



Commercial Banks in the Securities Business: A Review

by João Cabral dos Santos



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ABSTRACT

This paper analyzes the potential effects of commercial banks' expansion into the securities business, taking into account the underlying conditions assumed by the modern literature to explain the existence of financial intermediaries. The analysis focuses on the gains claimed to emerge with that expansion, particularly the gains due to information advantages and economies of scope, and on the costs claimed to arise with it, namely, those due to conflicts of interest and risk considerations. In addition, the paper discusses how these effects depend on the location of the securities unit within the bank's organizational structure, and it presents the securities powers of commercial banks in the OECD countries.

1 Introduction

The debate on the relationship between depository institutions' scope and their efficiency and stability has attracted additional interest in the United States in recent years because of successive attempts to repeal the Glass–Steagall Act and so expand commercial banks' securities powers. This issue has now moved to the forefront of public awareness because of differences in proposals made by the two main regulatory agencies—the Federal Reserve System and the Office of the Comptroller—regarding the location of the securities unit within a bank's organizational structure.

This paper reviews the two strands of the literature most prominent in that debate. The first strand identifies the potential advantages and disadvantages of combining the traditional commercial banking activities with securities activities. The second strand studies how dependent these effects are on the corporate structure adopted by banks for undertaking securities activities.¹ This review is complemented with a presentation of the securities services that commercial banks in the OECD countries are permitted to offer.

It we lived in an Arrow–Debreu world with complete markets, there would be no need for financial intermediaries, except perhaps to reduce transaction costs. The presence of moral hazard and adverse selection problems, however, prevents markets from being complete, thus creating a role for financial intermediaries. Under these circumstances, it is well established that financial intermediaries like depository institutions can improve the allocation of resources by offering liquidity services (transforming illiquid assets into liquid liabilities, as in Bryant [1980] and Diamond and Dybvig [1983]) and by providing monitoring services (acting as delegated monitors of investors, as in Diamond [1984]).²

However, more general questions about the optimal design of the financial system and the optimal scope of financial intermediaries remain unanswered. Research on these issues

¹The issues at stake in combining commercial banking with insurance and commerce are not addressed here. The former are surveyed in OECD (1992), Kane (1995), and Eisenbeis (1995), while the latter are reviewed in Saunders (1994) and Santos (1997).

²For an extensive review of the banking literature see, for example, Bhattacharya and Thakor (1993).

is still in its infancy and it has been hampered by the complexity of the problems involved, which explains why only some partial aspects of these questions have been addressed. For example, Neave and Johnson (1993) study the relationship between the financial system's organization and its corporate governance properties; Allen and Gale (1995) examine the intertemporal and cross-sectional risk-sharing opportunities offered to investors by a banking-based system, in comparison with those offered by a market-based system; Boot and Thakor (1995) analyze the relationship between financial innovation and banking scope; and Gorton and Haubrich (1987) and Boot and Thakor (1996) attempt to explain the simultaneous existence of banks and financial markets.

With respect to the relationship between depository institutions' powers and their efficiency and stability, the debate that has evolved usually considers 1) the most well-known reasons for the existence of these intermediaries (the provision of liquidity and the performance of monitoring services), 2) the problems generally associated with these institutions (being subject to runs and to failure because of insolvency), and 3) the devices most commonly adopted to address such problems (deposit insurance and discount window facilities).

Research shows that banks' provision of liquidity services leaves them subject to runs. The reason is that the liquidation value of the bank's portfolio of assets is less than the value of liquid deposits, which is a necessary condition for the bank to provide liquidity.³ Under these circumstances, a run can occur without any triggering event. If depositors panic, they may try to withdraw their funds out of fear that other depositors will do so first, thus forcing an otherwise sound bank into bankruptcy (Diamond and Dybvig [1983]). Banks may also fail because of insolvency. They may not be able to completely diversify the risk of their assets because markets are incomplete or because their monitoring technologies are not perfect. As a result, a run emerges if depositors realize that the value of the bank's assets is low, which makes withdrawing a dominant strategy. In this case, a run may be triggered, for example, by the release of information on the bank assets' quality (Jacklin

³Jacklin (1987) and Chari and Jagannathan (1988) identify conditions under which a deposit contract dominates a bank debt contract that is traded in secondary markets.

and Bhattacharya [1988]).

A bank run is costly because it forces the premature liquidation of assets, thus disrupting the production process. Furthermore, it may cause contagion runs, which may culminate in a system failure with strong negative effects on the economy. The risk of a system failure and the recognition of banks' importance for the smooth functioning of an economy have in turn motivated the development of mechanisms, such as deposit insurance and discount window facilities, to insulate banks from runs.⁴

These mechanisms, particularly deposit insurance, introduce problems of their own: They reduce depositors' incentives to monitor banks, and they give banks risk-shifting incentives by charging them premiums that do not reflect their risk.⁵ These distortions are often used to justify introducing a wide range of regulations. Some, such as the prudential regulations, are aimed at restraining banks' risk-shifting incentives, others, such as restrictions on the scope of activities, are designed to limit banks' opportunities to implement risk-shifting policies. The Glass–Steagall Act, which has prohibited U.S. commercial banks from entering the securities business since 1933, is an example of the regulations that belong to the latter group.

This paper reviews both the theoretical and the empirical evidence on what are usually recognized as the most important arguments in the debate over commercial banks' securities powers.⁶ The paper proceeds as follows: Section 2 discusses the potential advantages—and section 3 the potential disadvantages—that could result from combining traditional commercial banking activities with securities activities. Section 4 relates these effects to

⁴For a discussion on the effectiveness of the deposit insurance compared to other mechanisms such as the suspension of convertibility see Bhattacharya and Thakor (1993).

⁵The risk–shifting incentives are further increased when forbearance practices are embraced and when "too-big-to-fail" policies are adopted. On the other hand, these incentives are restrained by the costs of going bankrupt, namely the loss of the bank's charter and the loss of reputation.

⁶For the purposes of this paper, a universal bank is an institution that is allowed to accept deposits, make loans, and issue and underwrite corporate securities. Two other powers usually attributed to universal banks—taking equity positions in nonfinancial firms and conducting insurance businesses—are not discussed here.

banks' corporate structure, and section 5 concludes the paper. An appendix to the paper presents the securities activities that commercial banks in the OECD countries are allowed to carry out.

2 Potential Benefits of Universal Banking

An analysis of the effects associated with commercial banks' expansion into the securities business, particularly the issuing and underwriting of corporate securities, should consider why financial intermediaries like commercial banks exist in the first place. Traditional literature has focused on banks' provision of payments and portfolio services. In contrast, modern research emphasizes banks' role as providers of liquidity and as delegated monitors in environments characterized by the incompleteness of financial markets. Within the framework adopted in the modern literature, it is usually conjectured that commercial banks' main gains from expansion into the securities business result from their information advantages and from the economies of scope.

2.1 Information Advantages

It is by now commonly accepted that a major function of banks is to act as delegated monitors in a world where there is asymmetry of information between agents that need funding to finance investment projects and those that can supply it. Firms generally have information about their creditworthiness and about relevant features of their investment projects that is not readily available to outsiders.

