank" banks), loan production offices, Edge Act corporations, toll-free telephone numbers, brokered certificates of deposit, and other devices to serve customers over wide areas. Also, a number of states have liberalized their branching and holding

company laws in recent decades, and an increasing number have removed the restrictions of the Douglas Amendment and allowed out-of-state bank holding companies to open new banks or acquire existing banks within their boundaries (Moulton, 1983). In most cases interstate expansion has been on a limited basis as in Delaware, Maryland, and South Dakota or on a reciprocal basis as in Georgia, Kentucky, the Carolinas, Utah, New York, and most of the New England states. Only Alaska and Maine have unrestricted interstate banking laws. Bank product line restrictions remain pretty much intact, but are likely to become the legislative battlegrounds of the future. Entry into banking, at least in a de facto sense, has become progressively easier, though explicit legislative liberalization of bank chartering restrictions has been undertaken by only a few states. In sum, although deregulation has made considerable progress in the financial services industry, it still has a long way to go.

II. The Shape of the Future: Product Specialization or Diversification?

One clear consequence of the steps toward deregulation taken so far is that many financial institutions are free to engage in a much broader range of financial activities than was the case before. Economic forces, including any economies of joint production or consumption, can be expected to play a greater role in the future in determining the extent to which institutions specialize in one or a few services or diversify into many than they did over the past 50 years. Although little direct evidence is available on such complementarities, some inferences regarding their existence and importance can be drawn from observations on the past behavior and success of both financial and nonfinancial firms enjoying at least some freedom to choose their product lines.

A. The Evidence on Conglomerate Mergers

One source of evidence is the conglomerate merger movement among nonfinancial firms of the 1950s and 1960s. United States economic history has been characterized by several episodes or waves of merger activity. The first merger wave is generally agreed to have occurred between 1898 and 1902. This turn-of-the-century merger movement consisted primarily of horizontal mergers, i.e., mergers between firms competing in the same geographic and product markets. Most of these mergers were undertaken to achieve economies of large scale production and/or monopoly power. These mergers "transformed many industries, formerly characterized by many small and medium-sized firms, into those in which one or a very few large enterprises occupied leading positions." (Nelson, 1959) Economic theory would suggest that of all the types of mergers that can be undertaken, horizontal mergers, other things being equal, are most likely to increase the profits of the combined enterprises. However, after reviewing four studies of the effects on profitability of these turn-of-the-century horizontal mergers, one researcher concluded that "the profitability of firms which undertook substantial amounts of merger activity in the first merger wave was generally no better and perhaps worse than firms which expanded by internal means." (Rosenblum, 1972)

The second merger movement, which took place between 1926 and 1930, has been characterized by Stigler (1950) as "merger for oligopoly." The third wave of merger activity occurred between the early 1950s and 1970. No agreement has been reached on the precise dating of this third merger episode, partly because a renewed sharp increase in merger activity in the late 1970s has continued up to the present time, and it is as yet unclear whether the current merger wave is an extension of the 1952-70 merger episode.

Nonetheless, mergers in the post-1950 period have been dominated by conglomerate merger activity. In interpreting the intent and impact of conglomerate mergers, it is necessary to distinguish three types: product extension, market extension (geographic), and pure conglomerate mergers. Product and market extension mergers have some horizontal and vertical elements; the rationale for pure conglomerate mergers is much less clear.

A number of studies were undertaken in the late 1960s and early 1970s to determine the profitability of mergers during the third merger wave (Rosenblum 1972; Hogarty, 1970). These studies concentrated largely but not solely on pure conglomerate mergers. Their common finding, despite differing samples and methodologies, was that the effects of mergers on the combined firm's profitability, as measured by returns to stockholders, were at best neutral. The only debate seemed to be "whether mergers have a neutral or negative impact on profitability." (Hogarty, 1970, p. 384) These studies also concluded that, on average, the owners of acquiring firms lost from mergers while the owners of acquired firms gained--i.e., the key to merger profitability was the price paid for the acquisition.

This is not to say that pure conglomerate mergers cannot be profitable, at least in an accounting sense. Mead (1968) demonstrated that the acquisition by a firm with a high P/E ratio of a firm with a lower P/E ratio produces an instantaneous accounting profit. Such behavior characterized the conglomerate mergers, but not the horizontal and vertical mergers, studied by Mead during 1967-68. The widespread use of accounting and tax devices to produce stated increases in profits for merging firms but not true increases in economic value led Steiner (1975) to distinguish between pecuniary and real benefits arising from merger activity, with the former being particularly prevalent in

pure conglomerate mergers. He concluded that it is not possible to identify any single motive as the major explanation of conglomerate mergers. Rather, the historical experience taken as a whole argues for a multiple motivation model that would include as arguments such things as: real economic efficiencies, market power, growth, tax gains, short-term speculative gains, insider gains, and accounting profit gains. Some combination of these motives underlies all merger negotiations, and merger activity increases when the external climate (antitrust attitudes, interest rates, etc.) is right. While not concluding that conglomerate mergers are beneficial to society, Steiner did not find evidence that they are harmful.

More recently, Brozen (1982 a,b) has argued that conglomerate mergers do provide economic benefits to society. He concludes that, "chief among the many reasons for conglomerate mergers--and the best substantiated hypothesis--is that conglomerates take advantage of opportunities to acquire poorly managed assets." According to Brozen, these acquired firms have returns that are generally below the average for all firms and would either go out of business eventually or would continue to waste resources through relatively inefficient operation or distribution systems. Acquisition of these firms results in expansion of capacity or maintenance of capacity that would otherwise contract; therefore, competition or competitive intensity is greater that it otherwise would have been. Brozen cites some limited evidence that the effective level of entry and the number of viable competing firms are enhanced, not decreased, by an antitrust policy that does not interfere with conglomerate mergers.

Most recent studies do not separate conglomerate mergers from horizontal, vertical, product extension, or market extension mergers. In fact, the only

reason these studies shed any light on the benefits of conglomerate mergers is that the majority of the mergers in recent years (and therefore in the samples) were of a conglomerate nature. In reviewing the literature of the last decade, Halpern (1983) finds evidence that stockholders of acquired firms benefit from acquisition but, at best, limited evidence that stockholders of the acquiring firm derive any benefits. Jensen and Ruback (1983) report similar findings--namely, that corporate takeovers generate positive gains for target firm shareholders--but their review of the literature suggests that shareholders of acquiring firms do not lose from the merger activity engaged in by their management. Only one study by Lev and Mandelker (1972) found that acquiring firms tended to be somewhat more profitable than nonmerging firms within their industry.

