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The Liability Structure of FDIC-Insured Institutions: Changes and Implications (page 1)

by Christine M. Bradley and Lynn Shibut

As asset growth has outstripped core deposit growth in recent years, banks have adapted their funding strategies. This article describes the changes that have occurred, discusses possible future changes in bank liability structure, and explores the regulatory issues related to these changes (including the areas of market discipline, liquidity risk examination, deposit insurance, and failure resolution).

The Resolution Trust Corporation and Congress, 1989–1993 **PART I: 1989–90** (page 38)

by Lee Davison

This is the second of two *Banking Review* articles on the legislative history of the Resolution Trust Corporation. The legislative history of the establishment of the RTC, “Politics and Policy: The Creation of the Resolution Trust Corporation,” appeared in *Banking Review* 17 No. 2 (2005). The continuation of that legislative history, covering the years 1989–1993, is presented in two parts: Part I appears here; Part II will follow in an upcoming issue.

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The Liability Structure of FDIC-Insured Institutions: Changes and Implications

by Christine M. Bradley and Lynn Shibut*

Depository institutions have traditionally looked to deposits to fund their asset growth. But since 1978, the value of bank assets has increased proportionally much more than the value of bank deposits: between 1978 and 2005 the value of assets held in commercial banks insured by the Federal Deposit Insurance Corporation (FDIC) rose by nearly 500 percent, but total deposits held by these same institutions increased by only 393 percent. And between 1978 and 2005, the percentage of U.S. banks that were able to fund at least two-thirds of their total assets with core deposits fell from nearly 91 percent to 59 percent.¹ In addition to core deposits shrinking, banks are facing increased interest costs since bank customers are reacting to higher interest rates and moving their money out of lower-yielding bank accounts and into certificates of deposit and other higher-paying accounts. As a result of these developments, bank liability management demands more attention today than it did just a few years ago.

In Part 1 of this article we focus on the changes in bank liability structure, and in Part 2, on the implications of the changes for regulators. Part 1 describes the events that led to the decrease in banks' reliance on deposits, examines the changes

banks made to their liability management in response, and discusses the possible future of these changes. Part 2 looks at the possible effects of the changing bank liability structure on market discipline, liquidity risk examination, deposit insurance pricing, and failure resolution (domestic depositor preference and operational issues).

PART 1. Changes in Bank Liability Structure

In this section of the paper we survey the past, the present, and the possible future of banks' liability structure. We explain some of the wholesale funding options available to banks and describe other choices that bankers have available in their nondeposit liability management. We

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¹ Core deposits are estimated as total deposits minus brokered deposits and other time deposits that are in denominations greater than \$100,000.

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observe how the tools bankers choose are driven by developments in the financial marketplace, as well as existing legal constraints. We also take a look at the liquidity risk facing today's banker.

Historical Overview

For 45 years after the Great Depression, the business of banking was largely a process of collecting deposits from people and businesses and loaning the same funds to other people and businesses having credit needs. A bank's success greatly depended on a depositor's willingness to accept a rate of interest lower than the rate the borrower paid for use of the funds. But in the mid-1970s money-market rates rose above the rates that depository institutions were authorized to pay on their time deposits,² and by 1979 the savings patterns for U.S. households were affected by that differential in rates: in 1978, U.S. households held \$100.4 billion in time and savings deposits, but by year-end 1979 that amount had fallen to \$71.2 billion. Similarly, in 1978 U.S. households had \$5.7 billion in money market fund shares, but at the end of 1979 the figure had increased to \$30.5 billion.³ Figure 1 shows how the percentage of financial assets of households held by banks and thrifts fell from the mid-1980s until 1999, the year the U.S. stock market hit record levels. The chart further shows that as the stock market retrenched beginning in 2000, depositors again sought the safety provided by a bank deposit.

In the early 1980s, legislative reforms and technological advances became two-edged swords to bankers seeking to increase their deposits. Chief among the legislative changes during this period were the lifting of intrastate banking restrictions and the deregulation of interest rates paid on deposit accounts. But these legislative reforms, which were intended to give depository institutions tools to compete with the money market for deposits, also resulted in increased competition among banks by allowing bankers to go outside their local market to procure deposits. In addition, technological advances that created new delivery channels and increased efficiencies for bankers also made it easier for depositors to leave their local markets for better terms. With core deposits dropping as a percentage of total assets, bankers recognized that they would need to increase their reliance on managed liabilities to fund domestic credit, while managing liquidity risk (see figure 2).

² After the banking crisis of the 1930s, interest-rate ceilings were imposed on commercial banks to protect banks, both by holding the institutions' cost of funds below their return on assets and by restraining competition within the industry. Interest-rate ceilings did not apply to savings and loan associations (S&Ls) until 1966.

³ Federal Reserve Board of Governors (2006), chart B.100.

Figure 1

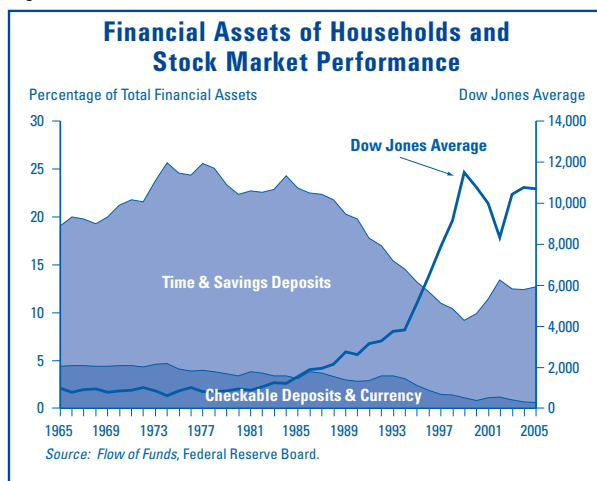
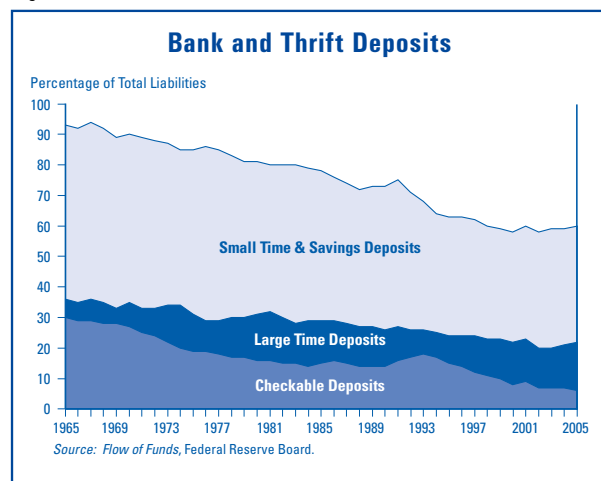


Figure 2



New Funding Trends

When deposits lagged behind loan growth in the 1990s, some bankers argued that there was a funding crisis.⁴ And indeed, managing bank liquidity is not as easy as it once was. However, calling it a crisis gives short shrift to the funding options available to banks. Now both small and large banks regularly use wholesale sources and rate-sensitive deposits as part of their funding strategy. By wholesale sources, we mean borrowings (such as federal funds, repurchase agreements, and Federal Home Loan Bank [FHLB] advances) as well as brokered deposits. Bankers have also developed methods of avoiding existing regulations that result in an increase in the bottom line (sweep accounts and international banking facilities). The many products available have much to offer banks, but they often entail more risk and require a more sophisticated management strategy. Thus even though management of liquidity has become more complex, it is by no means impossible.

Federal Home Loan Bank Advances

Congress established the FHLB system in 1932 to facilitate the extension of mortgage credit by providing thrift institutions with collateralized loans.⁵ In 1989 the Financial Institutions, Reform, Recovery, and Enforcement Act (FIRREA) expanded the role of the FHLB system by opening its membership to commercial banks and credit unions, and in 1999 the Gramm-Leach-Bliley Act expanded the type of assets that qualify as collateral for FHLB advances. Between year-end 1992 and year-end 2005, the number of commercial banks in the FHLB system grew from 1,284 to 5,927. As of December 2005, the FHLB system had 8,157 members.⁶ Although the FHLB system does not interact directly with U.S. households, the system has enhanced the availability of residential mortgages by providing member institutions with a way to liquefy the home mortgages they originate, thus ensuring the flow of available credit.

Some critics of the FHLB system have suggested that FHLBs are no longer necessary because of

the growth and strength of the secondary mortgage market.⁷ But the FHLB system has done more than help its members fund mortgage loans. The FHLB system also offers products that help members in their asset-liability management, and it generally provides a supplementary source of funds for expansion and liquidity that can address imbalances between deposits and funding needs.⁸

There is no indication that the role of FHLBs in providing a reliable source of bank funding will change in the future. But critics argue that FHLB advances enable banks to evade the natural limits of their expansion and that the advances thereby impede market discipline; thus, any future changes to the FHLB's role in liquidity management may well take the form of restrictions on the use of FHLB advances.⁹ An additional impetus for limiting the use of FHLB advances is the effect these advances can have on the deposit insurance fund when an insured depository institution fails: because all FHLB advances are required by law to be secured, they are paid in full before the FDIC recovers funds after an insured institution fails.¹⁰

Nonetheless, FHLB advances are very popular with bankers (for the ten years ending December 31, 2002, FHLB advances increased by 521 percent) and are likely to remain an important funding tool, possibly with limitations placed on their use by troubled institutions.¹¹

⁴ For example, see Garver (2000), Jackson (2001), and Silverman (2001a, 2001b).