For some firms, the information gap is small or nonexistent, giving them the ability to raise funding directly in capital markets. For other firms this gap can be reduced by contracting with an independent agent (a rating company) that conveys the relevant information to outsiders, certifying at the same time the quality of this information.⁷ Rating

⁷Holthausen and Leftwich (1986), Stickel (1986), and Hand, Holthausen, and Leftwich (1992) study the effects of the agencies' announcements on the firms' common and preferred stock prices and on bond prices. They find empirical evidence that credit rating agencies produce valuable information to outside investors.

agencies have an incentive to provide accurate information in order to maintain their reputation, while firms are willing to incur the costs of this process because it gives them access to capital markets and so saves them the costs of contracting with a bank.

In some cases, however, information cannot be easily acquired by outsiders. Its production may require a substantial investment or a continuous and extensive relationship with the firm. Under these circumstances, important savings can be achieved by delegating certain functions to financial intermediaries.⁸ The costs of financial intermediation are reduced by avoiding the duplication of such functions as gathering the relevant information before making the funding decision and monitoring borrowers' actions once they have undertaken their investment projects.⁹

In establishing a relationship with a firm, the bank incurs the costs of gathering relevant information about the firm and its investment opportunity before making the funding decision. Once this decision is made, a new stage of the bank-firm relationship begins: The bank starts monitoring the firm, making sure that it observes the conditions of the funding contract and, at the same time, it gathers further information about the firm. As a result, bank financing tends to be more expensive than public financing, which explains why firms tend to avoid the former type of funding. Moreover, some firms may also avoid bank funding in order to avert the additional scrutiny that usually comes with it. Because

⁸Diamond (1984) and Ramakrishnan and Thakor (1984), among others, derive theories of financial intermediation based on intermediaries' informational advantage. The former rationalizes depository institutions, while the latter explains the emergence of nondepository intermediaries.

⁹Consistent with intermediaries' role as producers of information, James (1987) finds that firms experience positive abnormal equity returns in response to announcements of bank credit agreements, and nonpositive effects in response to publicly placed debt. Similar results are reported by Mikkelson and Partch (1986). Lummer and McConnell (1989) find that initial loan agreements have no effect on firms' equity returns but loan renewals result in abnormal equity returns. Slovin, Johnson, and Glascock (1992) find that announcement of both loan initiations and renewals have a positive effect on small firms' stock prices but no effect on large firms', a result consistent with the idea that bank monitoring is more valuable for smaller firms. Best and Zhang (1993) also find results that accord with the idea that bank monitoring is more valuable for smaller firms.

of this, firms with higher reputations and firms with less opportunity to adopt risk-shifting policies (usually larger and better-known) tend to raise funding directly in capital markets, while smaller, younger, and less-known firms tend to apply to banks.¹⁰

Within this set-up, it is usually conjectured that universal banks have important advantages over specialized ones. Compared to a specialized bank, a universal bank offers a bigger set of financial products and services, thus creating the conditions for a relationship between the bank and the firm that is both "wider" and "lengthier." This enhancement of the bank-firm relationship may be a source of important gains to both institutions.

A "wider" bank-firm relationship may be an important source of scope economies. It allows the bank to learn more about the firm by observing its behavior with respect to various financial instruments, and it provides an opportunity to spread the fixed costs of developing the relationship over several products.

By offering a larger number of services, a universal bank develops more points of contact with firms. As a result, the bank has more instruments to consider in the design of financing contracts, and more leverage over firms' managerial discretion, which reduces agency costs. Furthermore, it becomes easier to gather information and monitor the borrowing firms.¹¹

¹⁰Several authors have derived theories of bank loan demand. Diamond (1991) focuses on borrowers' reputation. Borrowers with moral hazard problems borrow from banks initially but, as they build their reputation, they start issuing debt directly in capital markets. Rajan (1992) emphasizes the costs of bank financing. When a bank makes a loan, it obtains information that the firm cannot easily reveal to outsiders. The firm chooses its borrowing sources so as to avoid the bargaining power created by that information. Chemmanur and Fulghieri (1994) assume that banks, because they have a longer time horizon than bond-holders, are willing to spend more resources evaluating firms in order to acquire a reputation for making the "right" negotiation/liquidation decision. This affects firms' choices of bank loans versus publicly traded debt. Yosha (1995) focuses on borrower's competitors. Borrowing from capital markets forces the firm to disclose information that may be valuable to its competitors. Borrowing from a bank may create the perception that the firm is hiding information, thus making competition react in a way that jeopardizes its profits. The trade-off between these effects determines the borrower's choice of funding source.

¹¹Petersen and Rajan (1994) find that the larger the number of services a bank provides a firm, the greater the availability of funding, a result consistent with the existence of advantages in a "wider" bank-firm relationship.

For example, it would be relatively simple for a bank to study a firm with which it has a lending relationship for the purpose of underwriting its securities.¹² In addition, as argued by Nakamura (1993), banks gain important information by monitoring firms' checking accounts, which can then be used in a wide range of businesses (in the case of a universal bank), or only in lending decisions (in the case of a specialized bank).¹³

The length of the bank–firm relationship is also very important.¹⁴ If both the bank and the firm expect to be doing businesses for a long time, then the bank is more willing to invest in gathering information about this firm. It is also able to spread the costs of such investment over a longer time horizon, reducing the up-front cost of capital to the firm.

The information available about a firm, its financial needs, and its reputation change over its life cycle. Because they are unknown, young firms generally obtain most of their funding from banks through loans; this makes them very dependent on banks' investment in information. But as these firms mature and acquire reputations, they often divert to capital markets, a move that in turn requires underwriting services.¹⁵ Unlike a specialized bank,

¹²This is particularly important for small firms, because they are more bank dependent and because they tend to concentrate their financial services with a single bank (see Elliehausen and Wolken [1990]).

¹³Shaffer (1984) and Udell (1986) argue that banks use different features of checking accounts to sort customers of different quality types. Allen, Saunders, and Udell (1991), studying the prices of bank services, find some empirical evidence consistent with that screening device.

¹⁴Boot and Thakor (1994) show that even without learning, a long-term relationship between a bank and a borrower is still welfare-improving. The reason is that the long-term contract made possible by a durable relationship allows the bank to efficiently adjust the financing contract over time, in order to reduce the use of (costly) collateral. Empirical research has found evidence supporting the claim that bank-firm relationships are valuable. Slovin, Sushka, and Polonchek (1993) find that the Continental Illinois crisis had a negative impact on the stock prices of its client firms (more pronounced for firms that were more dependent on that bank), and the announcement of the bank's rescue by the FDIC had positive effects on these prices. Berger and Udell (1995) find that borrowers with longer banking relationships get better financing conditions in terms of both collateral and interest rates. Peterson and Rajan (1994) fail to find a positive association between the duration of the relationship and the interest rate charged, but they do find a positive impact on credit availability.

¹⁵See Myers (1984) for a discussion of the "pecking order" explanation to the firm's capital structure.

a universal bank can fulfill firms' funding needs throughout their existence. This fosters a long-term relationship that can be the source of significant gains to both parties.