Given the absence of any clear-cut findings that conglomerate merger activity among industrial firms provides any real economic gains to shareholders of the acquiring conglomerate firm, it is difficult to draw the inference that combinations of banks or other financial service providers with very different business product lines--such as retail department stores, securities brokerage or underwriting, telecommunications, or insurance--will result in new firms whose profitability will necessarily outstrip that of incumbent specialized financial service providers like commercial banks.

B. Financial Conglomerates

Financial conglomerates have received a great deal of publicity in recent years, largely due to the mergers in 1981 between Prudential Life Insurance and Bache, between American Express and Shearson, and between Sears (which already owned a large savings and loan association and a major casualty

insurance company) and both Dean Witter and Coldwell-Banker. Further stimulating the public's, the Congress' and regulators' imaginations were Sears' establishment of financial centers in a number of its retail stores and the acquisition or establishment by a number of nonbanking-based firms of consumer or "nonbank" banks. These are institutions with commercial bank charters, but which either do not make business loans or do not not accept demand deposits, thereby avoiding the necessity for prior approval by the Federal Reserve under the Bank Holding Company Act, which defines a bank as an institution that engages in both of those activities. Besides enabling a financial conglomerate to engage in a combination of activities not permitted to bank holding companies, such "banks" allow the parent firm to raise funds by offering federally insured deposits. These deposits complement their other nonbank products, particularly since the introduction of MMDA accounts that compete with money market funds. Before the Comptroller of the Currency, at the urging of the Federal Reserve, imposed a moratorium on new applications for national bank charters for such institutions, nonbank banks had been acquired, organized, or planned by Prudential-Bache, Fidelity, Merrill Lynch, Dreyfus, Gulf & Western, Dimension Financial Corp., and several other companies.

The attention centered on these and other comparatively recent cross-industry mergers, acquisitions, and affiliations has led many to believe that the interest of nonbanking-based firms in banking is of very recent origin. However, such a belief is false, because nonbanking entities have long had a significant presence not only in lending to businesses and households, but in many other financial services as well. For example, Sears began to provide retail credit in 1910. It has been a major supplier of

insurance services since it organized Allstate Insurance in 1931. In 1975, it purchased the Empire Savings and Loan Association in California, which it renamed Allstate and expanded sharply. Other nonbanking-based firms have been involved in providing financial services for a similarly long period of time. General Motors began its financing operations in 1919 and Ford in 1928. General Electric formed its credit subsidiary to finance refrigerators and other appliances in 1932, diversified into many types of business financing in the 1960s, and by 1982, virtually none of its $13.1 billion in loans was related to the financing of GE products.

Roughly a decade ago, Cleveland Christophe (1974) documented the positions of 11 nonbanking-based firms such as Sears, General Motors, and General Electric in the consumer lending areas traditionally thought to be the domain of commercial banks and consumer finance companies. Many of these firms had earnings from their financial service activities that rivaled those of the nation's leading bank holding companies. In 1972, moreover, the dollar amount of the combined consumer instalment loans held by three manufacturers (GM, Ford, and GE) was almost double that of three leading retailers (Sears, Montgomery Ward, and J.C. Penney) and almost triple that held by the three largest bank holding companies (BankAmerica, Citicorp, and Chase Manhattan).

Several studies published recently by the Federal Reserve Bank of Chicago (Rosenblum and Siegel, 1983; Rosenblum, Siegel, and Pavel, 1983; Rosenblum and Pavel, 1984) have updated and extended past studies of the extent of overlap between commercial banks and nondeposit-based firms in consumer and business lending and in the generation of deposit-like liabilities. These studies examined over 30 nonbanking-based companies and compared them with the top 15

bank holding companies and the consolidated commercial banking system. Among the studies' highlights are the following findings:

- In 1982, the 32 companies studied had one or more product lines that overlapped with commercial banks and that gave those firms a significant regional or nationwide presence in one or more banking services.

  In automobile credit, General Motors is far and away the largest lender with over one-fourth of all auto loans outstanding, having doubled its share from 13 percent in 1978. By contrast, the entire commercial banking industry holds 45 percent of domestic auto loans, down from 60 percent in 1978. Since 1979, General Motors and Ford have dominated the auto lending business, largely as a consequence of special terms offered to stimulate automobile sales.

  Commercial banks are still the dominant business lenders in the country, particularly in short-term commercial and industrial (C&I) lending. Nonetheless, the 32 nonbanking-based companies studied issued combined short-term loans of $42.5 billion in 1982, slightly more than one-fourth the amount of domestic C&I loans of the 15 largest bank holding companies and about 6.6 percent of the total for all commercial banks. These proportions appear to have changed little in the last 7-8 years.

  In commercial mortgage lending, four insurance-based companies make a greater volume of commercial mortgage loans than the largest 15 bank holding companies and about 27 percent as much as the nation's almost 15,000 banks.

  The business lease financing market is dominated by industrial companies. The 15 such companies studied had greater lease receivables than that of the domestic offices of all insured U.S. banks.

  Ten of the 32 companies studied have sponsored one or more money market mutual funds and account for about 38 percent of all money market fund assets. They clearly compete to some extent with commercial banks on the deposit side of the balance sheet.

Clearly, the nonbanking-based companies have significant overlaps with commercial banks. Ironically, this competition is not so much a case of the nonbanks invading the territory of the banks as it is the nonbanks trying to regain markets they abandoned or lost to commercial banks a long time ago. With the exception of short-term commercial and industrial lending and the

issuing of demand deposits, commercial banks are the Johnny-come-lately on the financial scene.

Despite the prominent examples of success, notably those of Sears, General Electric, and the major automobile manufacturers, casual and anecdotal evidence suggests that financial conglomerate combinations may not have been any more successful, on average, than their nonfinancial counterparts. The most dramatic recent example is Baldwin-United, which in 1967 was an old-line (dating back to 1862) manufacturer of pianos and organs with total assets of $67 million. Within a brief 15 years it skyrocketed to a financial conglomerate with $9.4 billion in assets, including a savings and loan association, life and property insurance underwriters and brokers, mortgage banks, and the largest home mortgage insurer in the country, MGIC. It also owned a number of commercial banks until the Federal Reserve forced it to divest itself of them under the Bank Holding Company Act at year-end 1980. Early in 1983, the company declared insolvency and began to spin off its subsidiaries.

