

Firewalls

John R. Walter

*[R]egulations may, no doubt, be considered as in some respects a violation of natural liberty. But those exertions of the natural liberty of a few individuals, which might endanger the security of a whole society, are, and ought to be, restrained by the laws of all governments; of the most free, as well as of the most despotical. The obligation of building **party walls, in order to prevent the communication of fire**, [emphasis added] is a violation of natural liberty exactly of the same kind with the regulations of the banking trade which are here proposed.*

— A discussion of restrictions on bank note issuance in Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*

In his 1776 *Wealth of Nations*, Adam Smith likened the regulation of bank note issues to the construction of walls that prevent the spread of fire. Smith's application of the notion of firewalls to banking seems remarkably prescient, for the subject of firewalls has surfaced repeatedly in recent discussions of proposals to reform banking. In such discussions firewalls refer to statutory and regulatory limitations on financial transactions between banks and their affiliates.¹ These limitations are analogous to fire-proof barriers in that they are meant to prevent the spread of financial difficulties within a banking company. Specifically, the restrictions should prevent a banking company from shifting financial losses from its nonbank subsidiary to its insured bank subsidiary and potentially to the federal deposit insurance fund.

■ This article benefited greatly from suggestions from R. Alton Gilbert (St. Louis Federal Reserve Bank), Marvin Goodfriend, Thomas Humphrey, Anatoli Kuprianov, Jeffrey Lacker, Elaine Mandaleris, James McAfee, Edward S. Prescott, Roy Webb, and John Weinberg. Alex Mendoza provided excellent research assistance. The views expressed herein are the author's and do not necessarily represent the views of the Federal Reserve Bank of Richmond or the Federal Reserve System.

¹ Banking parlance employs the term firewall to refer to other types of restrictions placed between a bank and its affiliates. As discussed in this article, however, firewalls refer only to restrictions on transactions.

The current interest in firewalls has its roots in the banking crisis of the early 1930s. Passed in response to the crisis, the Banking Act of 1933 (also known as the Glass-Steagall Act) prohibited commercial banks from conducting investment banking activities and from being affiliated with investment banking firms.² At the time, congressmen argued that the prohibitions were necessary (1) to prevent deposits from funding stock market speculation, (2) to limit conflicts of interest, and (3) to protect bank safety.

Many bankers, regulators, and legislators now argue that these concerns are unjustified or that they can be mitigated by regulations allowing more integration of commercial and investment banking. During 1995 and 1996, Congress considered various proposals to expand the investment banking activities allowed to banking organizations by reforming the Glass-Steagall Act. Under the proposals, investment banking activities would be conducted in a subsidiary separate from the insured bank, thus isolating the bank from investment banking losses. Besides Glass-Steagall reform, each proposal included firewalls restricting transactions that might be used to shift the investment bank's losses to the affiliated bank. No proposal gathered sufficient support for enactment, but discussions continue on the issues of Glass-Steagall reform and suitable firewalls for expanded activities.

For many students of banking, the subject of firewalls raises certain pertinent questions: What are firewalls? Why do we have them? How are they enforced? In what situations are they useful? This article answers these questions. Section 1 examines firewalls. It discusses their origins and development. It examines Congress's and regulators' stated purposes in establishing such firewalls. When firewalls were initially enacted as a provision of the Glass-Steagall Act, Congress provided little explanation. Later, congressional and regulatory pronouncements clarified the goal of the restrictions: to prevent banks from undertaking transactions with nonbank affiliates on terms disadvantageous to the bank. The concern was that these transactions might be intended to rescue a troubled affiliate or to drain the bank for the benefit of its affiliate. The banking crisis of the early 1930s and later notable bank failures contributed to the concern. One such failure, discussed below, occurred in 1953 when a Dallas company, owning a chain of nonbank loan companies, purchased two small banks and proceeded to unload the loan losses of its nonbanks on these two banks. Both banks were soon closed by auditors. Ultimately, one of the banks failed, requiring FDIC payments to protect its depositors. Congress extended the firewalls in response to the incident. Section 2 describes firewall enforcement by the federal banking supervisors.

² Some authors use the title Glass-Steagall Act to refer only to those sections of the Banking Act of 1933 dealing with the separation of commercial and investment banking. Others use the title to refer to the entire act. I will employ the latter usage.

Incentives that could motivate a banking company to engage in such transactions receive little discussion in the legislative history of the firewalls, in regulatory commentaries on the firewalls, or in articles discussing the firewalls.³ Without a clear understanding of a banking company's incentive, one finds it difficult to justify firewalls or to evaluate firewall recommendations included in reform proposals. Section 3 discusses several situations in which a banking company could profit from shifting a loss from its nonbank subsidiary to its bank subsidiary or from shifting bank income to a nonbank subsidiary. For example, in certain circumstances the banking company could employ such shifts to transfer wealth from the deposit insurance fund to itself. It is precisely in these situations that the firewalls are most likely to be useful.

1. THE FIREWALLS

Firewalls limit, prohibit, or set standards for transactions between banks and affiliated nonbanking companies. Sections 23A and 23B of the Federal Reserve Act prescribe firewalls and were enacted as amendments to the act in 1933 and 1987, respectively.⁴ Also prescribing firewalls are the orders under which the limited-function securities subsidiaries of bank holding companies (so-called "section 20 subsidiaries") operate. In general terms, the firewalls apply to any financial transactions between a bank and its nonbank affiliates, transactions that might be used to shift the bank's resources to the nonbank.⁵ For example, firewalls limit loans made by a bank to its affiliates. Such requirements are intended to limit opportunities for the bank to subsidize its affiliate with lower-priced or more risky loans than made to borrowers not affiliated with the bank.

23A and 23B Requirements

Section 23A limits banks' "covered transactions" with any single affiliate to 10 percent of the capital and surplus of the bank and with all affiliates to no more than 20 percent. Covered transactions include loans to affiliates, investments in securities issued by affiliates, purchases of assets from affiliates, acceptance of securities issued by affiliates as collateral on loans, and guarantees for affiliates (for example issuing letters of credit on behalf of affiliates). Section

³ Articles by Gilbert (1988) and Keeton (1990) discuss firewalls peripherally. Both articles enumerate several incentives that could motivate banking companies to undertake such transactions. Macey and Miller (1992), pp. 376–77, mentions one such incentive but provides little discussion.

⁴ Sections 23A and 23B are found in the United States Code at 12 U.S.C. 371c and 12 U.S.C. 371c-1, respectively.

⁵ Beyond the financial transactions regulated by Sections 23A and 23B, dividend payments and stock repurchases might be used to shift a bank's resources to the parent company and on to the bank's affiliates. Dividend payments and stock repurchases are also restricted, as discussed in Wall (1984), p. 24.

23A prohibits banks from purchasing low-quality assets from affiliates. All covered transactions between a bank and an affiliate must be on terms that are consistent with safe and sound banking. Finally, all loans and guarantees must be secured by collateral equal to at least 100 percent of the value of the loans or guarantees. Transactions between banks within a bank holding company (BHC) are exempt from most firewall restrictions.⁶

Under section 23A, an affiliate of a bank is any company that controls the bank (the parent bank holding company) or is controlled by the parent company or the bank's controlling shareholders. An affiliate also can be any company in which a majority of directors are also directors of the bank or any bank subsidiary of the bank. In addition, companies that a bank sponsors and advises under contract are considered affiliates. Prime examples are the real estate investment trusts (REITs)—closed-end funds investing in real estate—whose association with banks led to bank financial losses in the 1970s (Sinkey 1979, pp. 237–55).

Section 23B expands on 23A by adding that covered transactions must be on arm's-length terms (i.e., on terms comparable to those the bank would normally offer to nonaffiliated companies). Section 23B also requires that arm's-length terms be applied to certain additional transactions that might transfer a bank's resources to its affiliate. These are the sale of securities or assets to an affiliate (section 23A covers purchases of assets from affiliates), any payments to an affiliate, any service transactions, transactions occurring when an affiliate acts as an agent or broker for the bank, or any bank transaction that indirectly benefits an affiliate.