The bank is willing to enter into a long-term implicit contract only if it expects to do business with the firm for a prolonged period. To the extent that part of the information generated in the bank-firm relationship is private to the bank and not easily transferable by the firm to others, the firm will incur some costs if it decides to switch banks. These costs have a positive effect, they lend credibility to the implicit bank-firm contract. Because of this, the bank can make funding available under better conditions to firms in the early stages of their life cycle. But the switching costs also have a negative effect. They permit the bank to extract (ex post) some rents associated with its information advantage. This gives firms an incentive to rely more on internal funds in order to avoid becoming too dependent on a bank in the first place.¹⁶

The critical issues regarding the switching costs associated with a bank–firm relationship are how these costs compare when the relationship is in a universal banking setting versus a specialized banking system and how the rents associated with them are extracted in each banking setting. On one hand, it is frequently argued that switching costs are larger in a universal banking system, thus giving banks an opportunity to extract more rents. Two reasons are put forward to justify this difference in switching costs. The first is the preemptive behavior that a universal bank can adopt to deter other banks from competing for the firm's business. Because of its better information, the bank can anticipate the firm's funding needs and so can prepare some of the necessary work in advance, in order to gain an advantage over potential competitors.

The second is a new "lemon's" problem that can emerge when a firm leaves a universal bank. In a specialized banking system, when a firm switches from a commercial bank to an investment bank for the purpose of issuing in the market, no special meaning can be attached to this move except that the firm is interested in raising funds through a different

¹⁶Greenbaum, Kanatas, and Venezia (1989), Sharpe (1990), and Rajan (1992) are examples of papers that study the implications of the information advantage gained by the bank in its relationship with a firm.

channel. The investment bank knows that the firm's bank is not allowed to underwrite its securities. In a universal banking system, however, that switch introduces a "lemon's" problem. Because the firm's bank is now allowed to underwrite, and because it can easily get the information necessary to do so (having done other business with this firm), when the firm switches to an investment bank, this bank will wonder why the firm's bank does not provide this service. This doubt may create a "lemon's" premium, thus raising the firm's switching costs.

On the other hand, it is also commonly argued that a universal banking system allows for a smother extraction of such rents. Because it creates the conditions for a long-term relationship between a bank and a firm, a universal banking system allows the bank to extract such rents over a longer time horizon. As a result, financing costs in the early stages of the bank-firm relationship may be lower than in a specialized banking system, where banks might need to extract the rents over a shorter time period.

In sum, there seem to be important information advantages associated with a universal banking system: The bank-firm relationship is enhanced because this system permits additional points of contact between the parties and because it gives them the possibility of developing a long-term relationship. Empirical research on these issues is still in its early stages. However, the results already available seem to confirm that enhancement of the bank-firm relationship is a source of significant benefits in cost and availability of funding.

2.2 Economies of Scope

Economies of scope are pivotal to the efficiency of financial conglomerates in general, and universal banks in particular. They are usually pointed out as one of the important advantages of a universal banking system over a system that requires banks to specialize. Economies of scope may come from two distinct sources: the production of financial services and their consumption.

Regarding production, economies of scope are said to exist when the cost of one organization producing a given mix of products is less than the cost when the same bundle of products is produced by several specialized firms. Baumol, Panzar, and Willig (1981) suggest that economies of scope in production arise when there are inputs that are shared or used jointly.

In addition to the economies of scope resulting from the information advantages discussed in the previous section, some other reasons are frequently given as to why universal banks may benefit from these economies. The most important seem to be: First, universal banks can spread the fixed cost (in terms of physical and human capital) of managing a client relationship over a wider set of products (Steinherr and Huveneers [1990]).

Second, because some of the products offered by financial institutions are, to a certain extent, close substitutes, they are subject to potentially significant shifts in demand. Universal banks are believed to face these shifts more easily because they can respond to them by shifting resources within their organizations.

Third, universal banks may benefit from marketing and distribution economies (Llewellyn [1995]). For example, the branch network and all the other delivery channels created by a bank to distribute one product can be used to distribute additional products at a low marginal cost.

Fourth, to the extent that it is easier to gain reputation in some businesses than in others, and to the extent that there are spillovers in reputation, a universal bank might have an important advantage because it can use the reputation it gained offering one service to recommend its other services, Rajan (1995).¹⁷

Economies of scope may also emerge from the consumption of financial services: It may be advantageous for consumers to purchase a bundle of financial services from a single firm

¹⁷Several studies find evidence compatible with the idea that financial intermediaries' reputation is important. For example, Beatty and Ritter (1986) and Carter and Manaster (1990) find that the underpricing in initial public offers is associated negatively with the underwriter's reputation. Slovin, Sushka, and Hudson (1990) report identical results for seasoned equity issues. Billet, Flannery, and Garfinkel (1995) address the intermediaries' reputation issue but with respect to loans announcements. They find that the borrower's abnormal equity returns associated with bank loans announcements are positively correlated with lender Moody's credit rating.

instead of acquiring them separately from different firms. Such and advantage may derive from lower costs of searching for and monitoring the providers of the services. Moreover, by widening his relationship with a bank, a customer increases his bargaining power, thus improving his chances of getting better deals and enhancing his ability to exploit "relationship banking" (Llewellyn [1995]).

Thus, from a theoretical point of view, a significant number of potentially important sources of scope economies seem to be associated with universal banks. However, the debate on the importance of these economies has not been settled. The evidence found so far is mixed. Research on U.S. banks finds little proof of economies of scope in production, a result that is not surprising in light of regulatory constraints on banks' admissible activities. Research on banks in Japan and in some European countries, however, finds stronger evidence of these economies.¹⁸ In addition, some of the problems associated with the data and method generally used to estimate scope economies remain unsolved.

The traditional literature on economies of scope focuses mainly on deposits and loans in samples of small banks. More recent studies expand the focus to include large banks, information issues, and larger sets of financial products. Despite these developments, the conclusions of this research continue to be questioned. Some researchers note the limitations and instability of the most popular method of accounting for scope economies—the estimation of cost economies through the translog cost function or its Box—Cox variants (Pulley and Humphrey [1993]). Others raise concerns about the quality of the data used, particularly the lack of micro-data. Still others question research on economies of scope because it does not take regime-change effects into account. Calomiris (1993), for example, argues that the impact on current banks' profits or costs of combining different activities is not the correct way to estimate the economies of scope that would result if the U.S. were to move from the present structure to a universal banking system. The reason is that this procedure does not take into account that such a regulatory change would alter the

¹⁸For a survey of the empirical research on economies of scope see, for example, Kasuya (1986), Clark (1988), Mudur (1992), Forestieri (1993), and Berger, Hunter, and Timme (1993).

way banks do business, including their cost functions. Finally, some researchers claim that the results reported in the literature are not representative of a universal banking system's potential economies of scope because they do not take into account the possible economies on the consumption side.

In conclusion, from a theoretical viewpoint there is significant consensus that potentially important sources of economies of scope are associated with universal banking. However, the empirical research thus far has not been able to generate the same consensus, partly because of its mixed results and partly because of problems with the approach it has adopted.

3 Potential Costs of Universal Banking

The most frequent arguments for maintaining the separation between commercial banking and the securities business are that combining these activities would create serious conflicts of interest and would threaten the safety and soundness of the banking system. These arguments have a historical precedent, since they were the main reasons invoked by the U.S. Congress for enacting the Glass–Steagall Act in 1933.