The stories of most other unsuccessful efforts in putting together financial conglomerates were less dramatic. The recent acquisition of Shearson-Loeb Rhoades was not American Express' first venture into the brokerage business. In the early 1970s, it purchased a 25 percent interest in Donaldson, Lufkin, Jenrette, but spun it off four years later after experiencing disappointing returns.[1] Similarly, the Insurance Company

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[1]Indeed, American Express has experienced its share of disappointments in combining with other financial firms. In the 1960s, one of its subsidiaries was the holder of the watered tanks in the "Great Salad Oil Scandal" and the press has been reporting difficulties with, and the possible sale of, its Fireman's Fund Insurance Company. A review of some similar experiences of other financial conglomerates appeared in the American Banker (Zweig, 1981).

of North America (INA) purchased the brokerage firms of Blyth & Co. in 1970 and Eastman & Co. in 1972. After merging the two into Blyth Eastman, INA sold it to Paine Webber in 1979. Walter Heller, a large finance company, purchased the American National Bank of Chicago in 1973 to expand its product lines, but negotiated the bank's sale ten years later after it was unable to relieve Heller's financial pressures. Indeed, Heller is in the process of liquidating itself. Conglomerate affiliations between non-financial and financial firms were rarer, many ending with the enactment of the 1970 amendments to the Bank Holding Company Act, which required companies owning a commercial bank to divest themselves of most lines of nonfinancial activity.

No obvious pattern emerges from this experience, in the sense that no particular combinations of activities can be clearly shown to be more conducive to the achievement of synergies than others. Rather, it would appear that there is no obvious superiority--or inferiority--of financial services companies associated with conglomerates relative to independent companies offering the same services. Success or failure appears to be much more a function of the particular managements and competitive situations of the individual firms. On reflection, this is not surprising, since a conglomerate that allowed complete operating autonomy to its subsidiaries should be able to duplicate the performance of a collection of independent firms. Any stronger conclusions about the effects of conglomeration must await more detailed and systematic examinations of the internal organization and managerial styles of a number of financial conglomerates.

C. Bank Holding Companies

Commercial banks can enter many financial activities directly or through the establishment of a bank subsidiary. To enter activities permitted under

the Bank Holding Company Act, but not permissible for banks per se, they must form a bank holding company subsidiary. But, even for holding companies, activities must "be so closely related to banking . . . as to be a proper incident thereto." Some states grant broader powers to state banks than the federal government does to national banks or to bank holding companies.

Although similar restrictions apply to multi-association savings and loan (SLA) holding companies as to commercial bank holding companies, single-association holding companies have considerably broader powers. Recently, commercial banks and savings and loan associations have been permitted under the same holding company umbrella, but still only on a very restrictive basis. Except for the Glass-Steagall Act's prohibition on deposit-taking activities by securities firms, most firms other than commercial banks and savings and loan associations are not restricted as to the types of financial activities in which they may engage.

How successful have commercial banks been in diversifying their services? In terms of numbers, it appears very successful. A recent survey reported that, in 1982, 139 bank holding companies operated some 5,500 nonbank offices in states other than the ones in which they were headquartered. Of these, 4,442 were finance company offices, 584 were mortgage banking offices, and the remaining 474 were offices of other types of nonbank subsidiaries of bank holding companies (Whitehead, 1983). The services offered by the largest number of these offices were finance company-type services, followed by insurance agency activities for smaller companies, underwriting credit life, loan servicing, mortgage banking, and community-type investments. In addition, of course, these holding companies operate many additional in-state affiliates. However, little hard research has been conducted on how

profitable these operations have been. The fragmentary research that has been completed casts doubts on the success of these ventures in increasing profits or decreasing risk.

Two studies reported that mortgage banks affiliated with bank holding companies in the mid-1970s were both less profitable and slower growing than their independent counterparts (Talley, 1976; Rhoades, 1975). Two other studies reported that bank-affiliated finance companies were also less profitable, but expanded more rapidly than independent finance companies (Talley, 1976; Rhoades and Boczar, 1977). Similarly, bank-affiliated equipment leasing firms were less profitable than their independent counterparts (Rhoades, 1980). Despite these experiences, however, commercial banking was one of the more profitable industries in the 1970s (Ford, 1982; Kaufman, Mote, and Rosenblum, 1983b).

Nor have commercial bank holding companies appeared to be any more successful in reducing their overall risk through affiliation with nonbank activities (Boyd, Hanweck, and Pithyachariyakul, 1980). The conclusions of all of these studies, however, are limited by the restrictions on the types of nonbank activities bank holding companies may conduct (Stover, 1982). Risk reduction requires not only entry into different activities but entry into activities whose income flow is not highly correlated with the bank's income flow. While the available evidence on the success of commercial bank product diversification in reducing risk or increasing profitability is not encouraging, the final word awaits more rigorous research results. Increased authority to enter into additional areas may permit bank holding companies to search out activities whose income flows are less positively correlated with, or independent of, their current income flow. But it should be kept in mind

that the potential risk reduction from diversification by banks is ultimately limited by the fact that the typical bank already holds a highly diversified asset portfolio, albeit consisting almost entirely of debt securities.

D. Foreign Experience

A largely untapped source of useful information on the likely effects of further deregulation is the experience of other countries with less restrictive regulation of financial institutions. Any conclusions based on international comparisons must be drawn with great caution and some skepticism, given the importance of cultural and other nonquantifiable variables in affecting the outcomes of similar policies in different countries. Nevertheless, there are some broad lessons to be derived from foreign experience that would appear to have relevance in virtually any country.

One fairly clear generalization that can be drawn from other countries' experience is that, freed of legal constraints or administrative pressures, many of the larger banks would diversify further than has been the case in the United States (Goodman and Kumekawa, 1984). Such diversification would include a variety of investment banking functions, including underwriting of corporate securities and the purchase of equity interests in nonfinancial firms, both of which violate traditional U.S. beliefs about appropriate banking activities. The strongest argument that this would occur under deregulation is that in West Germany, where it is permitted, such "universal banking" is in fact practiced, albeit primarily by the largest banks. Both U.S. and Japanese banks engaged in underwriting until prohibited from doing so, the former by the Glass-Steagall Act of 1933 and the latter by legislation

adopted during the U.S. occupation. Moreover, in England, where informal regulation by the Bank of England had effectively separated commercial and merchant banking, the relaxation of that separation since 1971 has resulted in the rapid entry by the major clearing banks into securities underwriting and investment management (Daskin and Marquardt, 1983).

