Bank Organizational Form and the Risks of Expanded Activities

Gary Whalen

Office of the Comptroller of the Currency Economics Working Paper 97-1 January 1997

Abstract: Debate about the effects of permitting U.S. commercial banks to expand their range of activities has intensified in recent years. Opponents worry that banks, with access to a federal safety net, will use any new opportunities to take greater risks and increase their likelihood of failure at possible cost to the FDIC and taxpayers. Opponents also fear that the safety net might give banks a competitive advantage relative to nonbank rivals. Others argue that the risks of expanded activities are overstated and increased risks associated with them can be mitigated by constraints on organizational form and firewalls.

The purpose of this paper is to review the arguments and evidence on two critical questions: Are constraints on bank organizational form, in conjunction with firewalls, needed to shield banks, the FDIC, and taxpayers from any additional risks associated with expanded activities? If so, what is the best structural option -- the universal bank, the bank subsidiary, or the holding company?

The available evidence does not clearly show that any one of the three basic models is distinctly superior to the others. The two alternatives with subsidiaries appear to afford greater insulation, and so have a slight advantage over the universal bank model. Both types of subsidiary models appear capable of insulating banks from any risks associated with expanded activities and limiting the leakage of any subsidy to nonbank subsidiaries and affiliates. But each of the subsidiary structures has advantages and disadvantages, and so it is not possible to conclude that either subsidiary structure dominates the other.

The opinions expressed in this paper are those of the author and do not necessarily represent those of the Office of the Comptroller of the Currency, the Department of the Treasury, or their staffs. The author thanks Greg Orfalea for editorial assistance.

Please address any comments to the author who is the Deputy Director, Bank Research Division, Office of the Comptroller of the Currency, Washington, DC 20219. Phone: (202) 874-5250.

Questions regarding subscriptions to the OCC Economics Working Paper Series should be addressed to the Communications Division, Comptroller of the Currency, Washington, DC 20219. Phone: (202) 874-4700.

I. Introduction

Debate about the effects of permitting U.S. commercial banks to expand their range of activities--particularly in securities underwriting and insurance--has intensified in recent years. Proponents of expanded powers emphasize potential benefits for banks including gains in efficiency from the realization of economies of scope, risk reduction through greater diversification, and expanded opportunities to compete for commercial and retail customers as technology and tastes evolve. Presumably, as barriers to entry are removed, greater competition in financial markets will result in more options, lower prices, and greater convenience for customers of bank and nonbank financial companies.

Opponents dwell on potential problems associated with expanded powers for banks.

Perhaps the most important potential drawbacks stem from the existence and possible extension of the government safety net in an environment of broader bank powers. The argument goes as follows:

U.S. banks currently have access to deposit insurance, the payments system, and the discount window. This access, most notably, mispriced deposit insurance, gives banks a funding advantage over nonbanks and creates incentives for banks to take on greater risk.

Banking organizations allowed to engage in nontraditional activities, generally viewed as

¹Some emphasize corporate control benefits if reform permits banking organizations to hold corporate equities in addition to debt claims. See, for example, Pozdena (1989). The support for giving banks this power in the United States is lukewarm at best and so this subject is not discussed here.

inherently riskier than traditional activities, are likely to use this opportunity to take greater risks. Thus, the danger of bank entry into nontraditional activities is that it will increase the likelihood of insolvency for the participating banking organization. This view implies an increased probability of serious, even fatal losses to affiliated banks, and perhaps loss-shifting to the insurance fund or taxpayers.² Access to the safety net might also give banks an unfair competitive advantage over rival nonbank financial firms offering similar products and services. Opponents of expanded powers for banks also worry about conflicts of interest that could arise if banking is combined with securities or other nontraditional activities.³ Others are concerned about possible increased concentration of economic or political power as banks consolidate into larger financial conglomerates.

A critical question in the debate about the merits of expanding bank powers is can constraints on bank organizational form, in conjunction with so-called "firewalls", effectively mitigate any additional risks associated with expanded activities?⁴ Assuming an affirmative

²Even if one accepted this scenario as likely, a mitigating strategy would be bank expansion into nontraditional activities after meaningful safety net reform. Some believe that the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) represented a step in this direction. See, for example, Wall (1993). The extent to which FDICIA reduced problematic incentive effects associated with the safety net is unclear. In any event, further safety net reform (such as a reduction in deposit insurance coverage) is not viewed as likely and so is not discussed in this paper.

³Conflicts of interest are generally viewed with lesser concern because they are unavoidable even in narrowly defined financial firms. There is also evidence (see Benston (1990), Krozner and Rajan (1994), and Puri (1994), for example) that conflicts of interest were not a major problem, even in the twenties and thirties, prior to numerous subsequent, financial market reforms.

⁴In general, firewalls are constraints on intracompany payments (e.g. dividends), lending and asset transfers that attempt to prevent the transfer of risks from nonbank to bank affiliates. They also reduce the odds of the transfer of any safety net-related subsidy from banks to

answer to this question, the next key question is what is the best combination of constraints on organizational form and the appropriate type, number and thickness of firewalls needed to accomplish this job?

At least three distinct organizational models currently exist. At one extreme, traditional commercial banking, investment banking, and other nonbanking activities are combined within a single corporate entity with a bank charter. In this model, commercial banks are free to choose their organizational form and there are no firewalls separating commercial banking and other nonbanking activities.⁵ This approach is generally called, "the universal banking model", and characterizes the financial system in a number of Western European countries.⁶

In an alternative model, organizations with commercial banking charters are required to lodge securities and certain other nonbanking activities in separately incorporated and capitalized subsidiaries of the bank -- the so-called, "bank subsidiary model". This model has been adopted in a number of major countries including Canada and the United Kingdom.⁷

The intended effect of the mandatory bank subsidiary structure, possibly supplemented by some array of firewalls, is to reduce the likelihood that risks taken by subsidiaries are

nonbank affiliates

⁵Thus, banking companies could set up direct subsidiaries, or even a holding company, but are not required to do so.

⁶In their study of the financial structure of the G-10 countries, Cumming and Sweet (1987/88) categorize France, Germany, Italy, the Netherlands and Switzerland as universal banking countries.

⁷Cumming and Sweet, op.cit., also characterize the financial systems of Belgium, Japan, and Sweden as bank subsidiary models.

transmitted to the parent bank. A subsidiary structure can also help to make a multi-product financial firm more transparent to both supervisors and the market. This facilitates supervision and is also consistent with functional regulation of the various subsidiaries.