⁵ The FHLB system is a government-sponsored enterprise (GSE) consisting of 12 banks that raise funds by issuing consolidated debt securities in the capital markets.

⁶ http://www.fhlb-of.com/mission/membership_frame.html. This includes credit unions and insurance companies as well as banks and savings institutions.

⁷ See, for example, Congressional Budget Office (1993).

⁸ Another benefit of FHLB advances is that the FHLB system is willing to make both fixed and adjustable-rate advances that can have maturities ranging from one day to 20 years, whereas most other funding sources do not offer long-term maturities. (FHLBs also provide their members with funding for small businesses, community development, and rural and agricultural loans.)

⁹ See Stojanovic, Vaughan, and Yeager (2000); Ashley, Brewer, and Vincent (1998); and Bennett, Vaughan, and Yeager (2005). Concerns about the growth of FHLBs have resulted in a proposal by the Federal Housing Finance Board to significantly raise retained earnings held by the FHLBs. See Rucker (2006).

¹⁰ See Shibus (2002).

¹¹ Dow Jones Capital Market Report (2000). See the section below (in Part 2) on market discipline.

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Brokered Deposits

A second funding substitute for core deposits is brokered deposits, generally defined as deposits “issued by a financial institution and purchased by an investor through a third-party intermediary.”¹² Brokered deposits were used as far back as the 1950s to aid the thrift industry whenever there was a regional shortfall of funds. Before 1970, the brokered-deposit market consisted primarily of institutional uninsured depositors, including money-market funds, corporations, bank trust departments, and insurance companies. In 1973, when interest-rate ceilings were eliminated on deposits of \$100,000 or more, deposit brokers helped institutional investors find the highest rates available for their deposits, while technological advances made a nationwide market possible. But in 1974, an FDIC study indicated that a misuse of brokered funds was a contributing factor to many of the bank failures.¹³

In the early 1980s, the thrift industry used brokered deposits to fund much of its growth. Between 1980 and 1983, brokered deposits within that industry grew by a yearly average of 60 percent. It was during this period that the deposits gained much of their notoriety, and many people concluded that brokered deposits contributed to the savings and loan crisis. In 1984 regulators attempted to curb the use of brokered deposits, and from 1984 through 1989 brokered deposits held by savings and loans increased an average of only 4.27 percent per year.¹⁴ Although the use of brokered deposits is most often associated with the thrift industry, commercial banks also found that brokered deposits met their funding needs. At the end of 1990, commercial banks had \$72.6 billion in brokered deposits.¹⁵

By 1989 Congress had concluded that brokered deposits contributed significantly to the collapse of the savings and loan industry and began restricting their use.¹⁶ Congress adjusted the restrictions in 1991 by prohibiting any insured institution that is not well capitalized from accepting any funds obtained directly or indirectly from a deposit broker. Institutions that are “adequately capitalized” can apply to the FDIC

for a waiver of this provision on a case-by-case basis.¹⁷

People on the periphery of the banking industry might have concluded that brokered deposits would never again be thought of as a conventional source of funding. But brokered deposits have again become one of the tools bankers use in their liability management programs. In fact, as figure 3 shows, large banks’ use of brokered deposits has exploded in recent years. From a bank’s perspective, brokered deposits can be used to great advantage because they do not upset a bank’s local savings market and they give the institution access to national markets: banks can

¹² FDIC (1997), 119.

¹³ Hill (1974). The study found that a misuse of brokered deposits contributed to 30 percent of failures from 1960 to 1974. But regulators had expressed concerns even before this study was released. In 1959 the Federal Home Loan Bank Board (FHLBB) limited the percentage of brokered money that a thrift could accept to 5 percent of its total deposits. The limitation was repealed in 1981.

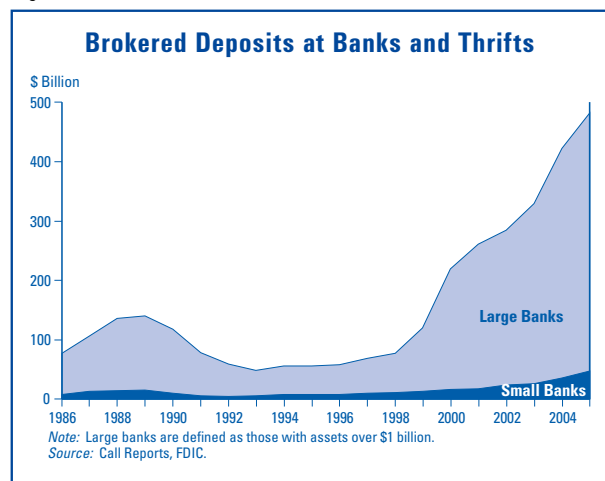
¹⁴ The 1980–1983 growth is documented in FHLBB (1980, 1983, 1984a). The 1984–1989 growth is documented in FHLBB (1984b, 1989). The FHLBB and the FDIC issued a joint regulation that would have limited deposit insurance on any deposits placed by brokers (49 Fed. Reg. 13,003 [1984]), but when the agencies were challenged in federal court, the court rejected their action (FAIC Sec., Inc. v. U.S., 595 F. Supp. (D.D.C. 1984), aff’d mem., 753 F.2d 166 (D.C. Cir. 1985)).

¹⁵ Cope (1991).

¹⁶ 12 U.S.C. section 1831(f) (2001).

¹⁷ Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), section 301, as codified in 12 U.S.C. § 1831f (2001). The capital categories are statutorily defined (12 U.S.C. §1831a(b)(2001)).

Figure 3



have one rate structure for local deposits and another for deposits placed through brokers. Additionally, because institutions that specialize in commercial lending are limited in their ability to borrow from FHLBs,¹⁸ such institutions find brokered deposits particularly beneficial.

Two forms of brokered deposits that bank managers use for liability management in today's market are deposit splitting, used mainly by large banks, and an Internet-based service, used mainly by small and midsize banks. Other sources of brokered deposits exist as well—for example, less-formal deposit-splitting arrangements, online auctions, and deposit-listing services¹⁹—but are not discussed here. However, their availability is a reminder that just as technological advances opened entirely new avenues of funding for today's bankers, other options for using brokered deposits will surely be developed in the future.

Deposit splitting by affiliated brokers. Despite the regulatory scrutiny that brokered deposits have received since the savings and loan crisis, the use of deposit brokers is recognized as a legitimate method of obtaining deposits. Although many brokers specialize in locating for their customers the highest rates of interest that are being paid on certificates of deposit,²⁰ our discussion here concerns the subset of brokered funds that are used to expand deposit insurance coverage beyond the normal limits to much higher levels. The insurance-related risks associated with this form of brokerage are familiar. First, this form increases the exposure of the federal deposit insurance fund. Second, this form of brokerage does not subject banks to the market discipline that is ordinarily brought to bear by larger depositors when they are unable to obtain full insurance coverage.²¹

Paradoxically, two root causes of the recent funding problem of depository institutions—the increased value of the stock market and a preference for higher-paying investments—have indirectly been the means by which larger institutions have found a reliable source of cash through brokered deposits. The volatility that characterized the stock market in the late twentieth century

and the opening years of the twenty-first led many investors to be content to wait on the sidelines for future investment opportunities, and the result was a problem for stock brokerage houses: how should the resulting oversupply of cash be invested?

In the late 1990s, Merrill Lynch began breaking up its customers' accounts into amounts of \$100,000 or less and distributing the money across its affiliated insured depository institutions, thus offering its clients additional deposit insurance coverage for their funds. Several other brokerage houses subsequently adopted similar deposit-splitting programs. But unlike Merrill Lynch's program, many of the newer arrangements place funds with unaffiliated institutions, a course that may prove more troublesome for regulators. When deposit splitting is restricted to affiliated institutions, the growth of such programs is inherently limited, but when a brokerage uses unaffiliated institutions, the number of depository institutions available is virtually unlimited, and if this activity is taken to the extreme, the resulting influx of insured deposits could lead to a reinstatement of deposit insurance premiums.²² In addition, when unaffiliated institutions are used, volatility increases, since money that flows so easily into the insured accounts from the brokerage house is just as likely to go elsewhere if the least financial incentive arises.

Although nothing limits this type of deposit-splitting program to large institutions, the largest institutions are currently the most active participants. But other deposit-splitting arrangements exist for mid- and smaller-size institutions. One such arrangement is an Internet-based service.

¹⁸ Institutions with assets over \$500 million are not able to use commercial loans as collateral for their FHLB advances.

¹⁹ Campbell (2001).

²⁰ By using such publications as Bank Rate Monitor or by surfing the Internet, bank customers can locate the higher-paying CDs without ever talking to a deposit broker. Customers' use of these vehicles has encouraged bankers who are in pursuit of funding sources to keep pace with technological advances.

²¹ Market discipline is discussed in detail in Part 2.

²² This possibility assumes that Call Report data will reflect the change in insurance status. An increase in the total deposits insured by the FDIC without a corresponding increase in the insurance fund balance would cause a decrease in the reserve ratio. The effect of a change in the reserve ratio is discussed at note 100 in the Deposit Insurance Issues section below.