Of course, the mere fact that banks would choose to diversify if free to do so does not demonstrate the desirability of that diversification from a social standpoint. It has frequently been argued that combining lending, underwriting, and equity ownership in the same institution will lead to reduced competition, undue risks to depositors, conflicts of interest, and undue influence on the policies of customers. In response to such concerns, the Minister of Finance of the Federal Republic of Germany in 1974 appointed a special commission--known as the Gessler Commission after its chairman--to investigate German universal banking. The final report of the commission, issued in May 1979, failed to find strong evidence of any of these adverse effects. The few reforms the commission did recommend were largely of a prophylactic nature, designed to prevent abuses from occurring rather than to correct any observed abuses (Kruemmel, 1980). The U.S. experience before 1930 which led to a different conclusion and, ultimately, to the legal separation of commercial and investment banking, has been increasingly questioned in recent years as banks have pushed for revision of the Glass-Steagall Act. It appears that the appropriateness of restrictions on banks' product lines, and particularly securities activities, will be among the hottest issues of financial regulation for some time to come.

E. Conclusions

The evidence appears unequivocal that deregulation of product line restrictions will result in considerable diversification by commercial banks (depending on the degree of deregulation) into services previously prohibited to them, as well as further expansion by nonbanking-based firms into additional financial services currently prohibited to them. However, the mixed success of both financial and nonfinancial conglomerates, the apparently poor performance of nonbank subsidiaries of bank holding companies, and the varying degrees of specialization by financial institutions even in a country like West Germany that imposes few product restrictions on banks all argue that there will continue to be a highly diverse set of financial institutions after deregulation.

III. The Shape of the Future: Size and Geographic Scope

A. Economies of Scale

A lowering of entry and geographic barriers would allow the number, size distribution, and geographic scope of financial institutions to be determined much more by market forces, including the relationship of efficiency to bank size and organizational characteristics and customer preferences regarding price, quality of service, and convenience, than is the case today. There is a considerable literature on economies of size and organization that should offer some guidance. Unfortunately, much of it has not been designed to answer the questions that need to be asked. For example, one of the key questions is the relative importance of plant and firm economies of scale in banking. Plant economies result from the expansion in size of a single plant

or office of a bank. If all the operating economies in banking are limited to the plant level, an alternative reason would have to be found for expecting multi-office firms to predominate. One possibility is that there are convenience advantages to customers in being able to do business with the same bank at more than one location--which must be distinguished from the added convenience of having more and, on average, more conveniently located banking offices in a given market, whether operated by the same bank or not. To the extent that the size of the local market places limits on the growth of a single plant, or banking office, very large unit banks would be found only in the largest, most densely populated markets. If there are significant economies at the firm level--perhaps because certain functions like personnel, accounting, and the establishment of broad management policies are centralized at the head office--then operating efficiency will also favor larger banks with many branches.

Disagreement in results exists in the literature on economies of scale at both the plant and firm level in banking. However, there has been a steady improvement over the past two decades in the measures of output, choice of functional form, and specification of branching effects. The more recent and better conceived studies appear to agree that: (1) there are significant economies of scale to be achieved by output expansion at the plant level for very small banking offices, (2) these tend to be exhausted as the office reaches a size between $10 million and $100 million in deposits, after which costs remain flat or begin to rise; and (3) economies of multiplant (branch) operation appear to be negligible (Benston, Hanweck, and Humphrey, 1982).

On the basis of a reading of these results, several authors have concluded that the dismantling of barriers to interstate branching would have a

relatively small impact on the U.S. banking structure, except possibly on banks in the smallest size class, and that there would continue to be a large number of banks of diverse sizes and branching configurations. As Richard Nelson (1983) recently stated this conclusion,". . .the broad elements of U.S banking structure have been determined more by underlying supply and demand factors than by branching regulations... ."

The major objection one might raise to such a conclusion is that it is based exclusively on operating efficiency. As indicated above, if customers value being able to transact business with their bank at more than one location, multi-office banking might proliferate despite the absence of operating economies. Nelson considered this force for consolidation but concluded that it would probably be confined to large urban areas. Additional possibilities, mentioned by Alton Gilbert (1983) in a recent survey of the bank cost literature, are that branching may enable a bank to reduce risk by broadening the geographic diversification of its loan portfolio and/or sources of funds and that greater size at the level of the firm may enable the bank to reduce the transactions costs required to manage its reserve position. If any or all of these factors were important, overall efficiency would require banks larger than would be justified simply on the basis of operating economies. Moreover, the fact that cost curves have been found to be relatively flat beyond the point of minimum average cost and that there may be some economies of scope is consistent with a wide range of efficient bank sizes.

Still another largely unanswered question is the effect of technological progress, particularly in data processing, on the optimal size of bank. It has often been assumed that such change would greatly increase the minimum size of bank needed for efficient operation. This might have been true a

couple of decades ago, when the use of a computer required a major investment well beyond the capabilities of most small banks--although the possibility of purchasing services from an outside firm means that the existence of economies of scale in computer operation need not imply economies of scale in banking. In any case, recent trends have been mostly in the opposite direction with the development of time sharing and smaller and less expensive computers with increasingly greater capabilities (Metzker, 1982; Kaufman, Mote, and Rosenblum, 1983).

B. Effects of Liberalizing State Laws

Some useful insights into the effects of geographical deregulation on banking structure can be gained by looking at the results in states that have liberalized their branching or multibank holding company laws. An early study of this type by Bernard Shull (1972) examined the experience of banks in New York and Virginia after both states liberalized their branching and multibank holding company laws in the early 1960s. Several peculiarities of the revised laws must be kept in mind in judging the results of the study. First, although both states eventually moved to statewide branching, branching in New York was initially confined to the banking district--of which there were nine in the state--within which the head office of the bank was located. Virginia allowed statewide branching, but only by merger, and encouraged statewide expansion by the holding company route. Shull observed the following statewide effects after the laws were changed: the rate of consolidation increased, concentration increased, and the number of banking organizations declined. At the local market level, however, the results were quite

different. There was no systematic effect on the number of banking organizations and, on balance, concentration declined slightly.

Other studies have found even less evidence of changes in concentration due to bank holding company expansion. In recent decades, concentration in banking declined at the national level, was virtually unchanged at the state level, and, with many exceptions in individual markets, declined at the local level (Savage, 1982). To be sure, the number of banking organizations statewide has declined in most states liberalizing their branching and holding company laws, but this is of significance only to the degree that such theories of mutual forebearance as the "linked oligopoly" theory are valid. So far this has not been demonstrated (Whitehead, 1978). At the local market level, there is no apparent relationship between state holding company laws and concentration (Rhoades, 1978).