The deep recession and the many bank failures that followed the stock market crash of 1929 motivated several investigations of the causes of such events. The investigation conducted by the Senate Banking and Currency Committee was highly influential in shaping public opinion at the time and in facilitating enactment of the Glass-Steagall Act. Among other things, it claimed that banks had been taking advantage of conflicts of interest in their securities dealings, and that their securities activities were a major cause of many bank failures.

Recent research on banks' securities activities prior Glass-Steagall, however, finds no evidence for the claims of widespread abuse and failures due to securities activities. Instead, this research concludes that some of the allegations made at the time regarding conflicts of interest were either unfounded or greatly exaggerated, and that banks engaged in securities

activities had no higher risk of failing than banks with no ties to the securities industry.¹⁹

After the enactment of Glass–Steagall, alleged conflicts of interest and threats to banks' stability continued to be evoked in defense of the separation between commercial banking and the securities industry. For example, a 1971 report by the President's Commission on Financial Structure and Regulation states that "this separation was prompted by the conflicts of interest that developed when the same organization handled the two functions. The possibility of conflicts of interest would still exist if banks were again permitted to underwrite new issues of corporate securities. The Commission, therefore, strongly recommends the continued prohibition against bank underwriting of private securities issues." ²⁰

3.1 Conflicts of Interest

As is widely recognized, potential conflicts of interest are inherent in almost all financial transactions. How important are the potential conflicts that could emerge with the combination of commercial banking with the securities activities? This issue can be evaluated first by analyzing the assumptions necessary for the conflict-of-interest argument against that combination of activities, then by examining the evidence available from foreign countries where this banking structure is already in use, and finally by looking at the empirical evidence reported in recent studies on the period prior to Glass–Steagall.

Edwards (1979, p. 282) defines conflicts of interest as follows: "A conflict of interest exists whenever one is serving two or more interests and can put one person in a better position at the expense of another." Bröker (1989, p. 228) states that "a conflict of interest arises for a bank ... dealing with a client if it has a choice between two solutions for a deal, one of which is preferable from its own interest point of view while the other represents a better deal for the client. A conflict of interest arises also for a bank ... if it carries out activities involving two different groups of customers and if it has to strike a balance

¹⁹For a discussion of the events, including the Senate's Hearings, that culminated with the enactment of the Glass–Steagall Act see, for example, Carosso (1970), Kelly (1985a), and Benston (1990).

²⁰Report of the President's Commission on Financial Structure and Regulation, December 1971, p. 52.

between the respective interest of the two customer groups." In light of these definitions, it becomes clear that even specialized institutions face an endless number of situations where conflicts of interest may develop. For example, a commercial bank that is not allowed to do underwriting has a incentive to recommend loans rather than stock or bond issues to customers who seek its advice on how to raise capital.²¹ In the course of evaluating a firm's eligibility for a loan, the same bank may uncover valuable information for its trust department, thus gaining an opportunity to benefit its customers at the expense of outsiders who lack access to this "inside" information.

Naturally, as the set of financial products offered by institutions increases, and as the set of customers expands, so do the opportunities for conflicts to emerge. Specifically regarding commercial banks' expansion into the securities business, the most frequent examples of new conflicts include those due to the bank's advisory role to depositors and its promotional role as an investment banker, those that emanate from the bank's role as a trust fund manager, those that arise because of the opportunity to impose more tie-in deals on customers, those that derive from the possibility of designing deals that will transfer bankruptcy risk from the bank's portfolio to outside investors and, finally, those that emerge because of "inside information." ²²

The usual claim regarding conflicts due to the bank's advisory role is that once the bank enters the securities business it may promote the securities it underwrites, even when better investments are available in the market. By the same token, the bank may "dump" into the trust accounts it manages the unsold part of the securities it underwrites. With respect to tie-in deals, the argument is that the bank may use its lending relationship with a firm to pressure the firm to buy its underwriting services, under the threat of increased credit costs or nonrenewal of credit lines. Regarding the transference of bankruptcy risk to outside investors, it is suggested that if the bank discovers that one of its borrowers is in difficulties,

²¹As already explained during the firm's "life cycle," particularly in the early stages, bonds and bank loans are not perfect substitutes.

²²For a detailed discussion of these and other conflicts of interest see, for example, Edwards (1979), Saunders (1985a), Kelly (1985b), and Benston (1990).

it may pressure this firm to issue securities that the bank will underwrite and sell to the public, with the understanding that the proceeds of the issue are for repayment of the loan, thus allowing the bank to substitute a risky loan for cash.²³ Finally, with respect to the "insider information" conflict, it is suggested that the bank may use confidential information that it obtains when making a loan to a firm or underwriting this firm's securities, in order to gain a competitive advantage in other businesses.

The critical issue regarding any potential conflict of interest is not whether the conflict exists but rather whether the agents in the transactions have incentives—and opportunities—to exploit the conflict. It is not clear that banks have a strong enough incentive to exploit the conflicts of interest listed above, considering several factors: the potential damage to banks' reputation, particularly to their certification role; the influence of the market for corporate control; the monitoring by bond-rating agencies; and the supervision exercised by regulatory authorities. Furthermore, it is unclear that banks would have an opportunity to turn these conflicts to their advantage. In general, conflicts of interest can only be exploited under certain conditions. Usually, these conditions involve some form of monopoly power (as with tie-in deals); asymmetry of information between the contracting parties (as in the conflict between the bank's promotional and advisory roles); the assumption that there is a "naive" party that can be fooled (as when securities are issued to transfer bankruptcy risk to outside investors).

Some of the conflicts of interest claimed to emerge with commercial banks' expansion into the securities business, such as the dumping of securities into trust accounts, tie-in deals, or the "insider information" problem, are already present, to a certain extent, in existing specialized institutions and are subject to several regulations. Further, in highly competitive environments like the U.S. financial markets, there does not seem to be much room for banks to impose tie-in deals. Moreover, economic theory suggests that if agents are moderately rational, when they enter into a contracting relationship they consider the

²³For a formal analysis of the conflicts associated with the bank's certification role when it underwrites its clients' securities see, for example, Rajan (1994), Puri (1995), and Kanatas and Qi (1995).

other party's incentives and, as result, they will not generally be fooled. For example, if firms perceive that they may be forced into future tie-in deals, they can protect themselves in advance by maintaining relationships with more than one bank. If investors perceive that a bank is "infected" by conflicts of interest, they can take that into account by applying a "lemon's" discount to the bank's products that are affected by the conflict.

Empirical research on the conflicts of interest associated with commercial banks' securities activities has not uncovered strong evidence supporting the claim that banks do exploit these conflicts. For the period before Glass–Steagall, Kroszner and Rajan (1994), comparing the ex post default performance of ex ante similar securities underwritten by commercial banks (either through trust departments or through affiliates) with those underwritten by investment banks, find no evidence that commercial banks systematically fooled the public by offering low-quality securities. Instead, their findings indicate that commercial banks underwrote higher quality securities, which performed better than identical securities brought to the market by investment banks. These findings confirmed the results of two other independent studies, Ang and Richardson (1994) and Puri (1994).²⁴

Some questions have been raised regarding the use of the default rate as the performance variable. The reason is that it is a one-time-event variable, which does not capture the continuous variation in value over the bond's lifetime (Calomiris [1992]). However, studies that have looked at other performance variables have found results consistent with research that used the default rate. For example, Ang and Richardson (1994) find, for the period prior to Glass-Steagall, that bonds issued by commercial banks' affiliates had lower ex ante yields and higher ex post prices than those issued by investment banks. For the same period, Puri (1996) finds that securities underwritten by commercial banks had higher prices (lower yields to maturity) than identical securities underwritten by investment banks, which suggests that investors perceived commercial banks' certification role, net of conflicts of interest, to be more valuable than that performed by investment banks.