Section 23B contains several outright prohibitions. It prohibits a bank, when acting as a fiduciary, from purchasing securities or other assets from an affiliate. For example, a bank may not purchase assets from affiliates for its trust customers. The prohibition does not apply when the fiduciary agreement specifically allows purchases of affiliate assets.⁷ A bank also is prohibited from purchasing securities underwritten by an affiliate during the underwriting period. Last, section 23B prohibits a bank or its affiliate from in any way indicating that the bank is responsible for obligations of the affiliate.

⁶ Prohibitions on the purchase of low-quality assets and the requirement that transactions be on terms that are consistent with safe and sound banking apply between affiliated banks (12 U.S.C. 371c(d)).

⁷ Unlike most other 23A and 23B limitations intended to prevent transactions detrimental to the bank, this prohibition aims to prevent transactions detrimental to bank trust customers. The apparent concern is with the bank putting the affiliate's, and therefore the BHC's, interest ahead of the trust customer's.

Origins and Development of Sections 23A and 23B⁸

Glass-Steagall Act Firewalls

Section 23A was enacted in 1933 as part of the Glass-Steagall Act. The act was adopted in response to the stock market crash of October 1929 and the banking panic of 1932 and 1933. In 1932 and early 1933 nearly 1,850 banks failed (U.S. Congress, Senate [1933], p. 6). President Roosevelt responded by declaring a nationwide bank holiday in March 1933. In addition to limiting transactions between a bank and its affiliates, the act separated commercial and investment banking, established federal deposit insurance, made changes to the Federal Reserve System, and expanded branching privileges of national banks (Kelly 1985b, p. 41; Macey and Miller 1992, pp. 21–24).

The legislative history of the Glass-Steagall Act indicates that Congress was concerned with perceived conflicts of interest emanating from ties between commercial and investment banking, the use of bank funds for excess stock market speculation, and the adverse effects on bank safety of affiliation with securities firms (Kelly 1985a, p. 231; U.S. Congress, Senate [1933], pp. 1, 6–10). These concerns were met by prohibiting banks from directly performing investment banking functions and prohibiting banks from affiliations with investment banking companies.⁹

The legislative history of the act is fairly clear about Congress's reasons for the separation of commercial and investment banking, but it is unclear about Congress's reasons for the firewalls. The portion of the congressional committee report on the Glass-Steagall Act that specifically mentions transaction restrictions is of little help in determining why Congress believed the restrictions were necessary (see U.S. Congress, Senate [1933], pp. 9–10). The mention of the transaction restrictions occurs within a discussion of problems that can emanate from affiliations between banks and securities firms. Since bank-securities firm affiliations were, for the most part, prohibited by Glass-Steagall, there seems to have been little reason to enact transaction restrictions. Nevertheless, one

⁸ See Table 1 for an outline of the history of firewall legislation and regulation.

⁹ Sections 16, 20, 21, and 32 of the Glass-Steagall Act accomplish the separation of commercial and investment banking. In broad terms, and with some important exceptions, these sections may be outlined as follows:

Section 16 limits the securities-dealing activities of national banks to purchasing or selling securities on the order of their customers. In addition, national banks may not underwrite securities. Section 16 restrictions are applied to state member banks by Glass-Steagall's section 5.

Section 20 prohibits national and state member banks from being affiliated with organizations that are engaged principally in securities activities.

Section 21 prohibits firms engaged in securities activities from accepting deposits. In effect this section extends securities activity restrictions to state nonmember banks. Sections 16, 20, and 32 do not restrict these banks.

Section 32 prohibits any officer, director, or employee interlocks between national or state member banks and any organizations primarily engaged in securities activities. (Fein 1996, sect. 2.01)

Table 1 Firewalls' Legislative and Regulatory Development and Their Requirements

Banking Act of 1933 (also known as the Glass-Steagall Act)

Amended the Federal Reserve Act to add section 23A, which contained firewalls limiting transactions between Federal Reserve member banks and their affiliates. Briefly, 23A included the following restrictions:

- Limited to a total of 10 percent of bank capital any of the following transactions: loans to an affiliate; purchases under repurchase agreement of securities held by an affiliate; investments in the obligations of an affiliate; or the acceptance of obligations of an affiliate as loan collateral. These same transactions were limited to 20 percent of the bank's capital for the sum of all affiliates.
- All loans to affiliates were to be backed with collateral worth at least 110 percent of the value of the loan.

Bank Holding Company Act of 1956

Contained firewalls that prohibited the transactions restricted by 23A. Covered both member and nonmember banks owned by multi-bank holding companies.

Bank Holding Company Act Amendments of 1966

Repealed the BHC Act firewalls but expanded 23A to cover all insured banks, member and nonmember.

Garn-St. Germain Depository Institutions Act of 1982

Made a number of amendments to 23A, including

- Restricted to 10 percent of bank capital all purchases of assets from any affiliate (20 percent for the sum of all affiliates); previously only purchases under repurchase agreements were restricted;
- Added guarantees, acceptances, and letters of credit on behalf of any affiliate to the list of transactions subject to the 10 and 20 percent limitation;
- Required that transactions be on terms consistent with safe and sound banking;
- Prohibited the purchase of low-quality assets from affiliates;
- Exempted affiliated banks and banks' subsidiaries from most transaction restrictions;
- Expanded the list of assets acceptable as collateral for loans to affiliates, and modified the collateral-to-loan ratios;
- Expanded the definition of affiliate to include REITs and other companies sponsored and advised by a bank, its subsidiaries, or affiliates.

Competitive Equality Banking Act of 1987

Amended the Federal Reserve Act to add section 23B. Section 23B requires that transactions between a bank and its affiliates must be on terms comparable to those the bank would normally offer to nonaffiliated companies (i.e., on arm's-length terms).

Financial Institutions Reform, Recovery, and Enforcement Act of 1989

Extended 23A and 23B to savings institutions.

1987 Board of Governors' Orders for Section 20 Subsidiaries

Restricted financial transactions between banks and their section 20 affiliates and between banks and customers of section 20 affiliates. Applied to section 20 subsidiaries that limit themselves to underwriting and dealing only in bank eligible securities plus commercial paper, municipal revenue securities, mortgage-backed securities, and consumer receivable-backed securities. A bank with a section 20 affiliate may not

- make loans to issuers for the purpose of payment of principal, interest, or dividends on bank-ineligible securities underwritten by its section 20 affiliate;
- make loans secured by or for the purpose of purchasing bank-ineligible securities underwritten by its section 20 affiliate during the underwriting period, and for 30 days thereafter;
- make loans or provide guarantees (for example a letter of credit) that will enhance the credit-worthiness or marketability of a bank-ineligible security underwritten by its section 20 affiliate;
- purchase bank-ineligible securities underwritten by its section 20 affiliate during the underwriting period and for 60 days after;
- purchase from its section 20 affiliate bank-ineligible securities in which the section 20 makes a market.

1989 Board of Governors' Orders for Section 20 Subsidiaries

Restricted financial transactions between banks and their section 20 affiliates and between banks and customers of section 20 affiliates. Applied to section 20 subsidiaries that underwrite and deal in debt and equity securities. The prohibitions under 1987 orders also applied to these subsidiaries. In addition, under the 1989 orders a bank may not

- make loans to its section 20 affiliate;
- make any financial asset purchases from, or sell financial assets to, affiliated section 20s;
- provide a guarantee, such as a letter of credit, for its section 20 affiliate.

can imagine at least three important factors that might have led Congress to enact the transaction restrictions.

First was the failure of the Bank of the United States in December 1930. This failure was caused by the bank president's appropriation of large portions of bank funds, through the bank's affiliates, to his own personal and highly speculative business ventures. His actions created widespread suspicion of all commercial bank affiliates (Perkins 1971, pp. 496–97).

Second, 1931 subcommittee hearings leading to the Glass-Steagall Act included a discussion of a number of securities affiliate “abuses” Congress may have believed applicable to other types of affiliates (U.S. Congress, Senate [1931], pp. 1052–68). Specifically, the hearing report notes that a bank might extend credit to a troubled affiliate to rescue it, purchase assets of a troubled affiliate, or make unsafe loans to the affiliate's customers. According to the report, “[w]hen dealing with its affiliate, the bank is really dealing with itself.” As a result, “there tends to be a breaking down of those limitations on the extension of credit which the bank sets up in other cases to guard against the making of excessive or poorly secured loans” (U.S. Congress, Senate [1931], p. 1066).