C. Foreign Experience

As in the case of product diversification, the experience of foreign banking systems subject to varying degrees of regulation can tell us something about the likely consequences of removing geographic restrictions. It is generally known that the banking systems of most other modern industrial countries are much more highly concentrated than that of the United States. Many have only a handful of banks of any consequence. In virtually all of these countries, the major banks operate nationwide branching systems. Consequently, it is tempting to conclude that removal of geographic restrictions in the United States would lead to a banking structure similar to those of other industrial countries.

However, such a conclusion ignores several important differences. One is the sheer size of the U.S. banking system, which means that even with banks of comparable absolute size to those abroad, the concentration level would be considerably lower. Secondly, the large average bank size and high concentration levels typical of most foreign banking systems are only partly due to liberal branching laws. In many cases, as in Japan, they are exacerbated by restrictive chartering policies and systematic encouragement of mergers (Wallich and Wallich, 1976). In Italy, the banking laws of 1926 and 1936, by encouraging consolidations and closings, reduced the number of banks from 4,000 in 1926 to 1,432 in 1945 and the number of branches from 12,000 to 6,889 (Alhadeff, 1968). Similar policies pursued by the Conseil National du Credit in France reduced the number of deposit banks from 361 in 1946 to 233 in 1964, while allowing some increase in the number of branches. Even more dramatic results were achieved by a restrictive chartering policy combined with a liberal merger policy in Canada, where the number of domestically chartered banks declined from 51 in 1875 to 11 today. Of these, five have nationwide branching systems and rank among the 65 largest banks in the world (Pozdena and Sullivan, 1982). Thus, the high levels of banking concentration in other countries are as much a reflection of regulation as is the extreme atomization of U.S. banking. A banking structure determined entirely by market forces would probably lie between these extremes.

D. The Experience with Food Retailing

Banking, defined broadly to include other depository institutions like savings and loan associations and savings banks, is among the few industries in which the extent of branching has been restricted. Food retailing is

another industry that was once subject to concerted efforts to restrict multi-office operations. Because these efforts failed, the subsequent experience of food retailing may provide some indication of what can be expected to occur in banking if branching restrictions were removed.

The first grocery stores were general stores that sold clothing, hardware, and general merchandise in addition to food. These were followed by specialty stores that restricted themselves to food or, even further, to particular types of foods such as meat or groceries. In the 1920s, chain grocery stores expanded rapidly and supermarkets developed from both independent and chain stores. A&P was the first and the leader among, first, chain stores and, then, supermarkets. It opened with one store in New York City in 1859. In 1900, it operated 200 stores throughout the country; in 1910, 372 stores; in 1920, 4,621; and in 1930, 15,737 stores, its peak number. Other chains quickly followed. In 1930, Kroger had over 5,000 stores and American, First National, and Safeway over 2,000 stores each (See Lebhar, 1959; Markin, 1968; and Mueller and Garoian, 1961).

The expansion of the chain stores was accompanied by severe price cutting that put local, independent stores under great financial pressure and drove many out of business. By the 1920s, the "menace" of chain stores was brought to the attention of state legislatures and the Congress, and bills were introduced to limit the number of stores operated by any one company and to impose a progressive tax on multiple stores. By 1933, more than 500 anti-chain store bills had been introduced in state legislatures and some 20 had been enacted (Lebhar, pp. 118-136). In 1928, the Senate requested the Federal Trade Commission to make a thorough study of chain store operations.

The reasons enumerated in the Senate resolution read much like those traditionally used against interstate banking. For example:

> Whereas these chain stores now control a substantial proportion of the distribution of certain commodities in certain cities, are rapidly increasing this proportion of control in these and other cities, and are beginning to extend this system of merchandising into country districts as well; and
>
> Whereas the continuance of the growth of chain-store distribution and the consolidation of such chain stores may result in the development of monopolistic organizations in certain lines of retail distribution; and . . .
>
> Whereas, in consequence, the extent to which such consolidations are now, or should be made, amenable to the jurisdiction of the Federal antitrust laws is a matter of serious concern to the public: . . .(U.S. Congress, Senate, 1934, pp. 1-2).

Before it was completed in 1934, the study involved a series of 33 reports, examining every conceivable aspect of chain-store operations. The Commission concluded that if the trend of the previous 20 years continued, monopoly in some lines of chain-store merchandising would result. Although it recognized some advantages to chain-store operations, the Commission recommended a number of changes strengthening the Clayton and Federal Trade Commission Acts (U.S. Congress, Senate, 1934, pp. 85-97). In 1933, Representative Wright Patman (later a vocal advocate of small banks and persistent critic of the Federal Reserve) introduced a bill that imposed a severe tax on the number of stores multiplied by the number of states in which the chain operated. If enacted, this bill would have effectively forced the closure of interstate chain stores and severely restricted intrastate chains. Although it gathered substantial support, this and subsequent bills were not enacted. Possibly in part because of this opposition and in part because of the Depression, the relative growth of chain stores slowed. By 1939, they accounted for 37 percent of all retail grocery sales, slightly less than the percentage in 1929.

After World War II, the opposition to chain stores declined significantly and their importance increased. By 1958, the proportion of retail grocery sales accounted for by chain stores had climbed to 43 percent. Thereafter, it leveled off. Increased demand for convenience and personal service associated with rising incomes, as well as the development of purchasing cooperatives and franchise operations, has enabled independently owned food stores to maintain a substantial portion of the market. To the extent that the experience of retailing is relevant to banking, it suggests that geographic deregulation may be compatible with the continued existence of a large number of banks of varying size. This conclusion is buttressed by the resurgence in the chartering of unit banks in California, Oregon, and other western states after years of domination by a few giant banks with statewide branching systems.

IV. Deregulation and the Safety of the System

Deregulating a previously regulated industry involves changing--at times, quite abruptly--the rules of the game under which management, owners, and labor have been playing. Moreover, as is evident from the recent experiences of the airline, securities brokerage (after the demise of fixed commissions), trucking, and telephone industries, these changes may also be disruptive for consumers. Not only do prices change more frequently, but the number of different prices for apparently similar services increases greatly--although, on average, they tend to be lower than before deregulation.

One of the ongoing problems in aligning costs and prices in the breakup of American Telephone and Telegraph may have an interesting counterpart in the deregulation of banking. As is well-known, AT&T subsidized local telephone service by overpricing long distance service. As competition in the latter

service forced reductions in price, the attempt to increase prices on local service and eliminate the long-standing subsidy was met with political opposition. Minimum local telephone service at a low price was viewed as a necessity in the public interest, a so-called "lifeline" service. The inability to increase prices on local service as much as necessary to align with costs could reduce AT&T's ability to reduce prices on long lines sufficiently to meet competition and protect its market share against firms not burdened with underpriced local service.