²⁴Moore (1934) and Edwards (1942), using the limited techniques available at the time, also found evidence compatible with these results.

The research on the conflicts of interest associated with commercial banks' securities activities in modern banking systems is also limited. The work done on the German banking system by the Gessler Commission in the late seventies is still the most comprehensive study. Krümmel (1980, p. 46) summarizes its findings as follows: "On the whole, consideration of potential conflicts of interest in universal banking did not lead the Commission to recommend the separation of the banking functions but rather to conclude that restraints of competition caused by such conflicts of interest are small and can be remedied or abolished by provisions within the existing system." More recently, Gande, Puri, Saunders, and Walter (1996) study conflicts of interest in the present American banking system by comparing the bonds underwritten by commercial banks' Section 20 affiliates with those underwritten by investment banks. Once again, their results suggest that commercial banks' certification role, net of conflicts of interest, is more valuable than investment banks'.

In conclusion, some of the potential conflicts of interest that could develop if commercial banks expand into the securities business already exist in the specialized institutions. Others could result from enlargement of the scope of banks' activities and customers, but despite this growth, institutions will exploit conflicts of interest only if they have the incentives and opportunities to do so. The incentives are severely constrained by the importance that banks attribute to their reputations. The opportunities are strongly limited by investors' expected rational behavior and by strong competition in the financial markets. Thus, provided that these conditions prevail, and provided that the contracting parties disclose the information deemed necessary in a timely fashion, conflicts of interest do not seem to constitute a solid reason for prohibiting commercial banks from undertaking securities activities.

3.2 Bank Safety and Soundness

The negative externalities that may result from a bank failure continue to be used as a major justification for making bank soundness the subject of regulation. It is frequently argued that the failure of a bank, particularly of a big bank, may spread domino-fashion, forcing other banks (solvent and insolvent) into bankruptcy and creating a system failure.

A bank may fail because of insolvency (it may not be able to completely diversify the risk of its assets) or because of a bank run (the provision of liquidity services leaves the bank susceptible to runs). In most countries, the desire to reduce the risk of a system failure motivated the development of mechanisms, such as deposit insurance systems and discount window facilities, aimed at protecting banks from runs.²⁵ However, these mechanisms create problems of their own. Most notably, they give banks an incentive to take excessive risks and they reduce depositors' incentives to monitor banks.²⁶ These problems, in turn, have been used to justify the introduction of a wide range of regulations aimed at limiting banks' incentives and opportunities to undertake too much risk. These regulations include, among others, a minimum required capital-asset ratio and restrictions on banks' permitted activities, for example, the prohibition against U.S. commercial banks entering the securities business. Such problems have also been used as a point of departure for narrow banking proposals.

A large number of studies, using various approaches and various measures of risk, have attempted to evaluate the potential risk effects to banks and bank holding companies of expansion into other, nonbanking activities.²⁷ Regarding the risk effects specifically due to their securities activities, research results are mixed, but on balance they appear to disprove the idea that the securities business is highly risky for banks.²⁸ For example,

²⁵For an analysis of the importance of deposit insurance in eliminating bank runs see, for example, Diamond and Dybvig (1986).

²⁶Schwartz (1992) discusses the problems associated with the discount window, while Kareken and Wallace (1978), Merton (1977, 1978), and Dothan and Williams (1980), among others, analyze the risk-shifting incentives introduced by deposit insurance.

²⁷For a review of this literature see, for example, Brewer, Fortier, and Pavel (1989) and Benston (1990).

²⁸Two studies examine the profitability and risk of the underwriting business per se. Giddy (1985) studies the net profits from underwriting common stock in the 1976–86 period and finds that very few underwritings result in loss, even when the underwriter holds the issue for as long as ten days. After computing the net profits of corporate bond underwritings, he finds that its mean is lower and the proportion of issues that produce a loss is larger than the corresponding values associated with equity underwritings. Saunders (1985b) finds that the coefficient of variation of the yields on municipal bonds was larger than on corporate bonds over 1978–83, a period when bank holding companies were allowed to underwrite municipal obligation

White (1986) studies the securities activities of national banks prior to Glass-Steagall. He finds, among other things, that both the mean and the coefficient of variation of four measures of profitability were larger for the securities affiliate than for the bank, and that the coefficients of correlation for these measures between the bank and the securities affiliate were small and were all insignificant. He also finds, using logistic regressions, that the existence of a securities affiliate or a bond department either decreased or had no impact on the probability of failure of the banks included in his sample.

Wall and Eisenbeis (1984) and Litan (1987) use industry data to study the correlation between bank earnings and security broker/dealer earnings. Wall and Eisenbeis find a negative correlation for the period 1970–80. Litan finds an identical result for 1965–82, but a positive correlation for the period 1973–82. This instability over time is also present when Litan studies the potential contribution of securities activities to reducing the risk of a portfolio made of banking, securities activities, insurance underwriting, and other activities. This way of identifying the potential risk effects to banks of their expansion into other activities has some limitations, including the use of industry data rather than firm data, the measure of risk adopted, and the inability to recognize regime-change effects.²⁹

Boyd and Graham (1988), Boyd, Graham, and Hewitt (1993), and Santomero and Chung (1992) examine the risk effects of banks' expansion into the securities business in a more satisfactory way: They study the risk of holding companies that are created through hypothetical mergers between banks and securities firms. However, they reach conflicting conclusions. While the first two works find that mergers of banks with securities firms would likely increase risk, Santomero and Chung find the opposite result. This approach has also been questioned on several grounds, including its lack of recognition for the regime-change effects.

Without the distortions created by the safety net, particularly by deposit insurance,

bonds but not corporate bonds.

²⁹Boyd, Hanweck, and Pithyachariyakul (1980) find that the use of industry data in these calculations introduces an important aggregation bias.

given that banks are allowed to make risky loans, it seems difficult to argue that banks should be barred from underwriting corporate securities because of risk considerations. This business, it appears, would give commercial banks an additional opportunity to diversify, that is, an opportunity to create an alternative source of revenue for periods of disintermediation (when firms sidestep commercial banks and obtain funding directly from capital markets). The question thus becomes whether the moral hazard introduced by the safety net justifies a regulation prohibiting banks from entering the securities business.

Some argue that if the risk-shifting incentives created by the safety net are important, then reducing the source of these incentives might be a better response to that problem than prohibiting commercial banks from the securities business. This prohibition does not address the problem; moreover, it introduces important distortions by strictly limiting choices for all banks. Others, however, support the position that banks should not be allowed into the securities business because this would give them additional instruments to pursue risk-shifting strategies aimed at exploring the deposit insurance subsidy. Still others go even further and argue that banks with insured deposits should be allowed to invest only in risk-free assets, that is, they propose a system of narrow banks (Kareken [1986], Litan [1987], and Bryan [1988]).