A third possibility is to require that some set of nonbanking activities be conducted in separate subsidiaries of a holding company that can own one or more commercial banks. This is referred to as the "holding company model". The United States is the only major industrialized country that has adopted such a model. As in the bank subsidiary model, a variety of firewalls can also be imposed to decrease the probability that risk is transferred from either the parent or its nonbanking subsidiaries to any bank affiliates.

The purpose of this paper is to review the arguments and evidence on these two critical questions:

Are constraints on bank organizational form, in conjunction with so-called firewalls, needed to shield banks, the FDIC, and taxpayers from any additional risks associated with expanded activities? If so, what is the preferred structural (organizational form-firewall combination) option? To preview the conclusion, the available evidence does not clearly show that any one of the three basic models is distinctly superior to the others. Each of these options have both pros and cons, and none of the basic structural alternatives by themselves absolutely guarantee that banking organizations and third parties will not be exposed to

⁸These questions and this paper do not explicitly deal with the issue of whether nonbank subsidiaries of a bank or holding company affiliates get any, or the same degree of competitive advantage because of safety net-related subsidies enjoyed by affiliated banks. But since the same sorts of devices--firewalls and separate corporate entities--are used to prevent both the transmission of risk and the leakage of safety net-related subsidies, the discussion in the paper provides insight on the subsidy issue.

additional risks as a result of expanded powers. Given concerns about the incentives created by the safety net in the United States, the two models with subsidiaries have a slight advantage over the universal bank model. Both types of subsidiary structures appear capable of insulating banks from the risks of nonbanking activities, given effective supervision. Each has advantages and disadvantages. However, given the number and degree of uncertainties involved, it is difficult to conclude that either subsidiary structure dominates the other.

The paper is organized as follows. The following section reviews arguments and evidence on the risks associated with nontraditional activities. The next section discusses whether organizational forms and firewalls are capable of insulating banks from risks associated with nonbanking activities. This is followed by a more detailed analysis of the benefits and costs of the two subsidiary structures. The paper ends with a summary and conclusions.

II. Expanded Powers and Bank Risk

The potential burden on bank organizational structure and firewalls posed by any relaxation of activity constraints is directly related to the likelihood that banks can and will use this opportunity to significantly increase their risk of failure. It is not clear that this will be the case.

There is no reason to expect entry into expanded activities will increase the incentives for banking organizations to take risks. In general, the risk-preferences of the managers of firms are exogenous with respect to the set of activities in which the firms may engage. The

risk preferences of managers, and the expected returns and the risks of potential activities, determine the configuration of the firm's activities, rather than the reverse. In banking, however, the incentives for bank managers to take risks is influenced by access to a possibly mispriced federal safety net. But this incentive affects their propensity to take risks in all of the activities in which they are legally permitted to engage, including traditional banking activities.

Bank entry into nontraditional activities could result in greater risk-taking if it enhances bank managers' ability to take risks beyond those inherent in the standard set of banking activities, but this is unlikely to be the case. The record demonstrates that bank managers have taken large amounts of risk through portfolio lending, a most traditional activity. Losses on standard types of loans are responsible for the lion's share of all bank failures in both the United States and foreign countries where banks are permitted to engage in more exotic, presumably riskier, activities.¹⁰ In fact, there is some evidence that portfolio lending is riskier than equity underwriting.¹¹ Similarly, currently permissible derivatives transactions probably allow bank managers to take risk levels approximating those attainable in any array of currently prohibited activities.

Having said all this, it is still possible that entry into nontraditional areas might result

⁹As noted above, the extent of this incentive post-FDICIA is not clear.

¹⁰For a discussion of the causes of U.S. bank failures, see Calomiris (1993). Davis (1992) provides case studies of financial crises in the United States and abroad. The primary cause for the crises outside the United States appears to be declines in the quality of loans, most particularly, real estate loans.

¹¹Both Saunders and Walter (1994) and Giddy (1988) report evidence that equity issues generally appear to be under-priced by underwriters.

in increased risks to banking organizations. Banks might encounter unexpected difficulties in nontraditional businesses due to lack of experience. Alternatively, bank supervisors might be less able to effectively assess, monitor, and constrain the extent of risk being taken by banks in nontraditional areas. However, there are ways to reduce the severity of these types of problems. In particular, banks engaging in potentially risky activities can be required to use separate subsidiaries or affiliates with firewalls in place. Banks can also be required to hold capital commensurate with the risks assumed in nontraditional activities. If necessary, additional, more frequent disclosure, either to supervisors or the market, can also be required.

Theoretically, it is possible that combining nonbanking and commercial banking activities in a single organization can reduce, or at least have a neutral impact on the risk that the firm will fail. That is, banks might benefit from diversification. Whether or not combining some nonbanking activity with a traditional commercial banking operation will lower the organization's risk of failure depends upon the variability and covariability of the returns in the various activities, the proportion of the firm's resources devoted to each, and the firm's leverage. For example, the returns obtainable in securities activities might be both higher and more variable than they are in commercial banking. But, depending on the precise magnitudes of the factors outlined above, combining the two activities could result in an organization with both higher expected and more variable returns, but with no material

¹²See the discussion in Wall (1987), for example, for the explicit derivation of a mathematical representation of this statement.

change in its likelihood of failure.¹³

Insight on the issue of the likely risk impact of expanded nonbanking activities can be gained from a number of sources. One source is the studies that have examined the returns and risks associated with the nonbanking activities currently permissible for banks and bank holding companies. Recent studies indicate that the typical degree of involvement of holding companies in nonbanking activities continues to be relatively low. A recent study reported that in 1993, nonbanking assets comprised only 8 percent of consolidated bank holding company assets. A small number of large companies account for a large proportion of overall nonbanking activity. In 1988, the 10 largest holding companies accounted for almost two-thirds of total net nonbanking assets. Most companies involved limit the type of nonbanking activities in which they engage. For example, in 1993, 35 percent of the holding

¹³This could be the case if the returns of the two activities were negatively correlated, if the amount of the firm's resources devoted to the activity with higher return variability was relatively small, if the differences in the variability of activity returns were not substantial, or if the firm reduced its leverage after the activities were combined.