Similarly, studies have suggested that the prohibition against cash interest payments on demand deposits has subsidized smaller depositors. As interest rates on transactions accounts are deregulated, including the removal of the prohibition of explicit interest on demand deposits, it appears reasonable to expect that the sharpest increases will be on charges to small depositors. This may well bring forth an outcry that minimum checking accounts at low prices are a public necessity and lead to restrictions on service charges that may impair the ability of banks to increase interest rates on larger accounts to meet the competition from nonbank firms not burdened with smaller accounts.

Another likely consequence of the increased competition resulting from deregulation is that certain services and even complete firms may disappear. Indeed, exit of individual firms through either merger or closure appears to be a characteristic of deregulation in many industries. Such exit need not, however, imply a reduction in the overall number of firms in the industry, as the entry of new firms--which is frequently the cause of the exit--could offset or even more than offset the number of leaving firms. This has been true in the airlines industry, which has more airlines today than before

deregulation. It may also be true in the securities brokerage industry, which underwent price deregulation earlier. In 1975, fixed minimum commissions on security transactions conducted on the New York Stock Exchange--the security industry's Regulation Q--were removed. The number of firms that were both members of the New York Stock Exchange and were conducting business with the public, the firms most directly affected by this change, declined in that year and also in the next two. It is difficult to tell whether the reduction was attributable solely to the ending of fixed commissions and the subsequent reductions in commissions, because the number of firms had also declined sharply in 1973, the first year the New York Stock Exchange reported this breakdown. Since 1977, the number of firms has increased, but remains below the 1975 number. The number of security firms registered with the National Association of Security Dealers (NASD), which includes almost every investment banking firm, also declined from 1974 through 1977 but has increased since then to well above its previous peak. Thus, although deregulation may have resulted in a decline in the number of brokerage firms, most or possibly even all of the decline was only temporary.

This may not prove to be the case in banking. Although entry was restricted under regulation, prohibitions against branch offices and geographical restrictions on branch offices in states where they were permitted resulted in the coexistence of more banking firms than are likely to exist in equilibrium in the absence of such restrictions. Thus, unlike in many other deregulated industries, geographic deregulation should lead to a sharp reduction in the number of banks and even more so in the total number of financial institutions, if accompanied by further deregulation of product lines. But even if the number of firms in an industry declines following

deregulation, the resulting churning of firms increases the competitive intensity of the industry, which is a major objective of deregulation. Market shares are reallocated both among existing firms and among old and new firms. In addition, if deregulation is successful in achieving increased efficiency, the size of the market may be enlarged.

Deregulation of commercial banking has the same objective as the deregulation of other industries--namely, to increase efficiency and reduce the cost of services to consumers--and may be expected, ceteris paribus, to result in increased entry of new banks and other institutions offering bank-like services. But entry increases the likelihood of exit by existing banks that suffer losses from increased competition. A key question is whether, under what circumstances, and in what form bank regulators and public policy should permit exit to occur.

A. The Key Role of Exit

Exit plays a key role in any competitive industry. It is the ultimate stick that complements the carrot of profits in disciplining firms to serve the public interest. However, it is effective in fulfilling this purpose only to the degree that it provides the proper incentives to the owners of the exiting firms. To do this, it must punish stockholders for the managerial errors, inefficiencies, or excessive risk-taking that were ultimately responsible for the exit. Or, in cases where the exit was due to a shift in demand or some other exogenous development that resulted in excess capacity in the industry, it must signal to others that the industry is not a prime prospect for new entry and that resources could be put to better use elsewhere. What must be avoided, if exit is to serve its disciplinary

function, is for existing ownership and management to be "bailed out" by some form of government subsidy--discount window borrowing at below-market rates and/or federally assisted mergers--that allows them to escape the consequences of failure.

B. Barriers to Exit

In banking, unfortunately, the nature of regulation has often worked to prevent exit from performing its intended function. Regulation of banking has differed in a fundamental way from that of most other regulated industries, in that the well-being of the overall banking system was believed to be dependent on the financial health of every individual bank. Consequently, bank regulation has been directed primarily toward preventing or containing bank failures. However, the adoption of federal deposit insurance in 1933 greatly reduced the likelihood of contagious bank failures. As a result, it can be argued that some positive rate of bank failure is not only acceptable, but optimal (Tussing, 1967; Rosenblum, 1976).

Although the introduction of FDIC insurance broke the linkage from the failure of an individual institution to the endangerment of the system as a whole, bank regulators often appear to act as if this linkage still existed. Only rarely has the FDIC forced an insolvent bank to liquidate and then generally only if the bank was small and located in a unit banking state so that merger with a nearby solvent bank was difficult. Most insolvent banks are merged with solvent banks (purchases and assumptions). Through this device, all depositors, including uninsured depositors, and general creditors

are generally made whole.[2] Likewise, the Federal Reserve has periodically provided exceptional assistance to large banks to maintain them solvent either as separate entities or as merger partners. The Fed has publicly stated its fears that insolvency of large banks would endanger the system as a whole. In the aftermath of the Penn Square failure, it assisted in constructing a safety net of large banks under the Seattle-First until its acquisition by BankAmerica Corp. and provided liberal assistance to the Continental Illinois National Bank while a permanent rescue plan was being worked out.

Such procedures are inconsistent with the therapeutic and disciplinary roles of exit. If the regulators remain reluctant to see exit by closure, then it is likely that they will act to offset some of the implications of deregulation of prices, products, and geographic location that has been or is being enacted by the Congress by constructing a safety net under, at least, larger individual banks.[3]

One of the reasons for regulators' reluctance to move quickly to deregulate banking derives from a basic flaw in the current system of federal deposit insurance. Because present insurance premiums are scaled

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[2]Similarly, the FSLIC has recently stated that an advantage of financially assisted mergers is that "The assisted merger not only protects insured depositors, but uninsured depositors and general creditors as well." See Edward J. McGuirk (1983).

[3]At least one former regulator, however, believes that bank failure is important for deregulation and efficiency. Thomas Vartanian, a former general counsel of the Federal Home Loan Bank Board, argued:

> "Without failure there is not going to be any ability to succeed. Otherwise, we will be regulated back to the mediocrity that has been the hallmark of financial institutions and that business over the last fifty years." (Fitzgerald, 1983)

proportionately to the bank's total domestic deposits, deposit insurance encourages banks to move out on their risk preference functions by permitting them to acquire insured deposits at the risk-free rate--regardless of the risk assumed by the bank. There are several ways that the salutary effects of market discipline can be reintroduced. One of these is to scale the insurance premiums to risk in the same manner as the market would have done in the absence of federal insurance, thereby discouraging excessive risk-taking (Bierwag and Kaufman, 1983). Absent risk-related deposit insurance premiums or capital requirements, the insuring agency must rely on other means to control its risk exposure. It does so by examining and regulating banks. To the extent that these activities are inconsistent with the objectives of deregulation, complete deregulation requires the introduction of risk-sensitive insurance premiums.