In its original format, the narrow banking proposal would allow a holding company to own a banking unit, which would invest insured deposits in risk-free assets (short-term government securities) and other affiliates, which would be financed by securities not federally insured and would conduct businesses, such as lending and securities activities. These affiliates would be completely separated from the banking unit by an extensive set of firewalls. Proponents of this system argue that it creates a "fail-safe" bank, where deposit insurance plays a minimal role but is available to cover losses resulting from extraordinary events, such as fraud and mismanagement.

Although the proposal was very appealing when first introduced, closer consideration has revealed serious problems, some of which remain unsolved. For example, when confronted with the observation that there are not enough risk-free securities to provide the counterpart of transaction deposits, the narrow banking proponents suggest broadening the set of banks' permissible investment opportunities to include long-term government bonds and high-grade commercial paper. However, this extension creates its own problems. It reintroduces interest rate risk and credit risk into the banks, thus enlarging the role of deposit insurance. In addition, as is widely recognized, one of banks' key functions is the transformation of illiquid assets into liquid deposits, that is, the creation of liquidity. Under a narrow banking system, it is not clear who will perform this function. Possibly the new firms that move in to fill the vacuum left by banks would inherit the problem of runs, thus requiring regulators to step in and extend deposit insurance to these firms.³⁰

In sum, it seems clear that a move to the narrow banking system would entail costs in terms of scope economies. Further, some of the unresolved problems associated with that system raise serious doubts about the extent of the benefits claimed by its proponents.

4 The Corporate Structure of Banks

The potential benefits and costs of allowing commercial banks to undertake securities activities largely depend on the latitude they have to integrate these activities with their current mix of businesses. This latitude is determined by their freedom to choose their corporate structure, that is, where they will locate the new activities within their organizational structure and by the restrictions imposed on them because of their securities activities, including those on the transactions and exchange of information between the banking unit and the securities unit.

In a deregulated system, there are several possible corporate structures that banks can adopt to combine commercial banking with securities activities. The most frequently chosen are a universal bank, a bank parent company with a securities subsidiary, and a holding company with a banking subsidiary and a securities subsidiary.³¹ In the universal banking

³⁰For an extensive discussion of this problem see Diamond and Dybvig (1986) and Wallace (1996).

³¹Herring and Santomero (1990) and Koguchi (1993) present some variants of these structures.

model, banks can completely integrate the activities they choose to undertake because they can conduct all of them within a single corporate entity. In the bank-parent-company and holding-company models, commercial banking activities and securities activities are conducted in legally distinct entities with separate management teams and separate capital. As a result, integration can only be partially achieved in these models. It is further constrained when there are restrictions on the financial and operational relationships between the bank and the securities subsidiary.

As reported in the appendix, most OECD countries allow commercial banks to undertake securities activities in-house, particularly underwriting, dealing, and brokering. A small group of countries (for example, Canada, and more especially Japan and the United States) require that some securities activities be undertaken outside the bank. Canada and Japan allow the development of bank-parent-company and holding-company structures, while the United States, until very recently, permitted only the development of holding-company structures.

The actual U.S. regulation of banks' choice of a corporate structure, for performing the limited securities activities that are permitted, seems to be more restrictive than that which existed prior to Glass-Steagall. Particularly after the enactment of the McFadden Act in 1927, the emphasis was on the activities that could be performed in-house versus those that would have to be undertaken in a unit outside the bank.³² As for the latter ³²At the turn of the century, state banks were free to conduct most investment banking activities. The Comptroller of the Currency, through his interpretation of the "incidental powers" clause of the National Banking Act, allowed national banks to underwrite only securities that they were permitted to own, mainly federal government securities, but later extended this permission to include other corporate securities to level the playing field with state banks. It is unclear when these extensions occurred and which securities were included in them. The McFadden Act clarified national banks' securities powers. Based on it the Comptroller ruled that national banks were allowed to underwrite all debt securities in-house, and that their affiliates or subsidiaries could underwrite both debt and equity securities. Peach (1941) presents a detailed analysis of the securities subsidiaries and affiliates created by banks prior to 1933, including their legal forms. It is unclear, however, how many banks chose the bank-parent-company model and how many chose the holding-company model. For a history of banks' securities activities see, for example, Carosso group of activities, banks could choose to offer them either through a subsidiary (in which case they would adopt the bank-parent-company model) or through a sister affiliate (in which case they would adopt the holding-company model). This limited flexibility was not recovered with the reinterpretation of the "principally engaged" clause of the Glass-Steagall Act, the vehicle used to allow banks to reenter some securities activities in the 1980s. Since then, banks have been required to offer these activities through a sister affiliate within a holding-company structure.

Last year's legislative attempt to repeal Glass-Steagall, the Financial Services Competitiveness Act of 1995, would maintain the requirement that banks offer their securities activities through a sister affiliate within a holding company structure. In the debate over that attempt at repeal, the Fed and the Office of the Comptroller have been in agreement on the expansion of commercial banks' securities powers and on the corporate separateness requirement. They have, however, proposed different ways to implement the separation. The Fed has advocated the holding-company model and the Comptroller the bank-parent-company model. The debate over the location of the securities unit within banks' organizational structure recently moved to the forefront again, because the Office of the Comptroller announced that starting January 1, 1997 it will allow banks under its supervision (national banks) to offer securities services in their subsidiaries.

Part of that debate's prominence is caused by the impact that banks' corporate structure will have in determining which regulatory agency will oversee their securities activities. If these activities are offered by a subsidiary of a bank holding company, they will be supervised and regulated by the Fed. If they are offered by the bank itself or by its own subsidiary, they will be overseen by the bank's regulator—the Fed in the case of a state member bank, the FDIC in the case of a state nonmember bank, and the Office of the Comptroller in the case of a national bank. However, the place where banks locate their securities services has implications reaching far beyond the definition of their regulator.

Is there any fundamental reason to force banks to adopt one particular corporate form

(1970), Perkins (1971), White (1986), or Mote and Kaufman (1989).

instead of allowing them to choose their own organizational structure? Further, if the objective is to implement corporate separateness, that is, to require banks to offer securities activities through a separate unit, is there any reason to prefer the holding-company model over the bank-parent-company model, or vice versa? These issues gain additional importance when we observe that in the countries where banks have more latitude to choose their corporate structure to integrate securities activities with their commercial banking activities, banks generally choose either to undertake securities activities in-house (as, for example, in France, Germany, Italy, the Netherlands, and Switzerland) or to conduct them in a subsidiary of the bank (as in Belgium, Sweden, and the United Kingdom.)³³

A variety of reasons are usually put forward to justify a regulation that requires securities activities to be undertaken outside the banking unit.³⁴ The first of these is the reduction of the potential conflicts of interest claimed to emerge if both activities were undertaken within the same unit. The second is the need to insulate the banking unit (and through it the safety net) from the risks of the securities activities (see Saunders [1988] for an extensive discussion of this issue). The third is the need to eliminate the universal bank's competitive advantage, that is, its ability to cross-subsidize the securities activities because of its access to the safety net (Kwast [1995]). The last of these arguments is that corporate separateness allows for functional regulations, which are easier and less expensive to implement than institutional regulations, (Herring and Santomero [1990]).³⁵

³³For a characterization of the predominant corporate structure chosen by banks to integrate commercial banking activities with securities activities in the G–10 countries, see Cumming and Sweet (1987).