¹⁴See for example, Brewer, et.al. (1988), Boyd and Graham (1986), Gunther, Zea and Zograf (1994), Kwast (1989), Liang and Savage (1990), Wall, Reichert and Mohanty (1993), and Wall (1987).

¹⁵Interestingly, in White (1986), there is evidence that this was also true of banks with securities subsidiaries in the thirties. He reports that the maximum percentage of combined capital in a securities affiliate for the banks in his sample was roughly 28 percent. For the two largest banks it was roughly 23 percent. The average proportion was approximately 10 percent.

¹⁶See Gunther, et.al., (1994).

¹⁷See Liang and Savage (1990).

companies engaged in nonbanking activities were involved in only one type of activity. 18

In general, the average aggregate profitability of nonbanking subsidiaries of bank holding companies has been roughly the same as that of their bank subsidiaries. But in a number of recent years, the aggregate profitability of the nonbanking activities of holding companies has exceeded that of their bank subsidiaries. These studies indicate that average returns earned over time differ depending on the type of nonbanking activity. The returns of securities activities, for example, are substantially more volatile than those in banking, but are considerably higher as well. Some studies also find evidence that the experience of holding companies in particular nonbanking lines of business varies is not uniform. The implication of this finding is that the performance effects of particular activities are company-specific, possibly due to differences in management quality.

Research generally does not support the notion that holding companies have significantly increased or decreased their risk exposure (either the variability of their returns or their risk of failure) through their involvement in currently permissible nonbanking activities. There are a number of explanations for this. One is that, with the exception of the recent authorization of securities underwriting through Section 20 holding company subsidiaries, commercial banks can directly engage in virtually all of the nonbanking activities permissible for bank holding companies. Also, the scale of holding company nonbanking activities is typically small. However, the involvement in this set of nonbanking

¹⁸Gunther, et.al., op.cit.

¹⁹For example, Gunther, Zea and Zograf, op.cit., report that the aggregate profitability of the nonbanking operations of bank holding companies exceeded consolidated holding company profitability in five of the eight years over the 1986-1993 period.

activities has permitted some holding companies to lower their risk, over some periods of time ²⁰

An examination of bank failures in the United States over the last twenty years demonstrates that bank failure due to involvement in nonbanking activities is extremely rare. Banks typically fail as a result of deterioration in the quality of assets that traditional banks are permitted to hold.²¹ In fact, in recent years many banking organizations have raised capital to support ailing banking units by selling nonbank subsidiaries.

The evidence from the pre-Glass-Steagall period in the United States, when banks were permitted to operate securities affiliates not subject to the sorts of regulation in place today, supports the view that involvement in securities activities does not necessarily increase the risk of affiliated banks. In a careful and interesting study done in 1986, White found that the failure rate of national banks with securities operations was significantly lower than the failure rate for all national banks.²² The former was just 7.6 percent over the 1930-33 period while the latter was 26.3 percent. Closer scrutiny of the failed national banks with securities operations suggested that their failures were not primarily attributable to securities activities.²³ White also estimated a bank failure prediction model and included two dummy variables for national bank involvement in securities activities. He found that the coefficient on the

²⁰This is the conclusion in Wall (1987), for example.

²¹This may not be the case in the future as banks become involved in activities entailing more interest rate, market, and other less traditional types of risk.

²²See White (1986).

²³This finding is confirmed in Kaufman and Mote (1988) and Benston (1990).

dummy variable indicating a bond department was insignificant, and that the coefficient on a securities affiliate dummy was negative and significant, indicating that banks with such affiliates had a lower probability of failure. He also found little correlation between the earnings of banks and their securities affiliates. Careful studies by Calomiris and others attribute the Depression-era bank failures in the United States to insufficient bank diversification stemming from restrictions on geographic expansion.²⁴

Further evidence of the impact of expanded activities on bank risk in the United States can be gained from observing the performance of U.S. banks abroad. U.S. banks are permitted to engage in securities underwriting and other domestically prohibited activities through overseas affiliates. While there have been instances where these operations generated losses, these activities do not appear to have substantially increased the riskiness of these institutions.

Similarly, there is no strong evidence that the combination of commercial banking, investment banking, and insurance in the universal banks and financial conglomerates operating in Western Europe has increased the likelihood that such institutions will fail, even in the absence of firewalls. As in the United States, bank failures appear to stem largely from involvement in traditional banking activities. In fact, private market financial ratings of universal banks have generally been above those of less diversified U.S. commercial banking organizations.

Additional evidence concerning the risk impact of expanded activities comes from studies that examine the hypothetical risk-return effects of combining commercial banking

²⁴See Calomiris (1993).

firms with firms from industries that banks are not currently permitted to enter.²⁵ These studies look both at pair-wise combinations of bank holding companies and other types of nonbanking entities and efficient portfolios--hypothetical constructs consisting of varying numbers of industry groups that yield the highest return for given levels of return variability. In general, these studies indicate that bank entry into a variety of nontraditional activities, particularly insurance, could lower risk. These studies do not generally find that combining banking and securities activities will lower the risk of banking organizations. An exception is the recent study by Wall, Reichert and Mohanty (1993) that finds that such a combination reduced risk in the 1981-1989 period, but only in pair-wise mergers. In fact, this study finds greater scope for diversification than that reported in most previous work. These sorts of studies generally find that banking-securities combinations do not significantly increase risk, if securities activities do not constitute an appreciable proportion of the combined enterprise. But the results of these studies are somewhat sensitive to the types of combinations assumed and the time period over which the means and variability of the industry returns are calculated.

III. The Role of Organizational Form and Firewalls

The available evidence does not clearly demonstrate that bank entry into additional nonbanking activities will inevitably increase the riskiness of banking organizations, even in

²⁵For a recent example and a literature review of similar studies, see Wall, Reichert and Mohanty (1993). See also Boyd and Graham (1988), Litan (1985), and Boyd, Graham and Hewitt (1993).

the absence of constraints on bank organizational form and firewalls. This assessment of the evidence is buttressed by the widespread adoption and satisfactory performance of the universal banking model, with minimal firewalls, in Europe.²⁶ The alleged problems associated with financial conglomerates are not readily apparent in these countries. However, since the evidence does not preclude the possibility that expanded activities could facilitate risk-taking, at least by some banks, the universal banking model is typically viewed as unacceptable in the United States.²⁷ This leads proponents of expanded powers to argue for one or the other of the two subsidiary models with some set of firewalls in place.