Third, in spite of the general prohibition of bank-securities firm affiliation, the Glass-Steagall Act left banks with the ability to affiliate with firms with limited securities powers. Perhaps Congress foresaw similar abuses with these affiliates and wanted to restrict transactions between banks and these limited securities affiliates.

For whatever reason or reasons the act introduced firewalls for most types of bank affiliates. According to a Senate Report on the bill that became the Glass-Steagall Act, an important goal of the bill was “[t]o separate as far as possible national and member banks from **affiliates of all kinds**” [emphasis added] (U.S. Congress, Senate [1933], p. 10). Section 23A firewalls helped accomplish the goal.

As passed in 1933, section 23A applied only to Federal Reserve member banks. Included in this category are all national banks, meaning banks chartered by the federal government and thus required by statute to be Federal Reserve members, and state-chartered banks that elect to become members of the Federal Reserve.

Firewalls Extended by the Bank Holding Company Act of 1956

The Bank Holding Company Act of 1956 (BHCA) extended firewalls similar to those in 23A to all banks, member and nonmember, owned by multi-bank BHCs.¹⁰ The firewalls extension was at least in part provoked by the failure of a Chicago bank, which stemmed from transactions with its parent BHC (discussed below). The BHCA included a provision completely prohibiting

¹⁰ The BHCA of 1956 covered only BHCs owning two or more banks. In 1970 the act was amended to include one-bank BHCs.

specified transactions: bank loans to, investments in, and purchases of assets from affiliates or the parent BHC (Senate Rep. No. 1095, 84th Cong., Sess. 2, reprinted in *U.S. Code: Congressional and Administrative News* 2482, 2496–97 [1956]). Section 23A firewalls differed in that they allowed such transactions as long as their dollar aggregate amounted to no more than 10 or 20 percent of bank capital.

For the most part, the BHCAct (of which the firewall provisions were only a small portion) was the result of congressional concern over the lack of regulatory control of bank holding companies (Senate Rep. No. 1095, 84th Cong., Sess. 2, reprinted in *U.S. Code: Congressional and Administrative News* 2482, 2483 [1956]). While banks were extensively regulated and supervised either under federal or state law, bank holding companies were relatively free of such regulation prior to the passage of the act. The act brought the activities of multi-bank BHCs under Federal Reserve regulatory and supervisory authority.

Just as with the reports on section 23A, the House and Senate committee reports on the BHCAct lack explanation. In this case, they fail to explain Congress's motive for completely prohibiting specified transactions rather than simply limiting them, as did section 23A. Yet, in contrast to the legislative history surrounding the passage of 23A firewalls, the reports do fairly clearly explain Congress's motivation for the firewalls in general: to prevent a parent BHC from taking "undue advantage of the resources of its subsidiary banks" (Senate Rep. No. 1095, 84th Cong., Sess. 2, reprinted in *U.S. Code: Congressional and Administrative News* 2482, 2496 [1955]). While the history indicates that "no widespread abuse of this nature has been brought to the attention of [Congress]," one such case was discussed in hearings leading to the passage of the act. In this case, a Dallas company that owned a chain of (nonbank) small-loan companies purchased slightly more than 50 percent of the shares of two small Chicago banks. Following the bank purchases, the Dallas company sold to the banks questionable assets held by the BHC at face value less a small discount (2 percent). The asset sales shifted BHC losses to the banks, and within a few weeks of the shift the banks were closed by state auditors. Ultimately, some of the shifted losses were borne by the FDIC, as the FDIC was able to reopen one of the banks only after providing financial assistance (U.S. Congress, House [1955], pp. 18–19; FDIC 1953, p. 8). According to a House report discussing the BHCAct, failure to institute the BHCAct restrictions on interaffiliate transactions "would be to invite a repetition of the [Dallas BHC incident]" (U.S. Congress, House [1955], p. 19).

Firewalls Further Extended by 1966 BHCAct Amendments

In 1966 the Bank Holding Company Act was amended to repeal the act's prohibitions of interaffiliate transactions, once again leaving only the firewalls laid out in section 23A to restrict such transactions. At the same time, 23A was amended specifically to cover transactions between a bank and its parent

BHC and subsidiaries of its parent. In addition, the Federal Deposit Insurance Act was amended to apply section 23A to all federally insured commercial banks, subjecting almost all banks to the requirements of section 23A (Rose and Talley 1982, p. 693; Senate Rep. No. 1179, 89th Cong., Sess. 2, reprinted in *U.S. Code Congressional and Administrative News*, 2385, 2396 [1966]).

Garn-St. Germain Act of 1982 Amendments to 23A

In 1982 section 23A was amended in several important ways. According to a Senate Banking Committee report, the amendments had three objectives. First, the changes were meant to liberalize unnecessarily restrictive provisions in the statute. Second, they were to close several loopholes. Third, they were intended to reorganize and clarify the statute to improve compliance and enforcement (Senate Rep. No. 97-536, 97th Cong., Sess. 2, reprinted in *U.S. Code Congressional and Administrative News*, 3054, 3085 [1982]).

Several significant circumstances preceded, and ultimately led to, the 1982 revisions to section 23A. For a number of years bankers had argued that section 23A unnecessarily stifled low-risk, interaffiliate transactions. In addition, in the mid-1970s several large banks were adversely affected by transactions with affiliates or with firms the banks sponsored and advised.

The failure of Hamilton National Bank in 1976 served to illustrate how section 23A might fail to prevent interaffiliate transactions detrimental to the bank.¹¹ The failure of the Chattanooga-based, \$461-million-asset Hamilton National Bank was the third largest bank failure in U.S. history up to that time. Hamilton National Bank was owned by a BHC, Hamilton Bancshares, Inc., which also owned nonbank subsidiaries including Hamilton Mortgage Corporation, an Atlanta-based mortgage banking company specializing in real estate development loans. In 1974, the real estate industry experienced major problems. Consequently, growing numbers of Hamilton Mortgage Corporation's borrowers began to default. When examined in September 1974, Hamilton National Bank was holding more than \$100 million in mortgages originated by the mortgage subsidiary, many of which were troubled (Comptroller of the Currency 1977, p. 233). Ultimately the bank failed largely from losses on loans purchased from its mortgage affiliate (Comptroller of the Currency 1977, pp. 233-34; Sinkey 1979, pp. 199-205).¹²

¹¹ Hamilton National Bank was the only one of 120 bank failures occurring in the ten years prior to the 1982 amendment to section 23A that could be directly attributed to interaffiliate asset transactions (Morgan Guaranty [1983] as cited in Saunders [1988], p. 168, footnote 43).

¹² Hamilton National Bank's purchases from its affiliate far exceeded 10 percent of its capital. While at the time 23A did not specifically restrict a bank's purchase of loans from its affiliate, the statute defined "extensions of credit" to an affiliate, which were restricted, to include a bank's "discount of promissory notes" held by its affiliate. Under a 1974 Board of Governors interpretation of 23A, the phrase "discount of promissory notes" includes the purchase of loans. This interpretation indicates that, with the exception of the amount permitted under the 10 percent limitation, Hamilton's purchases were in violation of 23A (Board of Governors 1974, pp. 726-27).

Also during the mid-1970s, several large U.S. banks sustained significant losses as a result of bailing out associated REITs. A number of large banks sponsored and advised these closed-end real estate investment funds in the 1970s. As the real estate market slumped in 1974 and REITs experienced financial problems, REITs' ability to issue commercial paper diminished. Because commercial paper issues provided a major portion of REIT funding, the REITs faced insolvency. To prevent REIT failures, a number of banks gathered together to fund a costly rescue operation (Sinkey 1979, pp. 237–55; Cornyn et al. 1986, pp. 187–88).