³⁴Empirical research on organizational structures is very limited. Two studies about the period before the passage of Glass–Steagall produce conflicting results. Kroszner and Rajan (1995) conclude that underwriting securities in a unit outside the bank was helpful in reducing conflicts of interest. Puri (1996) concludes that underwriting securities in–house did not lead to more conflicts of interest than conducting them in a separate unit. The results of these studies, however, should be interpreted carefully. As discussed above, the critical issue is the "distance" between the banking unit and the securities unit. This distance depends on the functional relationship existing between the two units and it also depends on the transactions and exchange of information allowed between them.

³⁵Merton (1995) provides a detailed analysis of the issues at stake in implementing functional and in-

Some argue further that part of these objectives can be better achieved in a holding-company set-up than in a bank-parent-company model. The point usually made is that the holding-company structure provides more "distance" between the banking unit and the securities unit. There is a cushion—the holding company—between the two subsidiaries, so that the relationship between them is only indirect. As a result, conflicts of interest are less prone to emerge, the banking subsidiary is more insulated from the risks of the securities subsidiary, and it has less incentive to bail out a sister affiliate than a direct subsidiary (Herring and Santomero [1990]). Moreover, it is frequently argued that the legal doctrine of corporate separateness provides a marginally better insulation of the banking unit in the holding-company model than in the bank-parent-company model (Litan [1985] and Kwast [1995]).

There are serious doubts about some of the benefits claimed to emerge with corporate separateness. First, the financial conglomerate has an incentive to go far beyond its equity investment in the financially distressed unit if it perceives that an appeal to the limited liability clause will make the public downgrade its assessment of the conglomerate or of its other units' debt. Further, as suggested by Wall (1984) and Talley (1985), the conglomerate has an incentive to protect the securities unit in order to avoid casting doubt on the quality of its management.³⁶ As Walter Wriston, former chairman of Citicorp, observes: "It is inconceivable that any major bank would walk away from any subsidiary of its holding company. If your name is on the door, all of your capital funds are going to be behind it in the real world. Lawyers can say you have separation, but the market place is persuasive, and it would not see it that way." ³⁷

stitutional regulations. Another advantage sometimes claimed for corporate separateness is that it makes it easier to implement different regulations for the banking unit and for the securities unit, an important issue for leveling the playing field in an economy where financial conglomerates coexist with independent securities firms (Dale [1992]).

³⁶See FDIC (1987, chapter 6) for several examples in which banking organizations helped financially troubled nonbanking affiliates, some of them involving bank-sponsored real estate investment trusts in the mid–1970s.

³⁷In Financial Institutions Restructuring and Services Act of 1981, Hearings on S. 1686, S. 1703, S.1720

Second, as argued by Flannery (1986) and others, even if there is corporate separateness, the adverse information produced by a unit in financial distress may cause a run on the bank's deposits. The potential for the contagion effect depends on the "distance" between the bank and the unit in financial distress, that is, it depends, among other things, on this units' location within the conglomerate and on how similar are this unit's activities with those offered by the bank.³⁸ The closer these activities are, the more reliable is the noisy signal sent when one of them is in distress. The runs on the Beverly Hills National Bank in 1974, a clear example of a contagion caused by an internal noisy signal, started when it became public that the bank's parent, the Beverly Hills Bancorp, had incurred significant losses in its real estate investment trust. The crisis ended with the sale of the troubled bank to the Wells Fargo bank.³⁹

Third, limited liability does not generally allow the securities unit's creditors (or, for that matter, the creditors of any other unit) to have any claim on the bank's assets. However, there are exceptions to this rule. For example, if the securities unit misled its creditors into thinking that they were dealing with the bank itself, then under the principle of "estoppel" these creditors may have a valid claim on bank's assets (Black, Miller, and Posner [1978]).

In addition to these concerns, it should be noted that the regulation requiring corporate separateness introduces some costs of its own, which tend to increase with the "distance" between the banking and the securities units that it demands. This regulation reduces the economies of scope. It introduces a new series of distortions, such as the agency problems associated with multiple management teams, as well as potential conflicts of interest that could develop if the bank's ownership differs from that of the securities subsidiary. This and S. 1721, before the Senate Committee on Banking, Housing, and Urban Affairs, 97th Congress, 1st Session, Part II, pp. 589–590.

³⁸The market perception of this "distance" will also depend on the policies followed by the conglomerate, the transactions among the units, and the behavior of bank regulatory agencies, particularly on whether they give the impression that they oversee the nonbanking units and the entire financial conglomerate (Cornyn, Hanweck, Rhoades, and Rose [1986] and Chase [1988]).

³⁹See Aharony and Swary (1983) for a discussion of the contagion effects caused by the release of information.

divergence gives managers an opportunity to favor one group of stockholders over another (Edwards [1979] and Saunders [1985a]). Furthermore, such regulation forces banks to incur the costs of developing and operating a more expensive corporate structure. It appears to be less expensive for a bank to undertake securities activities in-house than in an outside unit. It also appears to be less expensive to offer these activities through a subsidiary than through a sister affiliate because of the additional unit—the holding company—required in the latter organizational structure. International evidence seems to confirm this assertion. In countries where banks have more latitude to choose their corporate structure, they either conduct securities activities in-house or in a subsidiary of the bank.

Finally, the way that corporate separateness is implemented changes the bank's insulation from the risks of its securities activities. It also changes the pool of the bank's assets that can be claimed by its creditors. In the bank-parent-company model, the bank's investment in the securities subsidiary is an asset of the bank, which can be used in situations where the bank is in financial trouble for reasons unrelated to its securities activities. However, this is not true of the holding-company model, where the securities subsidiary's capital is an asset of the holding company (not of the bank) and thus is beyond the reach of the bank's creditors.⁴⁰

Were it not for the distortions created by the safety net, in a competitive market the bank would choose the most appropriate corporate structure by trading off the advantages of undertaking securities activities in-house (namely, the economies of scope) with the costs of doing so (namely, the premium the market may impose on some of the bank's services because of potential conflicts of interest). Because these effects vary with the securities activities, some banks would attempt to minimize the potential for such conflicts by separating with Chinese walls some of their in-house activities. Others would choose instead

⁴⁰Regulators in the United States have attempted to introduce this effect in the holding company structure, through the so-called "source of strength" doctrine, according to which the holding company has the duty to act as a source of financial and managerial strength to its banking subsidiary. It remains unclear, however, whether this doctrine can legally be enforced.

to conduct more sensitive securities businesses in a subsidiary of the bank, and others still would go even further by creating a holding company and carrying out securities activities in a sister affiliate of the bank. Under these circumstances, there is no fundamental justification for a regulation limiting banks' choice of corporate structure.