Both subsidiary structures, in conjunction with firewalls, are designed to protect insured depositories from the presumably greater risks associated with nonbanking activities such as securities underwriting. Both rely on the notion of corporate separateness to legally insulate the bank from nonbank affiliates or subsidiaries.

In essence, legal separateness requires that banking organizations take a series of actions to demonstrate that the bank and nonbank affiliates are truly distinct companies.²⁸

These actions include keeping separate accounting records, holding separate board meetings, maintaining some separateness of employees, officers, and directors and some separateness of facilities, avoiding actions that convey the impression that the bank is liable for the debts of the nonbank affiliate or that the liabilities of the nonbank entity are insured obligations, and

²⁶Universal banks in some countries (Germany, for example) are required to conduct certain operations (mortgage banking and insurance) in separate bank subsidiaries.

²⁷The large financial bill associated with the thrift crisis, which some believe was increased by activity deregulation, aggravates these concerns.

²⁸These steps are detailed in Chase (1988) and the FDIC (1992).

ensuring that the nonbank affiliates are adequately capitalized. If these conventions are followed, subsidiaries are generally viewed as legally separate from their parent company and any corporate affiliates. Risks, then, to the parent and bank co-affiliates of any nonbank affiliate are legally limited to any equity investment in it, or losses on outstanding loans to it.

In either subsidiary model, the parent company directly benefits from profits earned at the subsidiary. This point illustrates an important difference between the two models. A bank with nonbanking activities lodged in a direct bank subsidiary reaps the profits and bears the losses (depending on its equity stake and credit extended) associated with these activities. A bank owned by a holding company with nonbank affiliates is not directly exposed to nonbank losses, but may not benefit from any profits earned.²⁹

In general, firewalls constrain the ability of banking organizations to transfer risks from nonbank to bank affiliates. Two examples are Sections 23A and 23B of the Federal Reserve Act, which impose limits on the type, extent, and terms of loans to, and asset purchases from, nonbank affiliates by banks in a holding company. Banks may lend 10 percent of their capital plus surplus to a single affiliate, and 20 percent to all affiliates combined. The loans generally must be collateralized. Purchases of low quality assets are prohibited. Inter-affiliate transactions must have terms consistent with "arms length" dealing, and banks cannot indicate that they are responsible for the obligations of affiliates. Holding companies must report inter-affiliate transactions quarterly.

These sorts of firewalls limit, but do not preclude, funds flows between banks and

²⁹It could benefit indirectly if some amount of profits is channeled to it through the parent.

nonbank affiliates. Thus, they are not designed to prevent all risk shifting, only the shifting of undue risk from nonbank to insured affiliates.³⁰ Additional, or "thicker" firewalls can decrease the likelihood that risk is shifted from nonbank activities to banks. But they also make any firewalled activity more costly and less attractive to banks.

A number of observers claim that reliance on separate subsidiaries, particularly bank subsidiaries, and firewalls are unlikely to provide sufficient protection from the risks associated with nontraditional activities.³¹ These observers advance two different arguments in support of this position. First, they cite evidence that banking companies attempt to operate their organizations as integrated entities, regardless of their nominal organizational structure.³² For this reason, and because of the importance of reputation in the financial services industry, they expect parent holding companies to invariably and successfully breach any firewalls should a nonbanking affiliate encounter financial difficulties.³³ As a result, they believe risks taken by nonbanking affiliates are inevitably transmitted to the parent or affiliate banks.

Second, these observers believe that market participants cannot or do not form

³⁰Proponents of "narrow" banking do favor totally leakproof firewalls between the narrow bank and any related corporate entities. For a discussion of the potential merits of narrow banks in financial conglomerates, see Pierce (1991).

³¹See, for example, the work by Cornyn, et.al. (1986).

³²For evidence that holding companies tend to operate as integrated entities and that integration enhances performance see Whalen (1981/82) and Whalen (1983), respectively.

³³Interestingly, some proponents of this view argue in favor of the holding company model, claiming its superior insulating capability relative to the two alternative structural models.

accurate estimates of the financial condition of separate corporate entities in a bank or holding company group. As a result, evidence that a nonbank affiliate is in trouble could precipitate runs at, or even the insolvency of an otherwise healthy, affiliated bank. This contagion could reflect either revised assessments of the financial condition of the bank because the market assumes a common management team or operating philosophy, or the expectation that the resources of the bank might be dissipated in an attempt to rescue the nonbank affiliate.

While it is true that banking companies seek to operate as integrated entities, the intended purpose of requiring a subsidiary structure and imposing firewalls is to reduce or impede organizational integration. But, as noted above, these impediments shouldn't be expected to prevent the transmission of all risk from nonbanking affiliates to the insured portion of the company. They should be viewed as attempts to reduce the transmission of undue risk -- risk sufficient to cause the bank to fail. Viewed this way, the available evidence suggests that 23A- and 23B-type firewalls are effective, despite assertions to the contrary.³⁴

Several past cases of risk transmission from nonbank entities to related holding company banks are summarized in an appendix to this paper. An analysis of these cases (and similar cases not included) indicates that instances of risk transmission from nonbank entities to banks have been quite rare. Nonbanking activities have rarely resulted in serious problems or the failure of affiliated banks. One of the few, relatively recent examples is the failure of

³⁴For one of the few studies examining intracompany funds flows within bank holding companies, see Rose and Talley (1984). They find a general tendency for a net flow of funds from nonbank affiliates and parent companies to bank affiliates. They also find evidence that funds flows from banks to the parent and nonbank affiliates are well below the constraints specified in Section 23A and attribute this finding to the existence of this firewall. Several observers (see Huertas (1986), for example) have noted one obvious gap in Section 23A. Daylight overdrafts are not covered.