In response to concern with perceived deficiencies in section 23A, Congress called on the Federal Reserve to recommend amendments (Rose and Talley 1983, p. 424). The Fed's proposals served as the basis for the Banking Affiliates Act of 1982, which made a number of substantive changes to section 23A (Rose and Talley 1983, p. 424; Senate Rep. No. 97–536, 97th Cong., Sess. 2, reprinted in *U.S. Code Congressional and Administrative News*, 3054, 3085 [1982]). The Banking Affiliates Act was enacted as a section of the Garn-St. Germain Depository Institutions Act of 1982. Guiding the proposals was the view that the statute was meant to prevent the misuse of a bank's resources stemming from large-scale transactions with affiliates (Board of Governors 1981, pp. 1, 6, 28, 31, 39, 42–43). Specifically, the Fed's concern with interaffiliate transactions was that "because of this relationship [affiliation], the bank may engage in transactions that may adversely affect its condition. Such transactions may be designed either to rescue a financially troubled affiliate or to 'drain' a bank for the benefit of an affiliate" (Board of Governors 1981, p. 6).

The Federal Reserve proposed that REITs and other companies sponsored and advised by a bank or a bank's subsidiary or affiliate be considered affiliates. This proposal was motivated by REIT losses and the Fed's view that the relationship between a bank and a REIT it sponsors is in some respects an affiliate relationship (Board of Governors 1981, pp. 23–25). Other important changes to section 23A were a broadened definition of asset purchases considered "covered" transactions; the addition of guarantees, acceptances, and letters of credit issued on behalf of an affiliate as "covered" transactions; the addition of a provision requiring that all "covered" transactions with affiliates be on terms that are consistent with safe and sound banking practices; the prohibition of purchases of low-quality assets; the exemption of affiliated banks from most restrictions on transactions; the exclusion of banks' majority-owned subsidiaries from the definition of an affiliate; and an expanded list of assets that are acceptable as collateral backing transactions with affiliates (Senate Rep. No. 97–536, 97th Cong., Sess. 2, reprinted in *U.S. Code Congressional and Administrative News*, 3054, 3085–86 [1982]).

CEBA and FIRREA Augment 23A Firewalls

The Federal Reserve Act firewalls were expanded in 1987 with the addition of section 23B, passed as a provision of the Competitive Equality Banking Act of 1987 (CEBA). Previously in 1983 and 1984, Senate bills had proposed the expansion of bank securities, insurance, and real estate development powers and included proposals to amend the Federal Reserve Act by adding section 23B. Although these bills were not adopted, 23B resurfaced a few years later in CEBA (Miles 1988, p. 478, footnote 4). The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) extended sections 23A and 23B to savings institutions following the thrift industry crisis of the 1980s (U.S. Congress, House [1989], pp. 169–70; 12 U.S.C. sec. 1468(a)).

Firewalls Surrounding Underwriting Subsidiaries

A number of large BHCs currently take advantage of a loophole in the Glass-Steagall Act and operate securities-underwriting subsidiaries (named “section 20 subsidiaries” for the section of the act containing the loophole).¹³ As discussed below, the loophole is limited, so securities subsidiaries of BHCs are somewhat circumscribed compared to securities firms not owned by BHCs. BHCs’ underwriting subsidiaries face thicker interaffiliate transaction firewalls, instituted by Board of Governors orders, than those found in sections 23A and 23B. The thicker firewalls have the same purpose as the 23A and 23B firewalls.

Before the Glass-Steagall Act was passed in 1933, member banks could be affiliated with securities-underwriting companies. Following its passage, and continuing until the 1980s, member banks were denied such affiliations. Nevertheless, under the Glass-Steagall Act banks and their affiliates were allowed to underwrite certain assets such as U.S. government securities and general obligation municipal securities (Fein 1996, pp. 8-7, 8-12). Such securities are known as “bank-eligible” securities. With the advent of significant banking deregulation and heightened competition in the 1970s and 1980s, banking companies began to argue for the authority to conduct additional securities activities. In late 1984, Citicorp submitted an application to the Federal Reserve Board for approval to begin underwriting certain ineligible securities in its eligible securities subsidiary. While this initial application was withdrawn, Citicorp resubmitted a modified application in 1985 and was later joined by two other large New York BHCs making similar applications.

In response to these applications, the Federal Reserve Board reviewed the Glass-Steagall Act and concluded that the law does not prohibit a company affiliated with a member bank from underwriting and dealing in certain

¹³ As of 1996 there were 38 section 20 subsidiaries of BHCs (*American Banker*, May 10, 1996, p. 3).

securities if these activities provide no more than 5 percent of the gross revenues of the subsidiary (Board of Governors 1987, p. 476; Fein 1996, p. 8-16). Glass-Steagall does contain sections which prevent banks from conducting investment banking activities directly and prevent member banks from affiliating with companies that do so. Section 20 prohibits Federal Reserve member banks from affiliation with any firm “engaged principally” in the issue, flotation, underwriting, public sale, or distribution of securities. The Board ruled that if revenues from these prohibited activities account for no more than 5 percent of the subsidiary’s total revenue, the subsidiary is not “engaged principally” in the activity. In this case the subsidiary may be affiliated with a member bank without violating the Glass-Steagall Act (Board of Governors 1987, pp. 475–76).¹⁴ The only other securities beyond eligible securities that these subsidiaries were authorized to underwrite and deal in were commercial paper, municipal revenues securities, mortgage-backed securities, and consumer receivable-backed securities (Fein 1996, p. 8-49).

1987-Order Firewalls

In 1987, the Board of Governors of the Federal Reserve established additional firewalls that not only prohibited certain transactions between a bank and its affiliated section 20 subsidiary, but also prohibited them between a bank and the customers of its section 20 affiliate. The Board’s 1987 firewalls are provisions of Board orders authorizing securities underwriting and dealing. A bank with a section 20 affiliate may not

- make loans to securities issuers for the purpose of payment of principal, interest, or dividends on bank-ineligible securities underwritten by its section 20 affiliate;
- make loans secured by or for the purpose of purchasing bank-ineligible securities underwritten by its section 20 affiliate during the underwriting period, and for 30 days thereafter;
- make loans or provide guarantees (for example a letter of credit) that will enhance the creditworthiness or marketability of bank-ineligible securities underwritten by its section 20 affiliate;

¹⁴ Section 20 of the Glass-Steagall Act applies only to banks that are members of the Federal Reserve System. As previously noted, this contingent includes all national banks, i.e., those chartered by the federal government, and state-chartered banks that choose to be members (state members). Since section 20 does not apply to state-chartered nonmember banks, these banks may be affiliated with securities-underwriting companies engaged principally in underwriting ineligible securities. A nonmember bank may not engage in underwriting in the bank itself because Glass-Steagall’s section 21 prohibits such activities for member and nonmember banks. According to a 1981 Supreme Court ruling, section 21 does not extend to bank subsidiaries or affiliates (Fein 1996, p. 2-6). Nonmember banks are subject to the supervision of the FDIC, which has established several firewalls similar to those established by the Federal Reserve for section 20 affiliates (Fein 1996, pp. 8-64.3–8-68; U.S. General Accounting Office 1995, pp. 74–75).

- purchase bank-ineligible securities underwritten by its section 20 affiliate during the underwriting period and for 60 days after;
- purchase from its section 20 affiliate bank-ineligible securities in which the section 20 makes a market.¹⁵

In its discussion of the firewalls, the Federal Reserve indicated that the prohibitions on loans are meant to prevent “imprudent” and “unwise” lending to help out affiliated section 20s (Board of Governors 1987, pp. 496–97). Likewise, the securities purchase prohibitions are meant to preclude “unwarranted” and “detrimental” purchases by banks intended to prevent section 20 losses (Board of Governors 1987, pp. 497–98).