Does the presence of the safety net justify a regulation requiring corporate separateness? Does it justify an even stronger regulation requiring either the holding-company model or the bank-parent-company model? The answer to both questions seems to be a qualified no. Provided that certain measures are in force to limit the moral hazard of the safety net (for example, a credible bank closure rule, the elimination of the "too-big or too-important to fail" possibility, and greater sensitivity of the insurance premium to the bank's risk), a policy that allows banks to choose their corporate structure, eventually making the choice dependent on their capitalization, appears far more appropriate, because it would give banks the opportunity to explore the advantages of various organizational structures.⁴¹

5 Final Remarks

In a competitive environment where financial intermediaries like commercial banks exist because of the liquidity and monitoring services they perform, setting aside the distortions created by the mechanisms that protect them from runs, it seems difficult to argue that these institutions, which are allowed to make risky loans, should not be allowed to offer securities services.

In that environment, it appears that important gains in efficiency and stability could result from combining traditional commercial banking with activities like the underwriting of corporate securities. These gains would come from the enhancement of the bank-firm relationship promoted by that combination, the economies of scope in producing and consuming financial services, and the additional opportunities to diversify. If the major problem

⁴¹See, for example, Kane (1986) and Schwartz (1992) for measures that can be adopted to reduce the risk taking incentives introduced by the safety net.

claimed to emerge with commercial banks offering securities services—conflicts of interest—turns out to be important, a competitive financial market would force banks to take it into account, for example by choosing an appropriate organizational structure.

Do the distortions created by deposit insurance justify a regulation barring depository institutions from the securities business? If not, does it justify a regulation requiring these intermediaries to adopt a particular organizational structure to undertake securities activities? These two questions have been in the center of the debate over the repeal of Glass–Steagall. The research and the evidence, historical and international, reviewed here make a compelling case for answering both questions with a qualified no.

Considering the potential gains in a competitive market from combining traditional commercial banking with securities activities, it would seem desirable to let commercial banks enter the securities business and to give them some latitude in choosing their corporate structure. The problem of the risk-shifting incentives created by deposit insurance should be addressed by adopting mechanisms that curtail these incentives and abolishing policies that augment them. It should not be addressed by introducing prohibitions, like the one against entering the securities business, that affect all banks alike, regardless of pertinent factors as banks' capitalization, that determine their risk-shifting incentives. Moreover, the problem should not be used as the main reason for implementing regulations that require corporate separateness. History has shown us the many limitations of corporate separateness and it has taught us how fragile firewalls can be, particularly when they are most needed—that is, in situations of financial distress.

Appendix: Banks' Securities Activities in the OECD

Table 1 presents the securities activities that "banking-related financial conglomerates" are allowed to offer in the OECD countries.⁴² For the purposes of this appendix (and as defined in Koguchi [1993]), a "banking-related financial conglomerate" is "an equity-related

⁴²This appendix builds on Koguchi (1993).

(excluding holdings for portfolio investment) organic corporate group which offers different types of financial services including traditional commercial-banking services, ... Thus, such a conglomerate may consist of: (i) a bank and its subsidiaries; (ii) a bank and its affiliates related through substantial cross-shareholdings; (iii) a bank and its affiliates related through a holding company; or (iv) combinations of these forms."

The following definitions should be taken into account when reading table 1: First, Bank means that "the service is permitted for a banking-related conglomerate, and the bank in the conglomerate can directly offer the service." Second, Aff.-Sub. means that "the service is permitted, but the bank in the conglomerate cannot directly offer the service; its affiliate or subsidiary can offer the service." There is no information distinguishing a sister affiliate from a direct subsidiary. Third, Not Allowed means that "the service is not permitted for a banking-related conglomerate." Finally, in some cases there are important qualifications to these definitions. When this happens, a footnote to the table explains the qualification. Further, due to the level of aggregation and the multitude of issues and details that are specific to each country, table 1 should be seen as a synopsis—rather than a comprehensive inventory—of the regulations on banks' securities activities.

Among other things, the evidence contained in that table shows that: First, no country completely separates commercial banking and the securities business. Second, regulations are most flexible regarding the provision of financial advisory services. Third, fund management is where regulations are most restrictive. Finally, a majority of the OECD countries allow banks to engage directly in securities underwriting, dealing, and brokering. Concerning banks' choice of where to undertake these activities within their organizational structure, the countries with most restrictive regulations are Greece, Japan, and Norway, followed closely by the United States and Canada.

Table 1	Regulations on the Securities Activities of					
	Banking-Related Financial Conglomerates					
Country	Securities			Fund Management		Financial
	Underwriting	Dealing	Brokering	Trust F.	Pension F.	Advisory
Australia	Bank	Bank	Bank	AffSub.	AffSub.	Bank
Austria	Bank	Bank	Bank	Bank	Bank	Bank
Belgium	Bank	Bank a	Bank ^a	AffSub.	AffSub.	Bank
Canada	${ m AffSub.}^b$	${\rm Aff.\text{-}Sub.}^b$	${\rm Aff.\text{-}Sub.}^b$	AffSub.	Bank	Bank
Denmark	Bank	Bank	AffSub.	AffSub.	AffSub.	Bank
Finland	Bank	Bank	Bank	AffSub.	AffSub.	Bank
France	Bank	Bank	AffSub.	AffSub.	AffSub.	Bank
Germany ^c	Bank	Bank	Bank	AffSub.	Bank	Bank
Greece	AffSub.	AffSub.	AffSub.	AffSub.	Not Allowed	Allowed d
Ireland	Bank	Bank	AffSub.	Bank	Bank	Bank
Italy	Bank	Bank a	Bank ^a	AffSub.	_	Bank
$\mathrm{Japan}^{\ e}$	$\mathrm{AffSub.}^f$	${\rm Aff.\text{-}Sub.}^f$	${\rm Aff.\text{-}Sub.}^f$	Not Allowed	Not Allowed	AffSub.
Luxembourg	Bank	Bank	Bank	Bank	Bank	Bank
Netherlands	Bank	Bank	Bank	Bank	AffSub.	Bank
New Zealand	Bank	Bank	Bank	Bank	Bank	Bank
Norway	AffSub.	AffSub.	AffSub.	AffSub.	AffSub.	AffSub.
Portugal	Bank	Bank a	Bank ^a	Bank g	AffSub.	Bank
Spain	Bank	Bank	Bank	Not Reg. ^h	AffSub.	Bank
Sweden	Bank	Bank	Bank	AffSub.	AffSub.	Bank
Switzerland i	Bank	Bank	Bank	Bank	Bank	Bank
Turkey	Bank	Bank	Bank	Bank	Bank	Bank
UK	Bank	Bank	Bank	Bank	Bank	Bank
US	$\mathrm{AffSub.}^f$	$\mathrm{AffSub.}^f$	Bank	Bank	Bank	Bank

For securities dealing and brokering, a subsidiary or affiliate is required for transactions in stock exchanges.

^d This service is permitted but it is strictly limited.

^g Banks are allowed to offer the close-end trust fund service directly.

 h Trust funds are not regulated.

Banks may provide a limited number of these activities directly. Commercial banks include private banks, savings banks, and cooperatives, but not specialized credit institutions subject to special restrictions.

In 1993, a new law was implemented allowing banks to establish securities subsidiaries and trust banking subsidiaries, but prohibiting the former from engaging in underwriting, dealing, and brokering in equities. This law also allows securities firms to establish subsidiaries that engage in banking and trust businesses.

This service is permitted through a subsidiary or an affiliate on a limited basis.

 $^{^{}i}$ Banks are defined as institutions covered by the Banking Law.

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