An Internet-based deposit-splitting

arrangement. Brokered deposits seemed to gain some respectability when the Promontory Financial Network (Promontory) launched the Certificate of Deposit Account Registry Service (CDARS) in January 2003.²³ Promontory was founded by former Comptroller of the Currency and former FDIC board member Eugene Ludwig. Its board of directors includes a former vice chairman of the Federal Reserve Board, Alan S. Blinder, and a former FDIC chairman, L. William Seidman. Even though the principals of Promontory are quick to contrast their program with traditional brokered deposits,²⁴ a skeptic could just as quickly disagree and argue that the system is nothing more than a well-connected brokered-deposit service. Nevertheless, the new service has met with approval from most observers.²⁵

CDARS allows participating banks and thrifts to offer their customers insurance on deposits greater than \$100,000—currently, on deposits of up to \$25 million.²⁶ To illustrate how the service does this, let us assume a customer goes into a CDARS-participating bank to make a deposit of \$200,000. The bank holds \$100,000 in an account and places the other \$100,000 with another institution belonging to the CDARS network and offering terms acceptable to the first bank's customer. At the same time, another CDARS bank taking a deposit from one of its own customers arranges to deposit \$100,000 with the first bank. By using the CDARS network, the first bank continues to hold \$200,000 in its deposit base—an amount that increases its lending capacity; the bank-customer relationship is saved since the customer deals only with the first bank; and the \$200,000 deposit is completely covered by deposit insurance.

CDARS has been described as a clearinghouse that appears best suited to the small or mid-size institution,²⁷ and it is true that the bank customer who benefits from CDARS is primarily an individual with over \$100,000 in bank deposits. Nevertheless, the program is also being marketed to nonprofits, small businesses, and municipalities. In the case of municipal deposits, CDARS provides an additional benefit to the depository

institution since the institution's collateral is freed up under the program.²⁸

Although the service may resemble a typical deposit brokerage, some observers have favorably distinguished it from the brokered deposits that caused problems during the savings and loan crisis.²⁹ Time will tell, but CDARS may well make brokered deposits a primary consideration when bank management is exploring funding options.

Sweeps and Reserve Requirements

Another area of a bank's nondeposit liability management has been driven by legal restrictions. Under current law, depository institutions may not pay interest on demand deposits or standard checking accounts.³⁰ However, because nonbusiness account holders are generally paid interest through the use of negotiable order of withdrawal (NOW) accounts,³¹ the only group that is effectively barred from earning interest on its demand deposit accounts (DDAs) are holders of business accounts. To circumvent the restriction on the payment of interest, many banks arrange for funds held in a commercial account to be swept into an interest-bearing instrument (target account) on a regular basis.

²³ ABA (2003).

²⁴ Thompson (2003).

²⁵ For example, CBS (2003) and ABA (2001).

²⁶ As of March 2006, more than 1,100 banks were members of the network. Initially the service offered only four-week to one-year CDs, but within six months after it started, it began accepting individual retirement account CDs and extended the available terms to two- and three-year CDs.

²⁷ Bruce (2003).

²⁸ In most cases, municipal deposits over \$100,000 are required by law to be either fully covered by deposit insurance or secured by a bank's pledge of securities. If municipalities can get deposit insurance on their total deposit through CDARS, securities that would otherwise be used as collateral will become available to the bank for other activities. Information on CDARS is from the Web sites www.cdars.com and www.promnetwork.com.

²⁹ Vaughan and Yeager (2003).

³⁰ The prohibition arose in the 1930s, when it was feared that deposit competition could destabilize the banking system. It was also feared that money-center banks would draw funds from rural banks, diverting those funds from productive agrarian uses to speculation in stocks. As a result, the Banking Act of 1933 authorized the Federal Reserve to limit the interest rate member banks could pay on time deposits; the Federal Reserve implemented the law on November 1, 1933, by promulgating Regulation Q. Interest-rate controls through Regulation Q existed in some form until 1982.

³¹ NOW accounts are interest-bearing savings accounts with check-writing privileges.

Current law limits the frequency of sweep activity according to the nature of the target account. If the target account being used by the sweep is a traditional savings account or money-market account, banks must limit transfers and withdrawals between the accounts to 6 per month or per statement cycle.³² However, if the funds are being transferred to a nondeposit instrument, such as repurchase agreements or unsecured instruments, the transfers (or “sweeps”) can be made daily. Consequently, bankers can offer the business customer a sweep account that offers automatic investment in a high yield account and a blended rate of interest that is closer to market rate.³³

An additional impetus to establishing sweep accounts is the dollar amount required to meet a bank’s reserve requirements. All depository institutions must reserve an amount equal to between 3 percent and 10 percent of the funds they have in interest-bearing and noninterest-bearing checking accounts. The total required to be held in reserve is determined relative to the total deposits held in the qualifying accounts at each bank. Once the amount of the reserve is determined, banks may choose to hold their reserves in the form of cash (vault cash) or in an account at a Federal Reserve Bank (FRB) (sterile reserves), but in either case the funds are nonincome producing. As a result, a key strategy of bank liability management has been to discover ways of building a bank’s deposit base while keeping required reserves to a minimum.³⁴

Bankers have successfully reduced their reserves in recent years: reserve balances at FRBs fell approximately \$3.5 billion between 1994 and 2004, while total deposits increased by 95.6 percent during the same period.³⁵ The American Bankers Association cited the example of an institution that was able to reduce its required reserves from \$788,000 in August 2000 to \$48,000 in August 2001, a period when deposits at the institution rose by \$36 million.³⁶ Although many bankers have used sweep accounts successfully to reduce their reserve accounts, many analysts view the mechanisms

being used to evade reserve requirements as “inefficient and costly” and believe they result in price distortion.³⁷

During the 109th session of Congress, the Senate discussed whether banks should pay interest on commercial deposit accounts and whether FRBs should pay interest on the reserves they hold.³⁸ These two issues have been put before Congress in the past, and like past bills, the recent bill combines the two issues.³⁹ In fact, interest earned on a bank’s reserves is frequently viewed as an offset to the interest that the institution would pay on deposits held in its transaction accounts. If legislation goes forward, banks will likely unwind most of their sweep programs. Until then, sweep accounts continue to be used effectively by bank management. We next focus on retail sweep accounts, and sweeps to third-party money brokers, repurchase agreements, and international banking facilities.

Retail sweep accounts. The history of retail sweep accounts shows clearly that even though paying interest on deposit accounts may have been the primary motivation for establishing sweeps, minimizing required reserves quickly became bank management’s paramount goal.

As noted above, since the 1970s financial institutions have used sweep accounts to avoid the prohibition of interest payments on DDAs. In 1982, with the creation of the money-market deposit account (MMDA), the use of sweeps increased dramatically. The MMDA was statutorily man-

³² Recent congressional proposals would increase the number of transfers permitted between deposit accounts to 24 per month, allowing for a sweep on each business day of the month.

³³ The rate typically consists of the money market rate on the excess funds and a NOW account rate on the threshold funds.

³⁴ Saunders and Cornett (2003) provide a good discussion.

³⁵ www.federalreserve.gov/releases/z1/current/data.htm, chart L.110. Total Deposits equal Checkable Deposits (line 30), plus Small Time and Savings Deposits (line 34) and Large Time Deposits (line 35).

³⁶ ABA (2001).

³⁷ Bennett and Peristiani (2002), 1; *Banking Policy Report* (1997).

³⁸ S.1586, 109th Cong., 1st sess. (2005).

³⁹ See, for example, U.S. House Committee on Financial Services (2003, 2001).

dated to be “directly equivalent to and competitive with money-market mutual funds.”⁴⁰ With this new instrument, banks were finally able to pay their depositors a market rate of interest by sweeping any funds over an agreed-to amount into an interest-bearing MMDA. The funds were automatically returned to the transaction account with interest paid as the bank and depositor had previously agreed. By 1984, banks held more than \$370 billion in MMDAs.⁴¹ But even though the MMDA gave banks a product without interest-rate ceilings, banks’ ability to compete with the sweep accounts that were available on the open market continued to be limited because MMDAs were prohibited from having more than six transfers and withdrawals per calendar month or statement cycle.

Despite this disadvantage, when newly designed computer software enabled a bank to analyze its depositors’ use of their transaction accounts, sweeps became one of the main tools used to minimize a bank’s required reserves: any funds deemed by the bank to be excess were automatically transferred into MMDAs. (As a result of these transfers, a bank’s required reserve ratio could go from 10 percent to zero). And in 1994, when the Federal Reserve Board authorized banks to use this software to reclassify *any* transaction-account, retail sweep programs developed as banks notified their customers when they opened an account that “your deposit may be reclassified for purposes of compliance with Federal Reserve Regulation D. . . .” Banks began initiating sweeps without the customers’ explicit approval, and the volume of transfers occurring between transaction accounts and MMDAs increased dramatically.

The MMDA used in a retail sweep program operates as a “shadow” account that is visible only to the depository institution. The bank reduces its required reserves while leaving unchanged the transaction deposits that are available to the depositor. A bank’s level of transaction accounts decreases sharply, whereas the depositor’s view of the account appears unaffected.⁴² Just as this transfer occurs without the depositor’s explicit approval or knowledge, so, too, any profits that

the bank earns are not generally shared; in addition, banks also can choose how the funds will be invested.