1989-Order Firewalls

In 1989 the Fed increased the revenue limit from 5 to 10 percent and expanded the types of securities the subsidiaries could underwrite and deal in to include most debt and equity securities (Fein 1996, pp. 1-16–1-18, 8-24.2, 8-29).¹⁶ For those section 20 affiliates that chose to expand underwriting and dealing activities beyond the four types of securities authorized in 1987, firewalls were augmented. The major change was that of prohibiting loans by banks to their section 20 affiliates. Also, under the 1989 orders, banks were prohibited from making any financial asset purchases from, or selling such assets to, affiliated section 20s.¹⁷ Last, banks were prohibited from providing a guarantee, such as a letter of credit, for their section 20 affiliate. The stricter firewalls for section 20s were developed out of concern for the increased potential for losses from the expanded operations allowed to subsidiaries operating under the 1989 orders (Board of Governors 1989, pp. 203–06). Because of these firewalls and other more demanding restrictions, some section 20 affiliates have chosen to confine

¹⁵ These prohibitions contain certain exceptions. For a complete list of all underwriting subsidiary firewalls, see Board of Governors, *Bank Holding Company Supervision Manual* (1995), sect. 2185.0, pp. 15–28, or U.S. General Accounting Office (1995), pp. 70–73. Additional requirements and restrictions are placed on relations between banks and underwriting affiliates beyond these transactions firewalls. The additional requirements are meant to limit the opportunity for the exploitation of conflicts of interest and to provide a clear separation between the underwriting and bank subsidiaries of the BHC. For example, BHCs are required to maintain separate offices for the section 20 subsidiary and limit employee, officer, and director interlocks and communication of confidential customer information between section 20 subsidiaries and affiliated banks. A section 20 subsidiary is also required to disclose that it is separate from any affiliated bank and that securities offered, sold, or recommended are not FDIC insured (Board of Governors, *Bank Holding Company Supervision Manual* 1995, sect. 2185.0, pp. 15–28).

¹⁶ In July 1996 the Board of Governors proposed an increase in the revenue limit to 25 percent (Board of Governors 1996b).

¹⁷ The 1989 orders granted an exception allowing banks to purchase U.S. Treasury securities from, and sell such assets to, section 20 affiliates. In October 1996 the exception was expanded to include all securities with readily identifiable and publicly available market quotations (Board of Governors 1996a).

their activities to those allowed by the 1987 orders so that they are limited only by the 1987 firewalls.

2. ENFORCEMENT

Sections 23A and 23B and the section 20 firewalls are enforced by bank and bank holding company examiners in periodic on-site examinations. In broad terms, examination for firewall compliance follows a simple two-step pattern. Examiners first determine if the bank or affiliate has procedures in place that should prevent violations. Second, they run tests to determine if those procedures are being followed.

Banks are examined for compliance with 23A and 23B firewalls during each periodic safety and soundness examination. Bank examiners first obtain documents describing the bank's policies and procedures to verify that the bank has rules in place to avoid exceeding section 23A limits and to ensure that it is meeting the requirements of sections 23A and 23B. To test whether the bank's rules are observed, the examiner obtains from the bank a list of all transactions between the bank and affiliates. This list is verified against other sources to ensure that the bank did not exclude transactions. For example, to test whether he has a complete list of interaffiliate loans, the examiner will compare the list supplied by the bank with other accounting records maintained by the bank, such as customer liability records. Using the verified list, the examiner reviews the transactions to ensure (1) that together they do not exceed limits established by section 23A, (2) that 23A collateral requirements are met, (3) that low-quality loans have not been purchased from affiliates, and (4) that all transactions with affiliates are consistent with safe and sound banking practices (Board of Governors, *Commercial Bank Examination Manual* 1995).

Likewise, all bank holding companies are examined, or inspected, periodically. Only examiners from the Federal Reserve conduct these inspections. The holding company's policies and procedures regarding transactions between subsidiary banks and affiliates are reviewed to verify that procedures are in place to prevent violations of 23A and 23B (Board of Governors, *Bank Holding Company Supervision Manual* 1995, sect. 2020.1, p. 6, Item 3(g)). BHC inspections include a "thorough analysis of most intercompany transactions" to test whether the BHC's stated policies are being followed (Board of Governors, *Bank Holding Company Supervision Manual* 1995, sect. 2020.0, p. 2). The analysis includes a review of a list of all transactions between subsidiary banks and affiliates and of the terms, conditions, and circumstances of each listed transaction to ensure that none violates 23A or 23B.

At least once a year, section 20 subsidiaries are examined by Federal Reserve examiners. As with bank and BHC examinations, the section 20 examiner reviews procedure manuals to ensure they provide guidelines that will prevent firewall breaches. For example, the examiner may obtain copies of affiliated

banks' loan policy manuals to verify that they clearly state the types of loans restricted, such as loans to the section 20's current underwriting customers. The examiner will also assure that there is a procedure in place for notifying loan officers in the affiliated bank of the current underwriting customers of the section 20 subsidiary. The examiner may then perform tests to verify consistency with the procedures. For example, to determine that the bank has not financed the purchase of securities underwritten by the affiliated section 20 unit, the examiner will obtain a list of securities underwritten by the section 20 entity and compare the list to the bank's collateral ledger. The ledger lists the collateral against which loans are made, allowing the examiner to confirm that there is no overlap (Board of Governors, *Bank Holding Company Supervision Manual* 1995, section 2185.0, p. 13).

The responses of supervisory agencies to violations vary depending upon the severity of the violation. Examiners may simply notify the bank or the BHC of the violation and require the modification of procedures to prevent its recurrence. The supervisory agencies can impose penalties including cease and desist orders; actions to remove directors, officers, and employees; and monetary penalties on institutions or individuals (Spong 1995, pp. 113–17; Board of Governors, *Bank Holding Company Supervision Manual* 1995, sect. 2110.0). For example, in 1983 the FDIC assessed a \$1,000 penalty against a bank director, in part because of violations of 23A. The bank's board of directors, with this director's concurring vote, had authorized the bank to make loans to an affiliate above 23A loan limits, backed with collateral insufficient to meet 23A requirements (*Fitzpatrick v. Federal Deposit Insurance Corp.*, 765 F.2d 569 [6th Cir. 1985]).

3. WHEN FIREWALLS ARE USEFUL

The preceding historical review reveals that firewalls were prescribed to prevent adverse resource shifts. What has never been adequately explained, however, is why a BHC would want to effect such shifts in the first place. For a BHC could only benefit from the shifts if they reduced losses or enhanced profits.¹⁸ In most

¹⁸ Some commentators argue that banks may have a lower cost of funds than nonbanks due to federal deposit insurance. Allowing banks to lend to their nonbank affiliates, thus passing on the deposit insurance subsidy to the nonbank, could give companies that own both a bank and a nonbank an unfair competitive advantage over companies not owning banks (for example see Macey and Miller [1992], p. 377, or the discussion of protestants' argument against greater securities powers for BHCs in Board of Governors [1987]). Firewalls might be useful for limiting or preventing the grant of this unfair advantage and associated allocative efficiency losses. But there is reason to question the quantitative significance of the deposit insurance subsidy, and therefore banks' ability to subsidize their nonbank affiliates. If the subsidy were significant, one would expect banks to displace nonbank sources of credit over time. Instead, over the last several decades banks have lost share in the funds market, or at best held stable (Boyd and Gertler [1994], p. 2). Further, a BHC can benefit from shifting the subsidy from its bank to its nonbank affiliate only if profit opportunities in the nonbank affiliate, without the benefit of subsidized funds, exceed profits in the bank.

cases, simply shifting losses from one subsidiary to another generates no such benefit, and the firewalls would be unnecessary. Still, there are two cases where the BHC might profit from shifts such that firewalls would be necessary. In case number one, some commentators have argued that BHCs can be expected to use bank resources to prevent the failure of a troubled nonbank subsidiary, thus preserving the reputation of the BHC.¹⁹ That is to say, shifts can reduce BHC losses when the BHC's reputation would be damaged by the failure of a nonbank subsidiary. In case number two, a BHC can reduce losses by shifting them from a highly capitalized to a less capitalized subsidiary. The reason? Such shifts allow the BHC to escape some of the loss by taking advantage of shareholders' limited liability. In this case, if the less capitalized subsidiary is an insured bank, then the reduction of loss amounts to a transfer of wealth from the deposit insurance fund to the BHC. Firewalls, and their associated penalties, may be useful in reducing the likelihood of shifts motivated by these incentives since, in either case, nonbank losses can be shifted to the deposit insurance fund.