Hamilton National Bank in 1974. Most of the cases of risk transmission are concentrated in the mid-seventies and stem from declines in real estate values at this time rather than involvement in exotic nonbanking activities. Other instances of risk transmission reflect supervisory pressure on holding companies to extend aid to affiliates. A considerable proportion of these cases (the REIT cases, for example) predate Section 23B restrictions enacted in 1987 which basically require all transactions with affiliates to be at "arms length" and preclude sales of "problem" assets from nonbanking subsidiaries to bank affiliates on terms detrimental to the latter. Most of the cases also predate the prompt corrective action provisions of FDICIA, which include a provision authorizing supervisors to order divestiture of nonbank affiliates if they are deemed to pose a risk to troubled banks. In short, the available evidence suggests that subsidiary structures and firewalls are capable of insulating banks from material increases in risk stemming from nonbanking activities.³⁵

Instances of psychological contagion stemming from problems evident at nonbank affiliates are very rare. One of the few cases -- Beverly Hills National Bank -- is summarized in the appendix. There is evidence indicating that market participants can and do differentiate related corporate entities on the basis of risk. For example, the short term debt ratings of parent bank holding companies typically differ from those of their banking units.³⁶ In the past, there have also been several instances when one or more bank subsidiaries of bank

³⁵Herring (1994) concludes that the BCCI case illustrates that corporate structure matters. In the Tripartite Group (1995), the effectiveness of the approach to supervising U.S. securities firms, which relies on the concept of corporate separateness, is noted.

³⁶Huertas (1986) includes more than a dozen examples. The rating differences are typically only a single notch.

holding companies failed while others did not.³⁷ Separateness-promoting actions by banking organizations and meaningful disclosure facilitate informed risk assessment by the market and reduce the threat of contagion. Access to the discount window should allow any truly solvent bank to withstand temporary liquidity pressures associated with purely psychological contagion.

There may be differences, however, between the potential and realized insulation afforded by a subsidiary structure and firewalls. The performance of bank supervisors influences the degree of insulation achieved in several ways. The promised benefits of the subsidiary structures only materialize if supervisors make timely and accurate risk assessments and act in the appropriate manner when it is called for. In particular, the actions and pronouncements of supervisors significantly affect the behavior of bank management and the market. The ability of supervisors to detect proscribed funds flows, and the nature of any penalties meted out for firewall violations affect the likelihood of major breaches in the future. Supervisory actions shape the market's perception of the risk insulation afforded by corporate separateness and firewalls and also influence the incentives of market participants to be concerned about the risks being taken by the bank and nonbank entities comprising a particular banking group.³⁸ If bank supervisors state that corporate separateness and firewalls

³⁷Two such cases are Hawkeye Bancorporation and MCORP in the late eighties.

³⁸Abken (1994) provides an illustrative example. Securities firms set up unregistered securities subsidiaries to do OTC derivatives transactions. But counterparties were reluctant to deal with these subsidiaries because they viewed them as insulated from other affiliates. Some firms voluntarily restructured these subsidiaries as "enhanced derivatives products companies" and capitalized these subsidiaries at levels to obtain credit risk ratings above those of the parent company.

are a sham, and take actions consistent with this position, or encourage banking companies to provide aid to troubled affiliates or unrelated companies in excess of their obligations, they might actually increase the likelihood of contagion stemming from the financial distress of nonbank affiliates. If bank supervisors treat the banking group as an integrated entity and create the impression that they are supervising and regulating the entire organization, market discipline on the nonbank affiliates may be reduced, creating moral hazard.³⁹ Obviously, alternative courses of supervisory actions could enhance insulation and reduce the threat of contagion. It is fair to say that in the past, supervisory signals to the market have been mixed and have probably tended to diminish the insulation afforded by corporate separateness and firewalls.

Some observers believe that several provisions of FDICIA should result in improvements in supervision going forward, and reduce the probability that access to the safety net will result in excessive bank risk-taking in either traditional or nontraditional areas. 40 Section 131 of the law requires supervisors to act to minimize losses to the insurance fund and mandates a system of prompt corrective supervisory action. These provisions link the intensity of supervision to an institution's capital position and establish an explicit closure rule. Section 131 also facilitates supervisory actions to limit risk-taking and encourage remedial actions by bank management. This creates incentives for banks to maintain higher capital, increasing protection to the FDIC. Other provisions generally require regulators to

³⁹This possibility is discussed in the Tripartite Group (1995). Herring (1994) notes that this was a problem in the BCCI case.

⁴⁰For a more extensive discussion of this possibility see, for example, Wall (1993).

close institutions when their capital ratio falls below 2 percent. Supervisors can make exceptions to this rule but must justify and document their reasons. Ideally, the provisions of Section 131 should reduce the likelihood and costs of bank failure.

Section 141 of FDICIA requires the FDIC to resolve failures at the lowest possible cost. In essence, this section reduces the likelihood that the FDIC will protect depositors and creditors who are not insured de jure, enhancing market discipline and reducing moral hazard incentives. The FDIC can make exceptions on systemic risk grounds. However, unlike the pre-FDICIA situation, use of an exception requires a broad supervisory-Treasury consensus, documentation, and repayment of any loss by the industry through a special assessment.

Section 142 of FDICIA addresses discount window lending policies of the Federal Reserve. FDICIA does not alter the ability of clearly solvent institutions to access the Fed's discount window. Section 142 does impose limits on the ability of the Fed to lend to undercapitalized institutions (it cannot lend more than 60 days out of a 120-day period) unless either the appropriate banking agency or the Federal Reserve certifies that the institution is "viable". This reduces the likelihood that uninsured depositors escape losses when a bank fails and should reduce incentives for moral hazard behavior.

Section 301 imposes restrictions on the use of brokered deposits. This part of FDICIA required the FDIC to impose restrictions on rates offered and access to brokered deposits by banks that are not well capitalized. The aim of this section is to prevent banks with low capital from taking on increased risk using insured deposits.

Section 305 directs supervisors to adjust risk-based capital requirements for a variety of non-credit risks, most notably interest rate risk. These adjustments should reduce the

probability and cost of failure.

Section 302 requires the FDIC to establish a system of risk-based deposit insurance premiums. The intent is to link deposit insurance assessments to the risks of the insured institution. This provision should reduce any subsidy to high risk banks due to the method of deposit insurance pricing and should constrain risk-taking.

IV. The Bank Subsidiary Model vs. the Holding Company Model

A number of factors should be considered in making judgments about which structural model is most appropriate for the U.S. banking system in an environment of expanded powers. First, it is important to consider the impact of alternative structures on regulators' ability to assess, monitor and control the riskiness of insured depositories in large financial conglomerates. This determination hinges on one's view of the nature of the risks inherent in specific nonbanking activities, and whether or not it is possible to insulate insured depositories from these risks. The impact of proposed structures on efficiency must also be considered. Ideally, regulated entities should be able to operate with a degree of efficiency approximating that of suppliers of substitutes. The equity impacts of any proposed change in structure need to be weighed. U.S. banking organizations should not be placed at a significant competitive disadvantage relative to foreign competitors either at home or abroad. In addition, small U.S. banks should not be disadvantaged relative to large U.S. banks. The

compatibility of any proposed structure with the present system of laws and regulations applicable to banks is also a relevant factor (e.g. bankruptcy law, "corporate separateness", etc.). Making new laws and substantial changes in regulations takes considerable time. Thus, altering the existing system may be preferable to starting from scratch. The need for changes in the current regulatory framework should also be considered (i.e. the role of the states and the Federal Reserve, etc.).