During 2002, the Federal Reserve estimated that banks swept \$526.6 billion into MMDAs, and when then Federal Reserve governor Laurence Meyer testified before Congress, he expressed the belief that banks would probably reduce or eliminate the use of deposit sweeping if the Federal Reserve began paying interest on reserve accounts.⁴³

Third-party money brokers. When institutions choose to use third-party money-market brokers as a way to pay interest on commercial accounts, the depositor enters into an explicit contract for the broker’s services and the bank plays the role of conduit. The bank’s customer sets a target balance to hold in his or her transaction account, and any excess funds are wired out of the bank to a money-market broker. A variety of these arrangements are available, but in each of them the bank’s primary motivation is to make available to its commercial depositors interest-paying accounts through daily sweeps. Like retail sweep accounts, these programs reduce a bank’s required reserves, but the net saving realized by the bank is relatively insignificant, and unlike with retail sweep accounts, a bank loses control of the funds. Consequently, if new legislation authorized the FRBs to pay interest on reserve accounts and banks to pay interest on DDAs, banks would probably discontinue their use of third-party brokers (though the use of affiliated brokers might continue). If so, they may need to adjust their pricing strategies to maintain their profits.

Repurchase agreements. Repurchase agreements (repos) are contracts between the depositor and

⁴⁰ Pub. L. No. 97-320, § 327, 96 Stat. 1468, 1501 (1982) (codified at 12 U.S.C. § 3503 (1982)).

⁴¹ Kaswell (1984).

⁴² See Anderson and Rasche (2000) for further discussion of retail sweep programs.

⁴³ Meyer (2001). <http://www.federalreserve.gov/boarddocs/testimony/2001/20010313/default.htm>.

the bank that are considered short-term debt obligations in which the bank secures its obligation to pay the amount due under the contract by a pledge of government securities.⁴⁴ From the customer's perspective the repo operates much like an insured deposit, since the customer's funds (including interest) are secured up to the value of the collateral. In most cases, repos are overnight agreements: the funds are moved from the deposit account at the end of the business day and are returned to the account at the start of the following business day. With an in-house repo program, the bank decides how to invest the excess funds and retains the net interest margin. The customer is repaid under the terms of the repo from the general liquidity of the bank; that is, the specific government securities being used as collateral under the agreement are not generally sold.

Using repo agreements as a liability management tool has several advantages. First, repos enhance the bank's flexibility: the bank determines the rate of interest to be paid in the transaction and changes it as often as necessary to remain competitive in the market. Second, the bank retains total control: the bank decides how to invest the excess funds and retains the net interest margin. Third, the money remains in the community. But despite these advantages, repos require a pledge of collateral and therefore restrict the bank's use of its securities. For this reason, the payment of interest on reserves and DDAs would probably result in a decrease in the number of sweep arrangements using repos.

International banking facilities. During the 1960s and 1970s the U.S. banking industry developed a substantial offshore international banking sector that allowed banks to attract deposits by avoiding statutory interest rate ceilings. But in 1981, Congress alleviated the need for any offshore investment when it authorized U.S. banks to establish international banking facilities (IBFs). An IBF is merely a set of asset and liability accounts for international banking transactions that is segregated on the books and records of the establishing bank, with no separate organizational structure needed. Dollar-denominated deposits

held at a U.S. IBF (or a bank located outside the United States) are Eurodollars—Eurodollars are not subject to interest-rate ceilings, reserve requirements, or deposit insurance assessments.

The Federal Reserve authorized the establishment of IBFs at domestic banking offices in order to enhance the internationally competitive position of U.S. banking institutions.⁴⁵ The Board reasoned that since many banks avoided regulatory requirements by conducting their international banking from foreign bank branches, IBFs would make the cost of conducting international banking activities at domestic offices competitive with the cost of conducting business from a foreign branch, and the money would be held in accounts within the United States. In addition, since the cost of establishing a foreign bank branch would prevent any institution except the largest money-center banks from participating in the international banking business, IBFs offered regional banks a way to become involved in international banking. Although stringent requirements limit the type of transaction that can be undertaken by an IBF, qualified funds may be swept between a U.S. bank and its IBF.

Liquidity Risk Management

The trends discussed above have changed the way banks manage their liquidity positions and the associated risks. The basic principles of sound liquidity risk management remain unchanged; however, those who apply them must take into account the new challenges and opportunities faced by banks today.

Some banks have adjusted better than others, but regulators have noted several problems. Sound liquidity management requires that banks weigh

⁴⁴ Another type of repurchase agreement allows banks to borrow from major investment firms by pledging government, agency, or mortgage-backed securities as collateral for a loan at market rates on a short-term basis (usually extending from 30 to 180 days). This type of repo is not discussed here and would not be affected by the legislative changes in question.

⁴⁵ Chrystal (1984).

the trade-offs among liquidity needs, return on investment, and managerial flexibility. Problems arise when banks begin using new funding sources without understanding them or making the appropriate changes to their liquidity management programs. For example, some banks chose structured FHLB advances that contained options they may not have fully understood. When the FHLBs exercised their options, or when the banks decided to change their funding strategies by prepaying advances, an apparently inexpensive borrowing could have unexpected and expensive consequences.⁴⁶ Other areas where banks have sometimes failed to make adjustments include liquidity reporting and the associated management information systems support, as well as contingency planning: banks have not always adjusted their contingency plans or “what-if” analyses to address the characteristics of new funding sources. In 2001, the Office of the Comptroller of the Currency (OCC) found that up to 25 percent of the smaller banks that were represented at a large meeting of bankers had no up-to-date written contingency plans.⁴⁷

Some banks have addressed their funding needs by securitizing assets rather than holding them in their portfolio. This strategy raises different issues that, again, some banks have addressed more successfully than others. The most significant liquidity danger relates to early amortization clauses in the contracts. Such clauses are typically triggered by an indicator of deterioration in the performance of the securitized portfolio. When the clauses are triggered, the bank may suddenly be required to fund a large volume of new lending associated with the portfolio.

For many banks, an increased reliance on wholesale funds could lead to more severe liquidity problems if their financial condition deteriorated. Most core deposits are insured, so these depositors have little reason to exit from a troubled bank. But many wholesale and rate-sensitive funding sources could quickly evaporate if the bank’s solvency were in doubt.⁴⁸ Thus many banks should be more careful about contingency funding plans.

Bank Liability Structure in the Future

Having examined liability management strategies used by banks in response to the changing environment, we now venture to make predictions. We begin with core deposits because most banks still use core deposits as their preferred primary source of funding, turning to noncore deposits and other wholesale sources to supplement the funding of their operations.

We expect that growth in core deposits will continue to lag behind asset growth. Bank customers do not need to keep their money in core deposits since technological improvements have simplified (and will continue to simplify) the process of shopping for competitive returns from a broad array of options. Furthermore, the aging of the U.S. population has negative (as well as positive) effects on core deposits. Certainly aging customers are more likely to need the liquidity and safety provided by deposit products and will therefore tend to increase the demand for these products; nevertheless, as assets are passed to the next generation, customers are likely to shift away from core deposits in search of better returns.

Growth in core deposits will also be influenced by the health of the general economy and the stock market. If the country’s wealth continues to increase as it has in recent decades, the percentage of household wealth invested in core deposits will continue to drop (because wealthy consumers normally have a stronger appetite for and capacity to accept risk). A strong economy will bring about growth in core deposits, but the rate of growth will probably be slower than the rate of

⁴⁶ In 2002, 8 percent of FHLB net income came from prepayment fees.

⁴⁷ Silverman (2001a).

⁴⁸ See Shibut (2002) for a discussion of the incentives for various types of liabilities to exit from a troubled bank. Note, however, that economists and supervisors apparently disagree with each other on the likelihood that FHLB advances will exit from the bank. Economists argue that FHLBs have no incentive to exit from banks because their collateral protects them from losses at failure; for example, see Shibut (2002); Stojanovic, Vaughan, and Yeager (2000); and Ashley, Brewer, and Vincent (1998). Supervisors, in contrast, warn that the FHLBs may exit from the bank or demand additional collateral if the bank’s condition deteriorates; for example, see Sexton (2000b) and FDIC (2002).

growth in bank assets. However, if the economy—or the stock market—is weak, core deposit growth could be quite strong during a period when loan demand is relatively weak.⁴⁹

The future is even murkier for total deposits than for core deposits. Of course, the factors that influence core deposits will affect noncore deposits in a similar way. But technological changes have probably influenced noncore deposits more than they have core deposits, and depositors holding large volumes of funds are more likely to be sensitive to perceived trade-offs between risk and return.⁵⁰ When deposits are split and distributed among banks, deposits are insured at much higher levels than the level available through one institution. Deposit splitting allows investors to shift from low-risk low-return investments (money-market funds) to low-risk low-return insured investments (deposits) at a very low cost. In the short term, we expect this type of activity to continue generating deposit growth. Although the long-term prospect for the use of deposit splitting is particularly hard to ascertain, we expect these deposits to be more volatile than core deposits.

Banks' reliance on nondeposit sources, such as FHLB advances, will probably be determined largely by two factors: the ability of core deposits to fund asset growth, and returns on funds received from nondeposit sources compared with returns on deposits. If core deposit growth lags behind asset growth (as we expect), nondeposit instruments will continue to grow, as long as banks continue to offer competitive interest rates.

PART 2. Implications for Bank Regulators

Because these changes in bank liability structure have yielded substantial benefits to U.S. consumers and businesses, the task for regulators is not to find ways of turning back the clock but, instead, to accommodate these changes wisely. From this perspective we discuss several areas of bank regulation that are being affected by bank liability structure: supervision, deposit insurance,

and failure resolution. Under supervision, we look at market discipline (how to exploit the power of markets to encourage good bank governance)⁵¹ and the examination of liquidity risk at banks. Under deposit insurance, we look at deposit-insurance pricing and identify other issues. And under failure resolution we look at depositor preference (the optimum order of payment for creditors in the event of a bank failure) and some operational issues raised by changes in bank liability structure.