To illustrate why, in most cases, there is no benefit when losses are shifted, consider the example of a bank and a commercial finance company owned by a BHC. Should the finance subsidiary expect to incur loan losses amounting to \$10 million, the BHC would be made no better off by shifting the potential loss to the bank.²⁰ The BHC, whose assets include the net worth of both the bank and nonbank, can expect to suffer an equivalent \$10 million decline in the value of its total assets whether the bank or the nonbank subsidiary bears the loss. Firewalls aside, the bank or the BHC, because of minimum capital requirements, is likely to face strictures imposed by examiners in response to any shifts of losses or income that lower the bank's capital. Accordingly, the BHC not only gains nothing, it may suffer some cost from any shift of losses. In this case, a shift of losses is not profitable or attractive, with or without firewalls.

On the other hand, as mentioned earlier, the story could be different when a BHC's reputation is at stake. Some authors argue that a BHC has an incentive to use all its resources, including resources of its bank subsidiaries, to support troubled nonbank subsidiaries (see, for example, Cornyn et al. [1986], or Keeley and Bennett [1988]). The major factor cited is the desire to preserve the reputation of the BHC. Cornyn et al. argue that "experience suggests that BHC management will draw on the financial resources of the bank to assist

¹⁹ This section assumes that BHC managers will seek the best interest of shareholders; in other words, that they are profit maximizers. Gilbert (1988, pp. 70–71) argues that the desire of BHC managers to save their jobs, when confronted with a troubled affiliate and managers' fraudulent schemes to steal from banks, can motivate such shifts.

²⁰ This assumes that the bank's capital is at least \$10 million. As will be discussed later, the BHC can benefit by shifting the loss if it exceeds bank capital.

a troubled subsidiary” (p. 191).²¹ The primary reason is the “avoidance of serious reputation damage to the holding company and its bank” (p. 187) from the failure of a subsidiary. They cite several cases, one of which saw banks taking on some of the losses of REITs, discussed earlier in this article.²²

If a BHC owns a nonbank with expected losses exceeding the nonbank’s capital, then the BHC may be best served by simply allowing the subsidiary to fail. Because of the protection afforded the BHC by shareholders’ limited liability, the BHC stands to lose no more than the value of its equity investment in the subsidiary. The subsidiary’s creditors suffer the remainder of the loss. But the failure of one subsidiary may affect the public’s perception of the competence of the BHC management and of the soundness of other segments of the company. In turn, the shift in public perception could lead to creditor demands for higher interest rates from the BHC and its surviving nonbank subsidiaries. In addition, any harm to the reputation of surviving subsidiaries may mean lost business opportunities. Bailing out the troubled nonbank subsidiary with bank resources, rather than allowing it to fail and seeking refuge in limited liability, might leave the BHC’s shareholders better off, even though it leaves the bank worse off. If the bank is made significantly worse off, the probability of a deposit insurance claim is increased.

Consider the example of a BHC owning three nonbank subsidiaries, each having net worth (owners’ equity) of \$10 million (see Table 2, line 1). Additionally, it owns a bank with net worth of \$100 million. If one of the subsidiaries faces a loss of \$16 million, the “failure” cost to the BHC is \$10 million—the amount of its lost owners’ equity in the troubled subsidiary should it be allowed to fail. In addition to the failure cost, the BHC will face “reputation costs” (T-accounts in Table 2 list reputation as an intangible asset of each subsidiary and reputation cost as a decrement to the asset) for the sake of this example, summing to \$8 million (Table 2, line 2). Such costs include increased demands from the surviving subsidiaries’ creditors and lost business opportunities.²³ Consequently, the total cost to the BHC of allowing the failure of the nonbank subsidiary amounts to \$18 million—failure costs of \$10 million plus reputation costs of \$8 million. If instead \$7 million of the nonbank’s loss were shifted to the bank with the bank purchasing some of the nonbank’s troubled assets at greater than their market value, for example—total BHC losses would sum to \$16 million (nonbank’s losses of \$9 million plus bank losses of \$7 million). The BHC’s shareholders would be better off

²¹ Gilbert (1988), pp. 70–71, also discusses preservation of reputation as a motive for transferring bank resources to the nonbank.

²² Cornyn et al. (1986) conclude that firewalls alone are not sufficient to prevent BHCs from drawing on bank resources to assist troubled affiliates.

²³ In my simplified example I assume the parent BHC issues only equity, so only the subsidiaries have creditors.

Table 2**\$ Millions****(1)**

								Parent BHC*	
				Assets 130			NW** 130		
Nonbank A		Nonbank B		Nonbank C		Bank			
TA** 96	Liab** 90	TA 96	Liab 90	TA 96	Liab 90	TA 980	Liab 900		
Rep** 4	NW 10	Rep 4	NW 10	Rep 4	NW 10	Rep 20	NW 100		

(2)

Nonbank A bears complete loss

								Parent BHC	
				Assets			NW		
Nonbank A		Nonbank B		Nonbank C		Bank			
TA 96-16	Liab 90-10	TA 96	Liab 90	TA 96	Liab 90	TA 980	Liab 900		
Rep 4-4	NW 10-10	Rep 4-2	NW 10-2	Rep 4-2	NW 10-2	Rep 20-4	NW 100-4		
Nonbank A suffers \$16M loss—declares bankruptcy. Loss exceeds net worth, leaving creditors with a \$10M loss. Reputational assets are lost when the subsidiary fails.		Reputation of Nonbank B damaged \$2M causing net worth to decline by \$2M		Reputation of Nonbank C damaged \$2M causing net worth to decline by \$2M		Reputation is damaged \$4M causing net worth to decline by \$4M			

(3)

Nonbank A bears only part of loss:

								Parent BHC	
				Assets			NW		
Nonbank A		Nonbank B		Nonbank C		Bank			
TA 96-9	Liab 90	TA 96	Liab 90	TA 96	Liab 90	TA 980-7	Liab 900		
Rep 4	NW 10-9	Rep 4	NW 10	Rep 4	NW 10	Rep 20	NW 100-7		
Nonbank A suffers a \$16M loss, but the value of its assets falls by only \$9M because \$7M of its loss is shifted to Bank. Net worth falls by \$9M						Value of Bank's assets falls by \$7M due to shift of loss from Nonbank A. Net worth likewise declines \$7M			

* Here I focus on the parent corporation. One could focus instead on the consolidated enterprise—all assets, liabilities, and net worth on one balance sheet. The results are equivalent.

** NW is net worth, TA is tangible assets, Rep is reputation—an intangible asset to the subsidiary, Liab is liabilities.

by \$2 million, creating an incentive for the BHC to shift the losses (Table 2, line 3).

The reputation-defense argument for shifting losses relies upon the assumption that outsiders have difficulty ascertaining the true value of a BHC's bank and nonbank subsidiaries' assets. Given this assumption, any new information on the quality of subsidiaries' management would cause outsiders to revise their estimates of these subsidiaries' asset values. For example, the failure of one BHC subsidiary, itself new information about assets of the failed subsidiary, is likely to be taken as new negative information about the quality of the management of surviving subsidiaries of the same company. As a result, outsiders will lower their estimates of survivors' asset values. Reputation damage costs will result when outsiders lower their view of the strength of surviving subsidiaries. As noted earlier, these costs include creditors' demands for higher interest rates from survivors and survivors' loss of future business opportunities.

Accordingly, if a subsidiary's failure can be prevented both at a cost less than the BHC's estimate of reputation costs and in a manner that avoids the revelation of losses to outsiders, BHC shareholders will benefit. Precisely because bank assets are difficult for outsiders to value, losses shifted to the bank may go unnoticed.

While the parent company could assist the nonbank itself, it may be better able to hide the loss by shifting it to its bank subsidiary. If the parent holds few liquid assets, assisting the troubled affiliate could require the parent to issue debt, commercial paper, or sell one of its other subsidiaries. Such actions necessitate public disclosures and notices, highlighting the BHC's predicament. If instead the bank purchased the nonbank's troubled assets at inflated prices, this interaffiliate transaction would quite likely escape outside notice.