A preference for the two subsidiary models implies a belief in one or more of the following: that nonbanking activities tend to be somewhat riskier than traditional activities and banks are likely to increase their risk of failure if they engage in them; that it is somewhat difficult for supervisors to effectively assess, monitor, and control risk-taking in universal banking organizations; that corporate separateness and firewalls provide some measure of risk insulation to banks; or that the costs of the required organizational form and accompanying firewalls in subsidiary structures are not high.

A preference for the holding company model implies a belief in three things: that nonbanking activities are significantly riskier than traditional banking activities; that supervision is unlikely to prevent the transfer of excessive risk to the bank in the bank subsidiary model; and lastly, that the holding company structure and firewalls will not render the expanded activities uneconomic.

The current U.S. approach reflects the view that the holding company model, with Section 23A and 23B firewalls is superior to the bank subsidiary model. Proponents of the holding company cite the advantage of needed greater insulation at roughly the same, or slightly higher cost, than that of the bank subsidiary model. The holding company model also

has the advantage of being the structure currently in place in the United States. The model has a track record; supervisors and bankers are familiar with it. We have less domestic experience with the bank subsidiary model.

A key difference between the two models is that the parent bank in the bank subsidiary model is directly exposed to nonbank subsidiary losses, although this exposure is limited to the amount of its equity in, and loans made to the subsidiary. In the holding company model it is not.⁴¹ On the other hand, the bank in the holding company doesn't directly reap any of the profits earned by nonbank affiliates. Judgments about the significance of this difference depend upon one's assessments of the inherent potential risk impacts of particular nonbank activities and the ability of supervisors to limit any risk transfer, given some specific set of firewalls.

A potential disadvantage of the holding company model is that possibly valuable assets in nonbank subsidiaries of the holding company may be beyond the reach of the FDIC in the event of a bank failure. Since the bank subsidiary structure is similar to the organizational alternatives available to foreign banks, both classes of institutions would be placed on an equal footing if this option were permitted in the United States. A holding company structure is probably more costly for banking organizations than the bank subsidiary option, particularly for smaller banks.⁴²

It is not clear that the holding company form provides greater insulation than the bank

⁴¹The prompt corrective action section of FDICIA permits supervisors to order divestiture of nonbank subsidiaries if they are judged to adversely affect troubled bank affiliates.

⁴²Some support for this view is contained in U.S. General Accounting Office (1987).

subsidiary model because the insulating mechanisms -- firewalls and corporate separateness -- are the same in both cases. The review of the research on the likely impacts of expanded activities on bank risk suggests that any alleged additional insulation, and possibly greater expense associated with holding company subsidiaries, may be unnecessary.⁴³ Some claim that contagion is less likely in a holding company model, but there is no evidence to support this claim.

But hard empirical evidence on many of these issues is lacking. A major reason for the dearth of evidence is that banking companies in the U.S. either do not have both structural options for the full range of permissible nonbank activities, or the structural options entail different sets of regulatory constraints. Another is that banks do not report sufficient data on the performance of some of their direct subsidiaries to permit definitive empirical research on these issues. However, we do have some evidence indicating that when banks have a "clean" structural option (i.e., they face the same set of constraints for all organizational alternatives), they do not uniformly choose a holding company subsidiary. Rather, they tend to place activities in subsidiaries of the bank (or in the bank itself). For example, this was true

⁴³It might also be argued that abandonment of the holding company model, with supervision of the parent and nonbank affiliates, might reduce moral hazard. The Tripartite Group (1995) note the possibility that moral hazard is created if the market believes that an entire financial group, including nonregulated subsidiaries, is supervised or considered too-big-too-fail. This report also indicates a lack of consensus about the need to supervise the parent of a holding company group.

⁴⁴For example, banking companies can operate mortgage banking companies as bank or bank holding company subsidiaries. The former may be subject to any geographic restrictions binding the parent bank and their unconsolidated operating results may not be reported. However, Rose and Rutz (1981) did assemble enough data to examine the relative risk of mortgage banking subsidiaries of banks and bank holding companies. They found the former to be less risky than the latter.

of securities activities in the United States in the pre-Glass-Steagall period.⁴⁵ There is evidence that securities underwriting through bank subsidiaries did not substantially increase bank risk at this time, even though the securities affiliates were substantially less constrained by regulation than would be the case today.

Additional evidence on the sufficiency of the bank subsidiary model comes from an examination of the overseas activities of U.S. banks, which may engage in securities underwriting and other activities not permitted domestically. In general, U.S. banks are not permitted to engage in these activities through their foreign branches but must use either a bank subsidiary, Edge Act Corporation (which may be, and often is a bank subsidiary), or a holding company subsidiary. Roughly 85 percent of the assets of all foreign subsidiaries controlled by U.S. banking organizations are either directly bank-owned or controlled through Edge Act subsidiaries. Thus, there is a marked aversion to the holding company subsidiary form when there is a structural option. To date, there is little evidence that the parent banks have been harmed by these activities.

We also have evidence that virtually every other major industrialized country permits either universal banking or requires that certain activities be placed in subsidiaries of the bank. Interestingly, in the universal banking countries, some banking companies choose to conduct certain activities in subsidiaries of the parent bank rather than in the bank itself. But

⁴⁵In fact, in Kroszner and Rajan (1994), the authors provide evidence that the bank affiliate appeared to dominate the bank department as the locus of securities underwriting by banks prior to 1933. They attribute this trend to the conscious use of a separate underwriting subsidiary to reduce expected conflicts of interest stemming from the combination of commercial and investment banking activities.