Market Discipline

In recent years, regulators and economists have become increasingly interested in the use of markets to supplement or reduce the reliance on traditional supervision as a mechanism for monitoring and policing bank behavior.⁵² With banks relying more heavily on unprotected funding sources, the potential is greater for creditors to influence bank behavior—either directly (as banks respond to creditor demands) or indirectly (as supervisors respond to the changes in creditor behavior). Unprotected market participants have an incentive to monitor banks, an independent viewpoint, and certain advantages over supervisors.⁵³ In addition, many market signals are available daily, whereas examinations, and even Call Reports, are available much less frequently. And with liability structure now able to change more quickly, the FDIC's risk exposure could shift rapidly. Thus the regulatory community is taking some steps to expand the role of markets in the regulatory process and is exploring the possibility of other steps as well. Perhaps the most visible

⁴⁹ We concentrate on consumer issues here because most deposits are held by consumers. But if legislation were passed allowing interest payments on demand deposits, deposits held by businesses could increase markedly.

⁵⁰ The search costs and switching costs associated with maximizing one's return are similar for large and small depositors, but large depositors have more to gain from a higher return.

⁵¹ One way to use market discipline relates to capital regulation. We explore market discipline imposed by stockholders, but we do not address the question of capital requirements.

⁵² Sironi (2003), Federal Reserve Board (1999b), and Evanoff and Wall (2000) discuss industry changes that support an increased emphasis on market discipline.

⁵³ See Flannery (1998) for a discussion.

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sign of banking regulators' resolve to strengthen market discipline is the status it has in the Basel II accord: market discipline is the "third pillar."⁵⁴

Conditions Necessary for Market Discipline to Succeed

The term "market discipline" is often used broadly to represent the entire role that markets play in bank behavior. But to examine the effectiveness of market discipline and the ways in which regulators could enhance its influence, we need more specificity. We need a more precise definition of market discipline, and we need to understand the conditions necessary if market discipline is to succeed.

Flannery defined market discipline as the ability of markets to perform two distinct functions: to monitor changes in the bank's condition and to influence the bank's actions.⁵⁵ Llewellyn used the same breakdown of monitoring changes in condition and influencing actions, but he concentrated on the conditions necessary if market discipline—monitoring and influencing—is to succeed. He presented seven such conditions:

1. Relevant and accurate information must be available to market participants.
2. There must be enough market participants who are able to analyze the information.
3. The market participants must have adequate, clear incentives to monitor banks.
4. A sufficient number of market participants must act on the information.
5. The market response must be rational.
6. The response must lead to equilibrating change in market quantities or prices or both.
7. Bank managers must have the incentives and ability to respond to the market changes (or must be conscious of the potential threat of changes in quantities, prices, or both).⁵⁶

The last condition is the only one that relates to the market's ability to influence banks. A critical aspect of that criterion is timing. When a bank is

troubled, market discipline is most useful if it influences bank managers before it is too late to avoid failure.⁵⁷ In addition, regulators would naturally prefer that the managerial response be directed at reducing the likelihood or cost of failure (rather than taking on additional risk).

Assuming that market discipline is transmitted through price and quantity signals, Llewellyn concludes that market discipline will not work effectively if any of the seven conditions is violated. Furthermore, he concludes that actions taken by banking regulators to address any of these conditions can improve the effectiveness of market discipline.⁵⁸

Evidence about the Provision of Relevant and Accurate Data to the Markets

The availability of relevant and accurate data is Llewellyn's first condition for effective market discipline. The banking agencies primarily use two tools to help ensure that this condition is met: reporting requirements and examinations. Among the large number of reporting requirements imposed on banks is the requirement that banks collect, edit, and supply Call Report data quarterly. The second tool—the examination function—reduces the ability of banks to ignore or hide their financial difficulties from market participants. Managers at troubled banks have a strong incentive to hide problems, since both markets and regulators impose discipline when the problems become apparent. In fact, several researchers have found that troubled banks frequently reveal bad news (through increases in loan-loss reserves and reductions in equity) short-

⁵⁴ For details, see Bank for International Settlements (2001a, 2001b). See also Burton and Seale (2005).

⁵⁵ Flannery (2001).

⁵⁶ Llewellyn (2002).

⁵⁷ FDIC (1997), 487-88, describes the "anatomy" of a failure, with the earliest decisions made some time before problems become apparent in the accounting data. The literature on prompt corrective action puts a strong emphasis on timing: the triggers must occur before it is too late for the bank's management to turn the bank around. See Jones and King (1995) and Peek and Rosengren (1996).

⁵⁸ Llewellyn (2002). Similar lists of conditions can be found in Llewellyn (2005) and Hamalainen, Hall, and Howcroft (2005).

ly after a supervisory examination or an associated enforcement action.⁵⁹ Therefore, changes made to enhance market discipline cannot ignore the evidence that supervisors play an important role in providing accurate data—particularly for banks that become troubled. This evidence also indicates that efforts to supply the markets with negative information gleaned by supervisors might be a fruitful avenue for enhancing market discipline.

Evidence about Whether Markets Monitor Banks

Most of Llewellyn's conditions (conditions 2–6) relate to the ability of markets to monitor banks and react rationally. The evidence that unprotected creditors are able and willing to monitor banks and to act as expected on available information is very strong. The volume of uninsured and jumbo CDs drops substantially during the period leading up to failure.⁶⁰ CD yields increase with bank risk.⁶¹ Stock market prices drop when financial condition variables indicate problems and when examination ratings fall, and subordinated debt yields are higher for riskier banking companies than for less-risky ones.⁶² These findings indicate that, to some extent, the first six conditions set by Llewellyn are being met.

The evidence is less compelling (and less plentiful) when one asks whether market information could be used to improve regulatory monitoring. Gilbert, Meyer, and Vaughan tested the use of jumbo-CD rates and runoff as a screening tool to predict downgrades in supervisory ratings or as a factor to improve off-site monitoring models (which are currently based on accounting data).⁶³ They found that jumbo-CD information contributed nothing in either capacity, and suggested that the strong economy during their sample period (1991–1999) contributed to the weak relationship (that is, depositors might have had little incentive to monitor banks because the industry was so healthy). Jagtiani and Lemeaux examined the stock, bond, and deposit data of five publicly traded companies that failed.⁶⁴ They found that except at one bank, both bond and equity markets were slower to identify problems than supervisors were.

Berger, Davies, and Flannery examined the success of bond ratings, abnormal stock returns, and supervisory assessments (examination ratings) in predicting the future performance of banks.⁶⁵ They found that bond rating agencies (but not stock market participants) acquire and use information that would improve the ability of supervisory assessments to predict future changes in bank condition. However, their method did not test for the extent to which the benefits from bond rating and stock market information were also captured in the financial data collected in the Call Reports.

A few studies have tested the ability of stock market data to improve off-site monitoring models. Curry, Elmer, and Fissel found statistically significant relationships between various stock market variables and bank condition.⁶⁶ They also found that the addition of these variables to an off-site model improved performance, but the incremental improvement was very small. Krainer and Lopez studied the effectiveness of adding both stock market and bond market data to off-site models. They had similar results, finding that abnormal returns tended to anticipate examination rating downgrades. They also found that the addition of stock market and bond market data to

⁵⁹ See U.S. General Accounting Office (1990, 1992); Dahl, O'Keefe, and Hanweck (1997); Gunther and Moore (2000); and Curry et al. (1999).

⁶⁰ See Jordan (2000); Goldberg and Hedges (2002); Silverberg (1993); and Marino and Bennett (1999).

⁶¹ See Park and Peristiani (1998); Jordan (2000); Maechler and McDill (2003); and Hall et al. (2003).

⁶² See Flannery (1998) for a brief review of the literature on a wide range of related topics. The Federal Reserve Board (1999b) provides a more thorough review on sub-debt literature, and Krainer and Lopez (2002) provide a review of the literature on the stock market. See also Berger, Davies, and Flannery (2000); Morgan and Stiroh (1999); DeYoung et al. (2001); and Curry, Elmer, and Fissel (2003).

⁶³ Gilbert, Meyer, and Vaughan (2003).

⁶⁴ Jagtiani and Lemeaux (2000).

⁶⁵ Berger, Davies, and Flannery (2000).

⁶⁶ Curry, Elmer, and Fissel (2003). They found statistical significance even after controlling for relevant accounting variables. Gunther, Levonian, and Moore (2001) performed a similar analysis that also found a statistically significant relationship between the estimated default frequency (EDF) implied from stock market data and BOPEC (an acronym for a bank holding company rating: B for bank subsidiaries; O for other nonbank subsidiaries; P for parent control; E for consolidated earnings; C for consolidated capital) ratings. They found a small improvement in in-sample tests, but they did not provide out-of-sample tests.

off-site models improved the in-sample fit but did not materially improve predictive ability in out-of-sample tests.⁶⁷

In summary, researchers have found plenty of evidence that uninsured depositors, bond investors, and stockholders impose penalties on banks that become riskier. However, researchers' attempts to use market data to improve the predictive ability of supervisory off-site models have to date been disappointing.