Achievement of the socially beneficial effects of exit is not inconsistent with the sale of a failed bank's assets to other existing banks, so long as the previous stockholders bear the consequences of failure and the purchasers are not direct competitors. To some degree the FDIC has managed to achieve the benefits of exit in its management of purchases and assumptions. However, the benefits have been limited by the extremely restricted group of institutions allowed to bid for the failed bank's assets. Existing geographic and product line restrictions have often limited bidding to similar institutions competing in the same market. For example, the Bank Holding Company Act prohibits the sale of a bank to a steel company or retail grocery chain--i.e., pure conglomerate acquisitions are forbidden. Many product and market extension affiliations are barred by the Glass-Steagall Act and other laws such as those barring insurance companies from owning full-service

banks. These restrictions have been eased to some degree by the emergency merger provisions of the Garn-St Germain Act. But their complete elimination to allow a more open bidding procedure would do much to dissipate any possible anticompetitive effects of such forced mergers with existing institutions, as well as assuring that the assets were obtained by the owners willing to pay the most for them and, presumably, best able to manage them.

Although a merger with a financial institution not currently competing in the same market is probably the ideal solution for many failing banks, this is not to say that such firms should never be bought out by direct competitors or that liquidation is inherently preferable to that alternative. If Brozen (1982a) is correct that limitations on exit alternatives reduce entry, then the banking business has probably been less competitive than it would have been with more liberal exit alternatives. Furthermore, continued exit restrictions will probably reduce competitive intensity in the future by further limiting entry.

C. Alternative Forms of Entry and Exit

Failure and merger are not the only forms that exit can take. Another form is voluntary liquidation. A business firm that is earning a positive but inadequate return can choose to voluntarily liquidate if it cannot find another firm to acquire it. Liquidators are called in and assets auctioned off. However, as in the case of mergers arranged by regulators, the number of potential bidders is limited by existing restrictions on conglomerate and product and market extension mergers.

In order to aid institutions searching for a legally acceptable buyer, the state of Indiana has recently passed a law which allows a bank, savings bank,

or bank holding company to petition the state banking commissioner to arrange a merger and sets standards by which certain normal geographic and other restrictions (such as county-wide branching) might be waived.[4] This allows a greater range of potential purchasers to bid on the bank than would otherwise be the case. These procedures can be used when the capital-to-asset ratio falls below 3 percent, i.e., when returns are low but capital is still positive. If other states follow Indiana's example, then many "voluntary" liquidations may be avoided.

Finally, entry and exit can occur on a more limited scale that does not entail the disappearance of an entire firm. A bank can abandon one of its many product lines that is not profitable, or a new firm or branch of an existing firm can enter a market by offering a single product or narrow range of related products such as consumer loans. A hallmark of deregulated industries is the entrance of new tiers of specialized firms that offer narrow ranges of products: one tier that provides low cost, no frills service such as People Express in the airline business and a second tier that specializes in high value added services tailored to the individual needs of particular customers or segments of customers (Bleeke and Goodrich, 1981).

There is a critical need to pay full attention to the wide range of forms that entry and exit may exhibit; otherwise inappropriate public policy decisions will follow. The inherent product and geographic market overlaps between financial institutions of different types and between financial and nonfinancial firms cannot be ignored. As shown in Section II.B., the markets of bank and nonbank firms already overlap considerably and some members of

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[4]Senate Enrolled Act No. 232, Indiana Code, IC 28-1-7.2.

each group have begun to explore new ways to offer some part of the other group's products. For example, Dreyfus has acquired a "consumer" bank to expand the range of services it can offer to its existing customer base of mutual fund shareholders; Sears is capitalizing on the traffic volume in its retail stores to offer a group of financial services; a Kansas-based company, Dimension, has been formed with the intent of opening over 30 consumer banks in about a dozen states; and loan production offices and itinerant lending officers provide well-known examples of how new entry has occurred in business lending.

These new production and delivery systems may usefully be described as "mutants." A mutant, unlike a hybrid, connotes a strong element of randomness or unpredictability of outcome. Making forecasts regarding future mutations is more difficult than making forecasts about hybrids, which are usually designed, as opposed to occurring by chance. An example of a mutant is provided by the linkage of Paine Webber, a large brokerage firm, with a nationwide network of bank-owned automated teller machines run by MasterCard International that will allow Paine Webber's customers to draw cash from their cash management accounts. Although these forms of entry need not always involve a change in the number of banks (or S&Ls and other depository institutions), the competitive environment following such entry is changed nonetheless.

Not all mutants survive. Many of the new organizational forms of financial service providers will not do well but a few may displace some of the existing organizational types. For some period, both the mutants and the full-service, old-line commercial banks will exist side-by-side, just as

horse-drawn carriages and automobiles shared the same city streets and country roads for over 30 years.

Some of the mutants that do not survive may be sufficiently strong for a short period of time to cause the demise of many old-line, full-service banks, only to be themselves eliminated by a new mutant. As an example, suppose that a new delivery system for certain banking services--say, the supermarket-owned cash dispensing (or more sophisticated electronic teller) machine--offers greater convenience and thus gains widespread acceptance. These machines could lead to the demise of many banking firms as customers find that they can use distant banks both for many of their day-to-day transactions and for less-often-used banking services, such as major loans. But this new delivery system may itself be displaced by a more efficient network--say, between a communication company and a bank--which will allow a customer the convenience of performing the same set or a large subset of these transactions at home.

Note that the supermarket-turned-distributor of banking services need not go out of business in such an event. When transaction volume and fees fall off sufficiently that the floorspace devoted to teller machines could earn a higher return from providing milk or canned goods, then banking services will be eliminated but the supermarket remains in business. And again, the simple availability of a better delivery system, say in the home, will not immediately eliminate the supermarket delivery system. Today's "computer hacker" is comfortable doing business with an ATM; but he or she may be uncomfortable doing business with the third or fourth generation of ATM devices. But the children of today's young adults may feel perfectly at home with the new financial service delivery systems of that future era. Human generations do not correspond one-for-one with machine generations and this

factor should have a bearing on the financial structure of the future. In turn, entry and exit patterns will be influenced by this evolutionary process. Unfortunately, each set of demographics (human and machine) contains elements that cannot be forecast with a reasonably acceptable degree of precision.