Nevertheless, the BHC has a counterincentive weighing against the previously discussed incentive to shift losses to its bank. Any shift of losses will increase the probability of the bank's failure. Surely, the bank's failure would have reputation consequences for the BHC, so that any increase in the probability of the bank's failure due to a shift will tend to offset the BHC's desire to shift losses. While this counterincentive may be too weak to prevent all shifts of losses, it will tend to prevent those most dangerous to bank safety.

While preservation of reputation provides one set of incentives under which a BHC might benefit from shifting nonbank losses to a bank, a second set of incentives arise because of shareholders' limited liability. When the nonbank faces a potential loss smaller than its net worth but larger than the bank's, the BHC, taking advantage of limited liability, reduces its loss by shifting it to the bank. Consider the example of a BHC owning a bank with net worth of \$100 million and a real estate lending company with net worth of \$200 million (Table 3, line 1). Should the real estate subsidiary expect to incur loan losses of \$125 million, the BHC's management could potentially save its shareholders \$25 million by shifting the loss to the bank. Such a shift could be accomplished

by bank purchases of bad loans from the nonbank or bank loans made to the nonbank's troubled borrowers. As owner of the stock of both the bank and the nonbank, the BHC is liable for losses only up to the value of its ownership interest in each company, according to the principle of limited liability.^{24,25} If the loss is borne by the nonbank (see Table 3, line 2), the value of the BHC's nonbank stock holdings will shrink by \$125 million such that shareholders will lose that amount. If, on the other hand, the potential loss can be shifted to the bank, the shareholders' loss is limited to the BHC's ownership interest in the bank, or \$100 million.²⁶ If the borrowers recover, the BHC neither gains nor loses from the shift. If instead, the expected \$125 million loss is realized, the bank fails but the shift saves the BHC \$25 million (Table 3, line 3). In the latter case, the BHC's shareholders benefit at the expense of the deposit insurance fund.

Nonbank subsidiaries are typically considerably smaller than their bank affiliates. Thus, the circumstances under which the above-mentioned tactic would benefit the BHC's shareholders might appear to be quite limited. But this situation may change if the current limitations on affiliations between banks and investment banks are relaxed. Banks might be affiliated with investment banks as large as themselves. In addition, a bank that is itself troubled may find

²⁴ The protection of holding companies provided by the principle of limited liability is not iron-clad. The major grounds upon which the courts will disregard limited liability is when it is determined that the corporation has engaged in conduct or made representations likely to deceive creditors into thinking the shareholder was the real debtor (Posner 1977, p. 297). For further discussion of when the "corporate veil is pierced" and holding companies are held liable for subsidiary losses beyond their equity investment, see Black, Miller, and Posner (1978), pp. 395–96, Posner (1977), pp. 296–97, and U.S. General Accounting Office (1987), pp. 19–20.

²⁵ Two significant examples of banking policies that depart from the principle of limited liability are the Fed's "source-of-strength" policy, and the cross-guarantee provision of the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA). The Federal Reserve has attempted to require BHCs to provide financial assistance to troubled subsidiary banks (Gilbert 1991, p. 4, especially footnote 3; Keeton 1990, pp. 60–61) in its enforcement of its source-of-strength policy. In other words, it has attempted to hold a bank's shareholders (the BHC) responsible for the losses of the bank beyond their equity investment. The Fed's source-of-strength doctrine, a part of Federal Reserve Regulation Y, requires a BHC to act as a source of strength to its bank subsidiaries. Nevertheless, the ability of the Federal Reserve to enforce its source-of-strength regulation may be in some doubt. In 1988 the Fed commenced proceedings that might have required MCorp, a Texas BHC, to aid its insolvent bank subsidiaries. The attempt was repudiated in a federal appeals court. The appeals court held that the source-of-strength policy was in excess of the Fed's regulatory jurisdiction. The U.S. Supreme Court held that the lower courts lacked jurisdiction because MCorp's challenge to the Fed's proceeding had been premature, leaving the underlying substantive issue unresolved (Macey and Miller 1992, p. 656; *Board of Governors v. MCorp Financial, Inc.*, 502 U.S. 32 [1991]). FIRREA authorizes the FDIC to recover from a solvent bank losses incurred by the FDIC in connection with the failure of an affiliated bank (Keeton 1990, p. 58). Two federal circuit courts of appeal upheld FIRREA's cross-guarantee against constitutional challenges (Cayne, Alexander, and Lam 1994; *Banking Policy Report* 1996, p. 3; *BNA's Banking Report* 1996, p. 640).

²⁶ Keeton (1990), pp. 56–57, and Saunders (1985), pp. 220–21, both discuss this incentive for shifts.

Table 3

\$ Millions			
(1)			
Real Estate Lending Co. (RELCO)		Parent BHC*	
		Assets 300	NW** 300
		Bank	
Assets 2000	Liab** 1800 NW 200	Assets 1000	Liab 900 NW 100
(2)			
Relco bears loss		Parent BHC	
		Assets 300-125	NW 300-125
RELCO		Parent's assets and net worth decline by \$125M	
		Bank	
Assets 2000-125	Liab 1800 NW 200-125	Assets 1000	Liab 900 NW 100
RELCO suffers a \$125M loan loss. Net worth falls by \$125M			
(3)			
Loss shifted to Bank		Parent BHC	
		Assets 300-100	NW 300-100
		Parent's assets and net worth decline by \$100M	
RELCO		Bank	
Assets 2000	Liab 1800 NW 200	Assets 1000-125	Liab 900-25 NW 100-100
RELCO's \$125M loss is shifted to Bank such that value of Bank's assets decline by \$125M. Net worth is consumed and creditors (FDIC) bear remaining \$25M loss.			

* Here I focus on the parent corporation. One could focus instead on the consolidated enterprise—all assets, liabilities, and net worth on one balance sheet. The results are equivalent.
 ** NW is net worth, Liab is liabilities.

its true economic value well below its book capital and smaller than the value of an affiliate, therefore making the shift worthwhile.

Similarly, when a bank's true economic value sinks below zero, limited liability means that the BHC benefits from shifts of losses from the nonbank to the bank just as it benefits from shifts of income in the opposite direction. Here, the shifts simply amount to transfers from the deposit insurance fund to the

BHC's shareholders. For example, the BHC has an incentive to have the bank provide subsidized loans to affiliates or purchase services from nonaffiliates at prices higher than those that would be paid in arm's-length transactions.²⁷

An earlier discussion noted a counterincentive weighing against the incentive to shift losses to defend the BHC's reputation. Here there is a similar counterincentive. Sinking the bank to take advantage of limited liability protection is likely to have serious reputation consequences for the surviving BHC. Only if the avoided losses exceed these reputation costs will the BHC choose to shift losses and cause the bank's failure.

4. CONCLUSION

This article has identified circumstances under which a BHC's shareholders will have an economic incentive to shift nonbank losses to affiliated banks. Congress and the bank regulators have reason to be concerned with any such shifts which may increase the risk of, or produce, bank failures and claims on the federal deposit insurance fund. The firewalls may provide a valuable regulatory tool for limiting shifts of nonbank losses to banks and therefore for containing BHC shareholders' economic incentive to employ such shifts.

REFERENCES

- Banking Policy Report*. "Cross-Guarantee Case Appealed to Supreme Court," vol. 15 (June 17, 1996).
- Black, Fischer, Merton H. Miller, and Richard A. Posner. "An Approach to the Regulation of Bank Holding Companies," *Journal of Business*, vol. 51 (July 1978), pp. 379-412.
- BNA's Banking Report*. "Supreme Court: Retirement CD Ruling Left Standing As Supreme Court Opens New Term," vol. 67 (October 14, 1996), p. 640.
- Board of Governors of the Federal Reserve System. "A Review of Restrictions on Director, Officer and Employee Interlocks, Cross-Marketing Activities, and the Purchase and Sale of Financial Assets between a Section 20 Subsidiary and an Affiliated Bank," *Federal Register*, vol. 61 (November 7, 1996a), p. 57679.