Evidence about Whether Markets Influence Banks

Llewellyn's last condition addresses the ability and incentive of bank managers to respond to market signals. Bank managers' response is just as important as the market's ability to react to bank condition, but it has received far less attention from researchers.⁶⁸

Billett, Garfinkel, and O'Neal examined the abnormal stock returns of banks that had been downgraded.⁶⁹ They found that banks with high levels of insured deposits did not experience a significant reduction in abnormal returns from a downgrade, but banks with lower levels of insured deposits did. They also found that banks relied more heavily on insured deposits for funding after the downgrade. Several other researchers have documented significant shifts away from unprotected funds toward insured deposits and secured liabilities as banks become troubled.⁷⁰ There is also theoretical evidence that supports such a shift.⁷¹ This shift is frequently cited as evidence that market discipline works, and in a way, those authors are correct: bank managers clearly respond to market signals by shifting their funding strategy. But Billett, Garfinkel, and O'Neal concluded that the ready availability of insured deposits undermines the ability of markets to discipline bank management.

Billett, Garfinkel, and O'Neal have company. Jagtiani and Lemeaux reached the same conclusion, based on their inspection of five publicly held banks that failed. Ashley, Brewer, and Vincent came to a similar conclusion about FHLB advances, based on their finding that during the

thrift crisis, insolvent thrifts tended to rely more heavily on FHLB advances than healthy thrifts. Hall et al. studied the effects of depositor discipline on the operating results of healthy banks and found that the effects were too small to influence bank management.⁷² Therefore, under the current regulatory regime, the discipline imposed by bank creditors generally causes bank managers to adjust their funding strategy but not necessarily to reduce their risk exposure.

There is some evidence indicating that stockholders tend to encourage rather than discourage risk-taking at banks—particularly when bank condition is weak. Laeven found that concentrated ownership in banks (which ameliorates the agency problem) is associated with greater risk. Saunders, Strock, and Travelos found that management-controlled banks are more risk averse than stockholder-controlled banks. Demsetz, Saldenberg, and Strahan found that the combination of low franchise value and large insider holdings (the latter align the incentives of managers and owners) is associated with higher levels of bank risk.⁷³

We found two studies that documented evidence of a beneficial (risk-reducing) managerial response to market discipline. Cannella, Fraser, and Lee found that senior managers have more trouble remaining employed in the industry if their bank fails, particularly if the reason for failure was arguably within the manager's control. Baumann and Nier found that banks that were

⁶⁷ Krainer and Lopez (2003).

⁶⁸ Flannery (1998), Bliss and Flannery (2000), and Bliss (2001) all note this as an important area for future research.

⁶⁹ Billett, Garfinkel, and O'Neal (1998).

⁷⁰ For evidence related to insured deposits, see Jordan (2000); Goldberg and Huges (2002); Silverberg (1993); and Marino and Bennett (1999). For evidence related to secured credits, see Hirschhorn and Zervos (1990) and Ashley, Brewer, and Vincent (1998).

⁷¹ See Jordan (2000) and Birchler (2000).

⁷² Jagtiani and Lemeaux (2000); Ashley, Brewer, and Vincent (1998); Hall et al. (2003). Although Hall et al. concentrated their analysis on healthy banks (with a CAMELS rating of 1 or 2), the results did not change materially when they did robustness checks that included weaker banks.

⁷³ Laeven (2002); Saunders, Strock, and Travelos (1990); and Demsetz, Saldenberg, and Strahan (1997).

subject to more market discipline had higher capital ratios.⁷⁴

Bliss and Flannery examined the effects that abnormal returns on stocks and bonds had on a variety of managerial action variables.⁷⁵ Although they found anecdotal evidence that markets influence bank management in extreme circumstances, their results showed no significant relationship between abnormal returns and subsequent managerial actions. They concluded that “in the absence of specific evidence that bank holding company stock and bondholders can effectively influence managerial actions under normal operating conditions, supervisors would be unwise to rely on investors . . . to constrain bank holding company risk-taking.”⁷⁶ DeYoung et al., on the basis of their analysis of the effects of examination ratings on sub-debt spreads, concluded that their “results suggest that bond investors believe supervisory discipline to be more effective than what the market itself can apply.”⁷⁷

Market Discipline in the Future

Most economists and regulators now believe that a heavier reliance on market discipline could potentially improve both the supervisory function and the corporate governance of the banking industry. Related proposals that have been put forth vary widely but can be categorized in one of two basic groups: those that would make major changes, replacing segments of the supervisory function and the safety net with market-driven alternatives; and those that would make lesser changes, enhancing (but not replacing) the basic supervisory scheme and safety net that are currently in place. As may be apparent, the largest differences of opinion are tied to fundamental viewpoints about the need for bank regulation in the first place.⁷⁸

Among the several proposals for major changes is one by Stern, who recommended a mandate to haircut all uninsured depositors at failure, regardless of the circumstances.⁷⁹ Another is by Calomiris, who proposed that large banks be required to issue sub debt with an interest rate

below a specified threshold. If a bank were unable to meet these conditions, its assets would have to shrink 1/24th each month until the debt was issued (or the bank failed).⁸⁰ Proposals along these lines reduce the opportunity for regulatory forbearance and increase the market’s influence on bank behavior. Proposals for modest changes are illustrated by calls for expanding disclosure regulations or for adopting off-site models that incorporate market data.

There are a number of reasons that modest changes may be viewed (at least by regulators and Congress) as more palatable than major changes. First, the trade-offs related to modest changes are far easier to understand than are those related to major changes. Thus, the more sweeping proposals may be viewed as riskier because of unanticipated consequences. Second, the lack of convincing evidence that markets cause managers at troubled banks to reduce risk exposure is a concern. Third, some stakeholders (including regulators) may have a vested interest in the status quo.⁸¹

A fourth complicating factor is that regulatory policies can have inconsistent effects over time. The effects of any policy that is tied to market behavior are likely to vary over the business cycle. Extensive shifts in market behavior have been

⁷⁴ Cannella, Fraser, and Lee (1995); and Baumann and Nier (2003). There is also ample evidence that banks generally held more capital before the introduction of deposit insurance.

⁷⁵ Bliss and Flannery (2000). The variables ranged from dividend payments and staff levels (presumably fully under the control of management) to the book value of equity (where control may have been less complete).

⁷⁶ *Ibid.*, 26.

⁷⁷ DeYoung et al. (2001), 924. They found that sub-debt spreads fell when troubled banks retained a bad examination rating (that is, when a bank with a CAMELS 4 or 5 rating was not upgraded to a CAMELS 1, 2, or 3 during the examination). They also found that spreads increased when moderately troubled banks were upgraded (that is, when banks with a CAMELS rating of 3 were upgraded to a rating of 1 or 2).

⁷⁸ Benston (1993) provides an example of two diametrically opposed viewpoints.

⁷⁹ Stern (1997). See also Feldman and Rolnick (1997).

⁸⁰ Calomiris (1997). The proposal included additional requirements about the total amount outstanding (as a percentage of assets) and the frequency of rollover.

⁸¹ See, for example, Kane (1990), Boot and Thakor (1993), and Rosen (2003).

documented by several researchers. Covitz, Hancock, and Kwast found that sub-debt yields were significantly influenced by issuance decisions, which in turn were influenced by factors that varied substantially over time. Hall et al. suggested that shifts might occur in the monitoring efforts of uninsured depositors, depending on the overall health of the banking industry. Danielsson and Shin described how market reactions to increases in risk have sometimes amplified shocks to the system.⁸²

Proposals for major change usually include “hard” triggers based on market signals⁸³ and therefore provide less room for regulatory discretion in extreme circumstances. Historically large banks become troubled or fail during periods of industry-wide distress, and market volatility during those periods may bring about results that were not anticipated when the regulatory system was designed.⁸⁴ Furthermore, not only the market’s reaction but also the circumstances leading to the industry stress may be unexpected. In large part, the safety net was created to limit the spillover effects of bank failures during periods such as these. During the hearings that led up to passage of FDICIA, Congress spent a lot of time discussing these issues, and the result was prompt corrective action (PCA) and the least-cost test plus the systemic-risk determination.⁸⁵ We see no trends in banking (or in recent research) that would support a shift away from regulatory discretion in extreme circumstances. Therefore, we believe that any near-term changes will probably aim for relatively modest enhancements to the current supervisory scheme.

Although there is no consensus about the best approach, some types of proposals have more support than others. The most frequent recommendation is for more research, and that is already occurring. A basic view is that improvements in the use of market discipline should be measured in terms of net social benefits.⁸⁶ In other words, one should take into account the substantial differences (in costs and benefits) that may exist between the type 1 and type 2 errors associated with market responses. Along the same lines,

Flannery suggested that regulators should not insist on the perfect solution before instituting changes but, instead, should adopt options that yield better solutions more often, or better results for the most important circumstances.⁸⁷

Some of the likely changes are well accepted in academic and regulatory circles—in particular, increased disclosures to the market and increased use of market data in supervisory judgments. In addition, some economists have recommended incorporating market data into deposit insurance prices at large banks.

Increased disclosure requirements are already moving toward adoption as part of the Basel II effort.⁸⁸ Given the research showing that supervisors often have an advantage over markets in uncovering private negative information, future research may advocate—and future changes in the reporting requirements may institute—improved disclosures by banks (or perhaps supervisors) when trouble arises.