V. Remaining Policy Issues

A. Local Market Concentration and Competition

Deregulation of pricing, branching, and entry will do much to move commercial banking toward the status of other, essentially unregulated industries. This prospect raises a number of public policy concerns. One of the most persistent of these concerns is that regarding the appropriate merger and acquisition policy, if any, to apply to the financial services industry.

This is a subset of the broader question whether there is a need for an antitrust policy governing mergers, acquisitions, and pricing agreements generally. The traditional view has been that there is a need for such a policy, given the potential for overt or tacit collusion in highly concentrated markets. This need has been considered greatest in the presence of imperfect and asymmetrically distributed information, natural barriers to entry (including discontinuities due to large minimum optimal scale relative to the size of the market), and asymmetries between the costs of merging two existing firms and establishing a new one to enter the market.

However, recent empirical research and developments in the theory of industrial organization have raised serious questions about the viability of the traditional view. The evidence suggests that many instances of high

concentration are the result of superior performance rather than a source of anticompetitive effects. Renewed interest in the role of entry conditions has led to the development of the theory of "contestable" markets, in which the existing number and size distribution of firms play a much less prominent role in determining performance (Baumol, Panzar, and Willig, 1982). Finally, it has been argued that the broadening of markets that is accompanying deregulation and technological change should reduce concern about the effects of mergers and acquisitions even when traditional antitrust criteria are used in evaluating their competitive effects. The validity of these new results and theories should be scrutinized closely before deregulation proceeds much further because their acceptance and embodiment in policy are likely to have extremely important--and, perhaps, irreversible--effects on the financial structure of the future.

B. Conflicts of Interest

The conflicts of interest that attend the combination of lending, underwriting, and investment management activities are a perennial concern of students of banking. Although anecdotal evidence exists that such conflicts are real, their aggregate importance can only be guessed at. Hence, there is little basis for assigning a value to the potential costs that must be weighed against any benefits to be derived from combining these activities--benefits which are themselves largely conjectural.

The continued operation by banks of trust departments has long been an anomaly in an industry governed by the Glass-Steagall Act, since the conflicts of interest inherent in that arrangement appear to be every bit as serious as those between lending and underwriting. On the other hand, careful

examination of experience with supervision of trust operations may shed some useful light on whether supervision and regulation are sufficient to prevent the abuse of such conflicts of interest or whether enforced separation is the only effective solution.

C. Aggregate Concentration

Whatever the evidence indicates regarding the effects of consolidation and diversification on competition, efficiency, and the management of conflicts of interest, many observers of industrial structure will continue to have serious misgivings about the desirability of a heavily concentrated banking system modeled after that of Canada, England, or Germany. Fear and dislike of size for its own sake have a long history in the United States and are not easily assuaged by (often exaggerated) claims for the importance of economies of scale and scope. The seriousness of the danger that a few mammoth firms might dictate government policy or corrupt the political process overrides in many people's minds the reassurances of others that no evidence of such influence is to be found. The public will be called upon to decide whether, despite potential losses in competition and efficiency, it would prefer to retain constraints on individual institutions' geographic expansion and product lines that guarantee the survival of a large number of small firms. It does little good to dismiss such attitudes as reflecting uninformed populism; what is needed is more convincing evidence that what would be given up is worth more than what would be preserved.

D. Separation of Banking and Commerce

The fear of market power abetted by the government through its chartering powers, reinforced by concerns regarding potential conflicts of interest and their implications for the fair and efficient allocation of credit, underlies the long Anglo-Saxon tradition of separation of banking and commerce (Shull, 1983). Whatever the wisdom of such a policy, its continuance presupposes a fairly clear demarcation between those activities that constitute banking and those that do not. However, the technological changes of the past few decades, combined with the resurgence of firms like Sears and General Motors into some bank-like services, necessitate a reexamination of the perennial issue of how to define a bank (Di Clemente, 1983). One could, as the 64th American Assembly (1983) did in its recommendations for reform of the financial services industry, demarcate the line more or less arbitrarily as falling between those firms that offer governmentally insured deposits and those that don't. As stated in the American Assembly's first recommendation:

> Institutions that accept governmentally insured deposits should not be able to provide directly, or though affiliates, services other than financial services and services closely related thereto. Among other things, this would prevent firms from using low-cost effectively government I.O.U.s for financing their activities in competition with firms lacking access to such low-cost funds and without paying an interest rate commensurate with the riskiness of the activity.
>
> Conversely, institutions that provide nonfinancially related services or products, directly or through affiliates, should not be able to own or control institutions that accept governmentally insured deposits.

Unfortunately, this approach leaves undefined what is meant by "financial services and services closely related thereto." Moreover, efforts to list the

services that banks may appropriately engage in run the risk of being rendered obsolete by technological or competitive developments. What is needed is a more general statement of the broad principles underlying the separation of banking and commerce that can be applied to the situation as it exists at any particular time. Ideally, these principles would be derived from a rigorous analysis of the social costs and benefits associated with various possible combinations of activities.

IV. Conclusions

In light of the very dramatic changes in the economic, financial, and technical environments since the time most banking regulations were initially imposed and the belief (at least up to the time of the Continental Bank troubles) that the industry-wide solvency problem has been solved, deregulation has been advocated as a means to permit the financial system to operate more efficiently. What will be the net consequences of deregulation for commercial banks? As we have discussed in this paper, they are far-reaching and highly complex. The evidence strongly suggests that deregulation of product line restrictions will result in considerable diversification by commercial banks into services previously prohibited to them, as well as further expansion by nonbanking-based firms into additional financial services. However, the evidence on the performance of financial and nonfinancial conglomerates, the experience of nonbank subsidiaries of bank holding companies, and the varying degrees of specialization by financial institutions in countries with few product restrictions on banks suggest that there will continue to be a highly diverse set of financial institutions in terms of both size and degree of product diversification after deregulation.

The evidence from studies of plant and firm economies of scale and scope, the experience of states liberaliziang their branching and holding company laws, and foreign experience all suggest that geographic deregulation will result in some degree of consolidation of the banking industry. These changes may be smaller than is often predicted, because much deregulation has already been accomplished, de facto, if not de jure. While further deregulation may cause near-term problems for consumers, inefficient bank managements, and policymakers, in the long run it will benefit well-managed banks and, in particular, their customers.

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