⁴⁶See Houpt (1988).

the domestic organizational structures of these banking organizations are much simpler than those seen in the United States where the holding company is required.⁴⁷ Rarely does one see a holding company structure outside the United States.⁴⁸ As noted above, there is no strong evidence that these structures result in excessive risk for banking companies, even though these countries do not generally require firewalls like those used in the United States.⁴⁹

V. Summary and Conclusions

The impact of expansion into additional activities on the riskiness of U.S. banking organizations is difficult to predict. Some activities, particularly insurance, are likely to decrease risk. The risk implications of other activities, notably securities activities, is less clear. Entry into these activities need not increase bank risk. Organizational structure and firewalls, in conjunction with supervision, appear capable of mitigating concerns about increases in risk stemming from broader bank powers.

Both types of subsidiary structures appear capable of insulating banks from the risks of nonbanking activities. The main difference between the two is the more direct exposure under the bank subsidiary model of the bank to the bank subsidiary's earnings. But the likely

⁴⁷In Herring and Santomero (1990), the authors compare the number of domestic subsidiaries of the largest banks in Germany, Switzerland and the U.S. The figures are 35, 30, and 521, respectively.

⁴⁸When it is seen it is most often associated with the combination of banking and commercial firms. See Cumming and Sweet (1987/88), p. 18.

⁴⁹See Cumming and Sweet, op.cit, pp.22-23.

extent and ramifications of such exposure is not clear. Supervision and enforcement of capital requirements should be able to reduce any risk to manageable proportions. The bank subsidiary model has a number of advantages over the holding company approach, including likely lower costs and closer conformance with structural alternatives existing in most developed countries. However, given the number and degree of uncertainties involved, it is difficult to conclude that either subsidiary structure dominates the other.

Appendix

Examples of Risk Transmission From Nonbank Entities to Bank Affiliates in Holding Companies

While some relevant incidents are not included below, most of the major cases are.

1. Beverly Hills Bancorp (December, 1973)

Problems resulted from loans made by the parent holding company to a real estate development company. The loans were funded with commercial paper. Much of the commercial paper was sold to customers of the bank subsidiary, Beverly Hills National Bank. The loans made by the parent were not repaid, so the commercial paper could not be redeemed. Although the bank's exposure to the real estate development company was modest and secured, and the bank was solvent, adverse publicity about the parent's problems resulted in a deposit run. The deposit run culminated in a voluntary merger of the bank in January 1974. The bank did not fail and neither depositors nor the insurance fund suffered any losses..

2. Hamilton Bankshares (February, 1976)

Here bad real estate loans originated by the holding company's mortgage banking subsidiary were the culprit. By mid-1974, the mortgage company had originated more than \$200 million in real estate loans. Some of these loans were participated to bank affiliates of the company. The mortgage company was funded by parent company commercial paper. When the market became concerned about real estate exposure, the parent company had difficulty rolling over its paper. As a result, the mortgage company increased its loan sales to the lead bank, Hamilton National Bank (HNB). In an exam in September 1974, the OCC found \$100 million of real estate loans from the mortgage company, plus an additional \$30 million in loans from other affiliates, on the books of HNB. This exposure represented a violation of Section 23A of the Federal Reserve Act, and the OCC ordered the bank to correct the problem. Ultimately, the bank failed in February 1976 due to its real estate exposure. At the time of failure, 87 percent of the bank's problem loans had been acquired from the mortgage banking subsidiary.

3. The REIT Experience (mid-seventies)

A number of bank holding companies experienced problems as the result of acting as advisers to REITs in the mid-seventies. Most REITs made short-term real estate loans funded with commercial paper. They also had backup credit lines with banks, which did not own the REITs, but typically acted as advisers. When the real estate market soured in the recession period 1973-75, many REITs could no longer roll over their commercial paper and ultimately drew heavily on their bank lines. Because the recession was relatively severe and real estate markets did not quickly recover, REITs had difficulty repaying their bank debt. Among the bank holding companies affected were Chase Manhattan, Hartford National Corporation,

Manufactures Hanover, and First Wisconsin Corporation. Although not legally obligated to do so, many bank holding company advisers took a variety of actions to aid REITs that they advised. However, while REIT-related difficulties did adversely affect the performance of the advising banks and bank holding companies (BHCs) temporarily, they did not result in the failure of any banks. Further, several researchers have noted that BHCs were encouraged to provide aid to REITs by regulators who were concerned that this industry segment might collapse.

4. Drysdale Securities (1982)

Chase Manhattan and Manufacturers Hanover made interest payments on behalf of Drysdale Securities, an unaffiliated bond dealer, when it was unable to do so (\$160 million and \$30 million, respectively). These banks were only intermediaries in Drysdale's repo deals with customers. However, as in the REIT cases, there was supervisory pressure for the banks to take this action (in fact, Chase initially refused to do so) to preserve confidence in the government securities markets. This incident caused no material, permanent damage to the either bank.

5. First Chicago-Banco Denasa (1985)

First Chicago owned 44 percent of Denasa, a Brazilian investment bank with roughly \$180 million in total assets. Due to problems resulting from poor performance of the Brazilian economy, Denasa experienced financial difficulties. Its condition continued to worsen and when the majority owner could not inject additional capital, First Chicago elected to take control and provide the necessary support. The result was a \$131 million loss. This loss did no permanent damage to First Chicago or its lead bank and was reviewed and approved by the Federal Reserve.

6. Continental-First Options (1987)

First Options was structured as a subsidiary of Continental Bank. As a condition of its acquisition, Continental agreed that its dealings with First Options would be bound by the OCC's legal lending limit to unaffiliated companies. When the stock market crashed in October 1987, First Options was in danger of violating its capital requirements. To prevent this, Continental Bank made loans to First Options in violation of the lending limit (the excess amount of loans totaled approximately \$130 million). At the insistence of the OCC, this violation was corrected the next day, when the parent company took out the bank. No losses were sustained as a result of the bank loan to its nonbank subsidiary.

7. Bankamerica-Pacific Horizon Funds (1994).

Bankamerica made voluntary capital contributions totaling \$83 million to two Pacific Horizon Funds advised by the lead bank affiliate. Thus, the funds were not affiliates of the bank or holding company. These contributions were not prohibited by law or regulation and had a minimal impact on the performance of the bank.