Supervisors will probably continue to expand their use of these data in multiple ways. Even though the research to date has not produced large improvements in off-site models, supervisors will probably continue to expand the use of these data in the off-site review process.⁸⁹ Additional research might produce clearer—and thus more useful—signals for regulators. Also possible are changes in the training of examiners (training them to understand market signals better) and in the conducting of on-site examinations.⁹⁰

⁸² Federal Reserve Board (1999b), especially 19 and 58; Covitz, Hancock, and Kwast (2002); Hall et al. (2003), 25–26; Danielsson and Shin (2002).

⁸³ We define a hard trigger as one where there is effectively no supervisory discretion.

⁸⁴ A recent example occurred in 1998 after Russia defaulted on its debt obligations. Bond spreads increased dramatically and liquidity dried up. Other, more extreme examples date from the pre-FDIC banking panics.

⁸⁵ Under the systemic-risk determination, regulators can opt to ignore the least-cost test if a bank has failed, but only after crossing several statutory hurdles. In addition, regulators must publish a written analysis of the reasoning behind the decision.

⁸⁶ Flannery (2001), 112. Meyer (1999) echoes this view.

⁸⁷ Flannery (1998), 280.

⁸⁸ See BIS (2001b) for additional information.

⁸⁹ See Burton and Seale (2005) for a discussion.

⁹⁰ See Emmons, Gilbert, and Vaughan (2001).

Liquidity Risk and Other Supervisory Issues

Because many banks have adopted more complex funding strategies to address shortfalls in core deposit funding, supervisors have reconsidered their evaluation of liquidity risk. Regulatory agencies have increased their emphasis on liquidity management and updated their examiner guidance and training. In 2000 the Bank for International Settlements (BIS) published revised principles on managing liquidity.⁹¹ In 2001, the U.S. banking agencies released an interagency advisory letter on brokered and rate-sensitive deposits, reminding bankers to undertake risk-management measures that are appropriate for banks that rely on these instruments.⁹²

In 2001 both the OCC and the FDIC published new examination guidance on liquidity. The FDIC's revisions incorporated changes and additions in several areas, including FHLB advances, securitization, ratio analysis, contingent liabilities, brokered and rate-sensitive deposits, and factors for examiners to consider when rating banks on liquidity.⁹³ In 2000 and 2002 the FDIC also published new guidance on specific areas related to liquidity.⁹⁴ As banks continue to adjust their strategies and examiners continue to identify weaknesses in some banks' strategies, additional changes in examination procedures and training may be needed.

If core deposit growth continues to lag behind asset growth and banks are forced to rely more heavily on wholesale deposits, contingency planning may require more emphasis. For troubled banks, examiners may need to pay more attention to liquidity pressures than they did in the past.

The easy availability of wholesale funding sources raises other supervisory issues. It enables nontraditional banks to grow (and take on additional risk) very quickly. There is a well-established link among high growth, risk exposure, and bank failure.⁹⁵ The OCC found a positive relationship between the reliance on wholesale funding and risk exposure.⁹⁶ Hall et al. found that riskier

banks used jumbo CDs more heavily than low-risk banks, and McDill and Maechler found that banks with a CAMELS rating of 3 relied on uninsured deposits more heavily than healthier banks.⁹⁷ Supervisors have already instituted off-site monitoring tools related to high growth. Now that protected wholesale funding sources are becoming more readily available, should regulators be considering other actions as well?

The supervisory function might also benefit from an investigation into new standard performance ratios for liquidity measurement. Liquidity measurement has always been imprecise because it depends on future circumstances, including the market's future view of the bank. Jim Moss, a managing director at Fitch Inc., phrased it well: "You can do a lot of analysis, but there's that human element attached to liquidity."⁹⁸ The traditional ratio of loans to core deposits—never sufficient by itself—has become less meaningful and is now inadequate since not only are many rate-sensitive deposits issued at retail for amounts slightly below \$100,000, in some cases, deposits in accounts above \$100,000 may behave like core deposits.⁹⁹ Are there other, more useful measures that could be adopted, or other data that should be collected, to facilitate supervisory or peer-group analysis? These questions might be an area where future research would be fruitful.

⁹¹ BIS (2000).

⁹² Office of the Comptroller of the Currency et al. (2001).

⁹³ Zamorski (2001), 1-2. This memo (that is, the FDIC's new guidance) introduced a major revision of the liquidity and fund management section of the examination guidelines.

⁹⁴ See Sexton (2000a) on securitizations, Sexton (2000b) on FHLB advances, and Zamorski (2002) on wholesale funding. Note that the guidance is designed not solely to warn examiners of possible problems but also to remind them that sound liquidity management can include the use of wholesale funding, securitization, and so forth.

⁹⁵ See FDIC (1997); Nuxoll, O'Keefe, and Samolyk (2003); and McDill (2004).

⁹⁶ OCC et al. (2001).

⁹⁷ Hall et al. (2003); McDill and Maechler (2003).

⁹⁸ Quoted in Davenport (2003).

⁹⁹ Some bankers have argued that this would be the case for certain large banks that use brokered deposits from an affiliated broker. In addition, some jumbo CDs may be long-term deposits that are fully insured.

Deposit Insurance Issues

Bank liability structure affects not only supervision but also deposit insurance, and in several ways. As banks rely less on domestic deposits, the relationship among the assessment base used for deposit insurance pricing, the designated reserve ratio (DRR),¹⁰⁰ and the FDIC's risk exposure has diminished. The FDIC's risk exposure is largely driven by the quantity and quality of industry assets and the industry's equity position.¹⁰¹ However, the assessment base includes only domestic deposits, and the reserve ratio includes only insured deposits. When asset growth is funded by nondeposit liabilities, the FDIC's risk exposure changes with no similar change in the assessment base or the reserve ratio (or, therefore, in the required minimum fund balance). When asset growth is funded by uninsured deposits, the assessment base increases but the reserve ratio does not increase. Thus the FDIC's funding mechanisms do not respond to changes in the fund's risk exposure from asset growth funded by nondeposit liabilities—or even by uninsured deposits.

Several economists and regulators have raised the question of whether the FDIC's pricing mechanism should be adjusted to reflect shifts in the industry's funding mix.¹⁰² Twice in the last decade the FDIC itself has asked for public comments on the issue.¹⁰³ Options include changing the assessment base to: insured deposits; domestic deposits plus secured borrowing; total assets; or total liabilities excluding subordinated debt. Alternatively, the price (rather than the assessment base) could be adjusted for the effects of liability structure on the FDIC's risk exposure.

Most of the deposit insurance pricing options apply to particular priority classes defined under U.S. bank receivership law. In the event of failure, secured claims are paid first (up to the amount of the collateral), and these have received the most attention in the related literature. Administrative expenses of the receivership are paid next, followed by deposits (both insured and uninsured); then general trade claims, including foreign deposits and other unsecured claims; then subordinated debts; and finally shareholder claims.

Currently an institution's assessment base is approximately equal to its domestic deposits minus a deduction for float. Because large banks rely on nondeposit liabilities much more heavily than small banks, any potential changes to the assessment base raise profound issues about the distribution of insurance costs across the banking industry.

There has been less research about the question of whether—given the recent changes in liability structure—the reserve ratio is an appropriate measure of the adequacy of the insurance funds. It is not clear whether changes in bank liability structure have materially detracted from the reserve ratio's usefulness as a rough measure of fund adequacy.¹⁰⁴ This area may be worthy of future research.

¹⁰⁰ Under FDICIA, the DRR—the reserve ratio calculated as the ratio between the insurance fund balance and total deposits insured by the FDIC—was set by statute at 1.25 percent. In addition, the FDIC was required to impose hefty assessments on banks whenever the reserve ratio of the Bank Insurance Fund or the Savings Association Insurance Fund fell substantially below the DRR. Under the Federal Deposit Insurance Reform Act of 2005, the fixed DRR of 1.25 percent was replaced by a reserve range of 1.15 percent to 1.50 percent, and the FDIC Board of Directors was directed to set and annually publish a DRR within that reserve range. If the reserve ratio falls below 1.15 percent, the legislation required that the FDIC set assessments at a level that will bring the fund balance back to 1.15 within five years.

¹⁰¹ More specifically, one way to measure the FDIC's risk exposure for a particular bank is to calculate the bank's expected probability of default multiplied by the expected total loss, multiplied by the FDIC's percentage of the expected loss. The probability of default and expected total loss tend to be related to asset composition. Equity holders normally lose their entire investment at failure. The remaining loss is, for the most part, borne by the FDIC because the FDIC cannot flee a bank before failure, but other unprotected credits usually flee or protect themselves through collateral arrangements before failure. See Shibus (2002) for a more detailed discussion. This section draws heavily from that paper.

¹⁰² See Silverberg (1993); Baer (2000); Bair (2001); Seidman (2001); Carnell (2001); and Thomas (2001).

¹⁰³ In 1994, the FDIC issued an Advance Notice of Proposed Rulemaking (ANPR) focused on the assessment base; the notice did not result in changes to the assessment base (FDIC 1994). In 2000 the FDIC's options paper on deposit insurance reform also raised the issue of the assessment base (FDIC 2000).