²⁷ Keeton (1990) discusses alternatives to firewalls that could offset the BHC's incentive to shift losses to the FDIC. These alternatives are the Fed's source-of-strength doctrine and FIRREA's requirement that a failed bank's surviving affiliate banks reimburse the FDIC (source of strength and the FIRREA provision are discussed in footnote 25). If, under the source-of-strength doctrine, BHCs were required to use their financial resources to assist troubled subsidiary banks, there would be no benefit to the BHC of shifting nonbank losses to banks. The FIRREA requirement means any nonbank loss must exceed the sum of the capital of all banks owned by a BHC, not just of one bank, before a shift can benefit the BHC.

- _____. “Revenue Limit on Bank-Ineligible Activities of Subsidiaries of Bank Holding Companies Engaged in Underwriting and Dealing in Securities,” *Federal Register*, vol. 61 (August 5, 1996b), p. 40643.
- _____. *Bank Holding Company Supervision Manual*. Washington: Board of Governors, 1995.
- _____. “Order Approving Applications to Underwrite and Deal in Certain Securities to a Limited Extent and to Engage in Combined Investment Advisory and Securities Brokerage Activities,” *Federal Reserve Bulletin*, vol. 75 (March 1989), pp. 190–217.
- _____. “Order Approving Applications to Engage in Limited Underwriting and Dealing in Certain Securities,” *Federal Reserve Bulletin*, vol. 73 (June 1987), pp. 473–508.
- _____. “A Discussion of Amendments to Section 23A of the Federal Reserve Act Proposed by the Board of Governors of the Federal Reserve System,” an unpublished report prepared by the Board of Governors to accompany its legislative proposal to amend Section 23A, September 1981.
- _____. “Miscellaneous Interpretation,” *Federal Reserve Bulletin*, vol. 60 (October 1974), pp. 726–27.
- Board of Governors v. MCorp Financial*, 112 S.Ct 459 (1991). St. Paul, Minn.: West Publishing Co., 1991.
- Boyd, John H., and Mark Gertler. “Are Banks Dead? Or Are the Reports Greatly Exaggerated?” Federal Reserve Bank of Minneapolis *Quarterly Review*, vol. 18 (Summer 1994), pp. 2–23.
- Cayne, Howard N., Richard M. Alexander, and Brian E. J. Lam. “Federal Courts Disagree over Constitutionality of FIRREA Cross-Guarantees,” *Banking Policy Report*, vol. 13 (November 7, 1994), pp. 4–6.
- Comptroller of the Currency. *Annual Report*, 1977.
- Cornyn, Anthony, Gerald Hanweck, Stephen Rhoades, and John Rose. “An Analysis of the Concept of Corporate Separateness in BHC Regulation from an Economic Perspective,” in *Proceedings of a Conference on Bank Structure and Competition*, (Federal Reserve Bank of Chicago, May 14–16, 1986), pp. 174–212.
- Federal Deposit Insurance Corporation. *Annual Report*, 1953.
- Fein, Melanie L. *Securities Activities of Banks*. Englewood Cliffs, New Jersey: Aspen Publishers, Inc., 1996.
- Fitzpatrick v. Federal Deposit Insurance Corp.*, 765 F.2d 569 (6th Cir. 1985). St. Paul, Minn.: West Publishing Co., 1985.

- Gilbert, Alton R. "Do Bank Holding Companies Act As 'Sources of Strength' for Their Bank Subsidiaries?" *Federal Reserve Bank of St. Louis Review*, vol. 73 (January/February 1991), pp. 3–18.
- _____. "A Comparison of Proposals to Restructure the U.S. Financial System," *Federal Reserve Bank of St. Louis Review*, vol. 70 (July/August 1988), pp. 58–75.
- Keeley, Michael C., and Barbara A. Bennett. "Corporate Separateness," *Federal Reserve Bank of San Francisco Weekly Letter*, June 3, 1988.
- Keeton, William R. "Bank Holding Companies, Cross-Bank Guarantees, and Source of Strength," *Federal Reserve Bank of Kansas City Economic Review*, vol. 75 (May/June 1990), pp. 54–67.
- Kelly, Edward J., III. "Conflicts of Interest: A Legal View," in Ingo Walter, ed., *Deregulating Wall Street: Commercial Banking Penetration of the Corporate Securities Market*. New York: John Wiley and Sons, 1985a.
- _____. "Legislative History of the Glass-Steagall Act," in Ingo Walter, ed., *Deregulating Wall Street: Commercial Banking Penetration of the Corporate Securities Market*. New York: John Wiley and Sons, 1985b.
- Macey, Jonathan R., and Geoffrey P. Miller. *Banking Law and Regulation*. Boston: Little, Brown and Company, 1992.
- Miles, Veryl Victoria. "Banking Affiliate Regulation under Section 23A of the Federal Reserve Act," *The Banking Law Journal*, vol. 105 (November/December 1988), pp. 476–509.
- Morgan Guaranty. "An Investigation of Commercial Bank Failures," *Memo-randum*, September 1, 1983.
- Perkins, Edwin J. "The Divorce of Commercial and Investment Banking: A History," *The Banking Law Journal*, vol. 88 (June 1971), pp. 483–528.
- Posner, Richard A. *Economic Analysis of Law*. Boston: Little, Brown and Company, 1977.
- Rose, John T., and Samuel H. Talley. "Bank Transactions with Affiliates: The New Section 23A," *Banking Law Journal*, vol. 100 (May/June 1983), pp. 423–38.
- _____. "The Banking Affiliates Act of 1982: Amendments to Section 23A," Board of Governors of the Federal Reserve System *Federal Reserve Bulletin*, vol. 68 (November 1982), pp. 693–99.
- Saunders, Anthony. "Bank Holding Companies: Structure, Performance, and Reform," in William S. Haraf and Rose Marie Kushmeider, eds., *Restructuring Banking and Financial Services in America*. Washington: American Enterprise Institute for Public Policy Research, 1988.

- _____. "Conflicts of Interest: An Economic View," in Ingo Walter, ed., *Deregulating Wall Street: Commercial Banking Penetration of the Corporate Securities Market*. New York: John Wiley and Sons, 1985.
- Seiberg, Jaret. "38 Banks Getting Head Start on Securities Business," *American Banker*, May 10, 1996.
- Sinkey, Joseph F., Jr. *Problem and Failed Institutions in the Commercial Banking Industry*. Greenwich, Conn.: JAI Press Inc, 1979.
- Smith, Adam. *An Inquiry Into the Nature and Causes of the Wealth of Nations*. London: George Routledge and Sons, Limited, 1913.
- Spong, Kenneth. *Banking Regulation: Its Purposes, Implementation, and Effects*, 4th ed. Kansas City: Federal Reserve Bank, 1995.
- U.S. Code: Congressional and Administrative News*. St. Paul, Minn.: West Publishing Company, 1982, 1966, 1956, 1955.
- U.S. Congress, House. *Financial Institutions Reform, Recovery, and Enforcement Act of 1989*. House Report No. 101-222, 101 Cong. 1 Sess. Washington: Government Printing Office, 1989.
- _____. *Report to Accompany H.R. 6227*. House Report, No. 609, 84 Cong. 1 Sess. Washington: Government Printing Office, 1955.
- U.S. Congress, Senate. *Operation of the National and Federal Reserve Banking Systems*. Senate Report No. 77, 73 Cong. 1 Sess. Washington: Government Printing Office, 1933.
- _____. *Operation of the National and Federal Reserve Banking Systems: Hearings Pursuant to S. Res. 71*. Hearing, 71 Cong. 3 Sess. Washington: Government Printing Office, 1931.
- U.S. General Accounting Office. "Banks' Securities Activities: Oversight Differs Depending on Activity and Regulator." Washington: U.S. General Accounting Office, September 21, 1995.
- _____. "Bank Powers: Insulating Banks from the Potential Risks of Expanded Activities." Washington: U.S. General Accounting Office, April 14, 1987.
- Wall, Larry D. "Insulating Banks from Nonbank Affiliates," Federal Reserve Bank of Atlanta *Economic Review*, vol. 69 (September 1984), pp. 18-28.