References

- Abken, P. "Over-the-Counter Financial Derivatives: Risky Business?" Economic Review Federal Reserve Bank of Atlanta (March/April 1994).
- Benston, G.. The Separation of Commercial and Investment Banking. New York: Oxford University Press (1990).
- Boyd, J., S. Graham and R. Hewitt. "Bank Holding Company Mergers with Nonbank Financial Firms: Effects on the Risk of Failure." Journal of Banking and Finance 17 (1993).
- Boyd, J. and S. Graham. "Risk, Regulation and Bank Holding Company Expansion into Nonbanking." Quarterly Review Federal Reserve Bank of Minneapolis (Spring 1986).
- ______. "The Profitability and Risk Effects of Allowing Bank Holding Companies to Merge with Other Financial Firms: A Simulation Study." Proceedings From a Conference on Bank Structure and Competition. Federal Reserve Bank of Chicago (May 1988).
- Brewer, E., et.al. "Bank Risk from Nonbank Activities". Economic Perspectives Federal Reserve Bank of Chicago (July/August 1988).
- Calomiris, Charles W. "Corporate-Finance Benefits From Universal Banking." Proceedings From a Conference on Bank Structure and Competition. Federal Reserve Bank of Chicago (May 1993).
- . "Regulation, Industrial Structure and Instability in U.S. Banking." in Klausner, M. and L. White, eds. Structural Change in Banking New York University Press: New York (1993).
- Chase, S. "Insulating Banks from Risks Run by Nonbank Affiliates." Proceedings From a Conference on Bank Structure and Competition. Federal Reserve Bank of Chicago, (May 1988).
- Cornyn, Anthony, Gerald Hanweck, Stephen Rhoades, and John Rose. "An Analysis of the Concept of Corporate Separateness in BHC Regulation from an Economic Perspective." Proceedings of a Conference on Bank Structure and Competition. Federal Reserve Bank of Chicago (May 1986).
- Cumming, C. and L. Sweet. "The Financial Structure of the G-10 Countries: How Does the U.S. Compare?" Quarterly Review Federal Reserve Bank of New York (Winter 1987/88).

- Davis, E. Debt, Financial Fragility and Systemic Risk Oxford University Press: New York 1992.
- Federal Deposit Insurance Corporation. "Report to the Congress on the Findings and Recommendations Concerning the "Two-Window" Deposit System Proposal." Washington, D.C.: Federal Deposit Insurance Corporation, 1992.
- Giddy, I. "Is Equity Underwriting Risky for Commercial Bank Affiliates?" in I. Walter, ed. Deregulating Wall Street: Commercial Bank Penetration of the Corporate Securities Market. New York: Wiley (1988).
- Gunther, J., W. Zea and O. Zograf. "Financial Liberalization Changes the Focus of Nonbank Subsidiaries." Financial Industry Issues Federal Reserve Bank of Dallas (Third Quarter 1994).
- Herring, J. "The Collapse of BCCI: Implications for the Supervision of International Banks." in Kaufman, G., ed. Reforming Financial Institutions and Markets in the U.S. Kluwer Academic Publishers: Boston (1994).
- Herring, J. and A. Santomero. "The Corporate Structure of Financial Conglomerates." Journal of Financial Services Research 4 (4) (December 1990).
- Houpt, J. "International Trends for U.S. Banks and Banking Markets." Staff Study 156 Board of Governors of the Federal Reserve System (May 1988).
- Huertas, T., et. al. "The Protection of Deposits from the Risks Assumed by Nonbank Affiliates." Appendix C, Hearings before the Subcommittee of the Committee on Government Operations House of Representatives 99th Congress (December 17, 1986).
- Kaufman, G. and L. Mote. "Bank Securities Activities: Current Position and Future Prospects." Proceedings From a Conference on Bank Structure and Competition Federal Reserve Bank of Chicago (May 1988).
- Kroszner, R. and R. Rajan. "The Role of Firewalls in Universal Banks: Evidence from Commercial Bank Securities Activities before the Glass-Steagall Act." unpublished paper (July 1994).
- . "Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking Before 1933." American Economic Review. 84 (September 1994).
- Kwast, M. "The Impact of Underwriting and Dealing on Bank Returns and Risks." Journal of Banking and Finance 13 (1989).

- Liang, N. and D. Savage. "The Nonbank Activities of Bank Holding Companies." Federal Reserve Bulletin (May 1990).
- Litan, Robert E. "Evaluating and Controlling the Risks of Financial Product Regulation." Yale Journal of Regulation 3 (Fall 1985).
- Pierce, James L. "Can Banks Be Insulated from Nonbank Affiliates?" Governing Banking's Future. Boston: Kluwer Academic Publishers, 1991.
- Pozdena, R. "Do Banks Need Securities Powers?". Weekly Letter Federal Reserve Bank of San Francisco (December 29, 1989).
- Puri, M. "The Long Term Default Performance of Bank Underwritten Security Issues." Journal of Banking and Finance 18 (2) (March 1994).
- Rose, J. and S. Talley. "Financial Transactions Within Holding Companies." Journal of Financial Research VIII (3) (Fall 1984).
- Rose, J. and R. Rutz. "Organizational Form and Risk in Bank-Affiliated Mortgage Companies." Journal of Money, Credit and Banking 13 (3) (August 1981).
- Saunders, A. and I. Walter. Universal Banking in the United States. New York: Oxford University Press (1994).
- Tripartite Group of Securities, Insurance and Bank Regulators. "The Supervision of Financial Conglomerates". (April, 1995).
- U.S. General Accounting Office. Bank Powers: Insulating Banks From the Potential Risks of Expanded Activities. Report to the Chairman, Committee on Banking, Housing and Urban Affairs, U.S. Senate and the Chairman, Committee on Banking, Finance and Urban Affairs, House of Representatives, April 1987.
- Wall, L. "Too-Big-to-Fail After FDICIA." Economic Review Federal Reserve Bank of Atlanta (January/February 1993).
- _____. "Has Bank Holding Companies' Diversification Affected Their Risk of Failure?".

 Journal of Economics and Business 39 (1987).
- Wall, L, A. Reichert and S. Mohanty "Deregulation and the Opportunities for Commercial Bank Diversification." Economic Review: Federal Reserve Bank of Atlanta. (September/October 1993).
- Whalen, G. "The Operational Policies of Multibank Holding Companies." Economic Review Federal Reserve Bank of Cleveland (Winter 1981/82).

_____. "Holding Company Organizational Form and Efficiency." Working Paper 8301 Federal Reserve Bank of Cleveland (1983).

White, E. "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks." Explorations in Economic History (January 1986).