¹⁰⁴ Other factors, such as the riskiness of the industry's asset holdings or its financial condition, are also not captured in the reserve ratio. Most of the discussion of fund sufficiency focuses on the appropriate role of an insurance fund, public versus private funding, ex ante versus ex post funding, measures of fund exposure, and concentration risk (that is, funding adequacy, given the size of the largest insured bank). Another way to gauge fund adequacy is through the reserving process for near-term future losses. Liability structure also affects the FDIC's contingent-loss reserves. Both the current method used by the FDIC to estimate contingent-loss reserves, and recent proposals for change in the current method, take liability structure into account. The FDIC hired McKinsey and Company in 2003 to review its risk management program and contingent-loss reserving methods. See McKinsey and Company (2003) for details. One of the short-term recommendations was to change the contingent-loss reserve to take liabilities into account (p. 19); the FDIC has already made this change. McKinsey concurred with the FDIC's plan to move toward using credit-loss modeling techniques for measuring the corporation's contingent-loss reserve. Jarro et al. (2003) have developed a draft contingent-loss model for this purpose. Their model also incorporates liability structure into its loss estimates.

Recent developments in wholesale deposit practices raise other policy issues that have received scant attention by regulators but may be worth additional analysis as well, and possibly changes in policy. We list these other policy issues here, but in the rest of the section we concentrate on the pricing issues. The first of these other issues is that some banks (particularly those with affiliated brokerages) could easily shift from deposit to nondeposit funding whenever insurance losses triggered substantial premiums. Such shifting could increase the volatility of the reserve ratios (and thus the volatility of premiums) and could raise questions about equity across banks. Second, deposit-splitting practices can circumvent the insurance coverage limits that Congress intended. Should regulators (or more likely Congress) be taking action to make the \$100,000 limit¹⁰⁵ more meaningful for depositors? Another question is the most appropriate treatment of sweep accounts for deposit insurance purposes.

Secured Liabilities

Under the FDIC's current pricing method, secured nondeposit claims introduce the most distortion. If a bank fails, secured claimants are invariably paid in full because collateral protects them.¹⁰⁶ Thus, losses are usually borne by the FDIC and other unprotected creditors.¹⁰⁷ If a bank shifts its funding strategy away from domestic deposits and toward secured borrowing but makes no other change to its business strategy, the FDIC's loss exposure remains unchanged even though insured deposits fall.¹⁰⁸ Moreover, most banks are currently in a position to make this shift; that is, they can choose their asset portfolio independently of their funding sources.¹⁰⁹ And the FDIC's pricing method provides an incentive for banks to shift from uninsured deposits to secured borrowing, since investors are willing to accept a lower interest rate when their investment is protected by collateral.¹¹⁰ In addition, *ceteris paribus*, banks that do not rely on secured borrowing for funding are effectively subsidizing banks that do. If two banks are identical in all aspects except that one relies on domestic deposits for funding but the other relies on a mix

of domestic deposits and secured borrowing, both banks will expose the FDIC to identical losses, but the second bank will pay smaller assessments.

Some researchers have argued that the ready availability of secured borrowing may have important secondary effects as well. If bank managers know that they can easily replace unprotected credits—uninsured and unsecured debt—with secured borrowing if their financial condition deteriorates, they may choose to increase their exposure to risk.¹¹¹

Therefore, both Silverberg and Baer have urged that secured liabilities be included in the FDIC's assessment base. Bair, Seidman, Carnell, and Thomas have recommended that the appropriate treatment of secured liabilities be considered as part of deposit insurance reform.¹¹²

Uninsured Deposits

In contrast to the case of secured borrowing, if a bank shifts its funding strategy away from insured deposits and toward uninsured deposits but makes no other change to its business strategy, the FDIC's loss exposure decreases as losses are shifted

¹⁰⁵ \$250,000 for individual retirement accounts.

¹⁰⁶ Theoretically, they could be haircut if the value of the collateral were less than the outstanding balance of the borrowing.

¹⁰⁷ Of course, the availability of collateral limits the volume of secured credits that can be fully protected. In practice, however, these limits have rarely been binding.

¹⁰⁸ The funding shift would not influence total losses to unprotected credits or the FDIC. Therefore, even though the volume of deposits fell, losses imposed on deposits at failure would not change. Shibus (2002) elaborates this point.

¹⁰⁹ Of course, there are important limits on asset growth related to equity, but most banks meet the regulatory minimums for capital. Given the choices available for the types of assets that can be pledged as collateral, most banks have the freedom to increase their secured borrowing substantially without adjusting their asset portfolio. Their ability to increase unprotected—uninsured and unsecured—funding is tied much more closely to financial condition.

¹¹⁰ See Birchler (2000) for a theoretical model that supports this point.

¹¹¹ See Shibus (2002), 25, for a discussion. See also Stojanovic, Vaughan, and Yeager (2001); and Ashley, Brewer, and Vincent (1998).

¹¹² Silverberg (1993) and Baer (2000); Bair (2001), Seidman (2001), Carnell (2001), and Thomas (2001). Thomas recommended that deposit insurance prices be adjusted for secured borrowing, but he did not specify how the adjustment should be made.

from the FDIC to uninsured depositors (provided that the uninsured deposits remain in the bank at failure). Nevertheless, the FDIC assesses uninsured deposits even though they are unprotected at failure. On the surface, this appears to be patently unfair to these depositors—particularly since some banks pass assessment costs directly to depositors that receive no insurance protection.¹¹³ For this very reason, a number of countries use insured deposits for assessments.¹¹⁴

However, most uninsured depositors do not lose money when a bank fails because they manage to withdraw their deposits and receive full payment beforehand. As the bank's condition deteriorates, these funds are sometimes replaced by insured deposits or secured borrowing.¹¹⁵ This phenomenon is well documented: from 1990 to 2002, on average an estimated 22.8 percent of domestic deposits were uninsured, but during the same period only 1.5 percent of deposits at failed banks were uninsured and exposed to losses.¹¹⁶ To the extent that uninsured depositors flee troubled banks and banks respond by replacing the uninsured deposits with insured deposits or secured instruments, the inclusion of uninsured domestic deposits in the assessment base makes sense. Uninsured depositors' preferred status under domestic depositor preference also provides some compensation for the assessments. In addition, the inclusion is easy to administer, for the distinction between insured and uninsured deposits is hard to make before failure.

Some banks, however, rely so heavily on unprotected funds (including uninsured deposits) that, in the event of failure, many of the unprotected creditors will be unable to exit in time to avoid losses. These are typically wholesale banks, where the FDIC's losses will be mitigated—or even wiped out—because other creditors will bear significant losses.¹¹⁷ For these banks, it may be unfair to charge assessments on uninsured deposits. In truth, their heavy reliance on unprotected funding sources may merit a discount on their assessments.

General Trade Claims and Subordinated Debt

Both general trade claims and subordinated debt are excluded from the assessment base. If a bank fails, both of them serve to reduce the FDIC's losses, since the FDIC suffers losses only after these credits are wiped out.¹¹⁸ However, like uninsured deposits, many unsecured claimants are able to exit from banks (and thus receive full payment) before the banks fail. When this occurs, the unsecured claimants effectively “put” losses to the FDIC. To the extent that these creditors succeed in exiting from banks before failure, one can argue that they should be included in the assessment base. Longer-term credits (typically sub debt) or credits that are bank-specific (such as lawsuits) are less able to exit from a troubled bank and thus more likely to absorb losses at failure. As a result, there is less justification for including these debts in the assessment base.

For credits that are likely to dodge losses at failure, one can argue that they should be included in the assessment base. Silverberg concludes that all borrowing except sub debt should be included because they all help to fund bad assets before failure but are not around to suffer losses at failure.¹¹⁹ However, both general trade claims and sub debt that remain in a bank at failure usually

¹¹³ In testimony on deposit insurance reform, Mr. Nolan North of the Association for Financial Professionals made exactly that argument (2001).

¹¹⁴ Garcia (2001), 86.

¹¹⁵ The bank often shrinks as well. See Jordan (2000); Silverberg (1993); Marino and Bennett (1999); and Billett, Garfinkel, and O'Neal (1998). Jordan found that during the two-year period preceding failure, the failed banks that relied most heavily on uninsured deposits recorded dollar volume increases in small-denomination time deposits that exceeded the reduction in large-denomination time deposits.

¹¹⁶ These are simple averages. The figures for failed banks include only banks where the FDIC imposed haircuts on uninsured depositors at failure. For additional evidence, see the section above on market discipline; see also Silverberg (1993); Jordan (2000); Marino and Bennett (1999); and McDill and Maechler (2003).

¹¹⁷ Marino and Bennett (1999) discuss this phenomenon at length.

¹¹⁸ *Ceteris paribus*. If these credits encouraged banks to take on additional risk or if they brought about a more lax supervisory stance, the result could differ. Most of the theoretical literature suggests that unprotected credits should encourage less risk taking; a notable exception is Blum (2002). There is little empirical evidence on the topic. For more detail, see the section above on market discipline.

¹¹⁹ Silverberg (1993), 1.

suffer a complete loss; moreover, these types of credits may also provide useful corporate governance services in the form of market discipline. Thus, the case for including these items in the assessment base is far weaker than the case for including secured credits.

Other Considerations

In focusing on the relationship between various types of liabilities and FDIC losses, we have looked at each type in isolation, but the distribution of these instruments across the industry is also important. In addition, the discussion so far has implicitly assumed that the current pricing method captures the FDIC's risk exposure well—except for the treatment of bank liabilities. It turns out that adjustments to deposit insurance pricing are not nearly as straightforward as they first appear.

Of the major types of liabilities used by banks, only uninsured deposits are relied on equally by large and small banks.¹²⁰ Small banks rely much more heavily on insured deposits than large banks, and large banks are much heavier users of nondeposit liabilities. Unfortunately, no full breakout of nondeposit liabilities into secured and unsecured components is currently available. But even without full information on the status of nondeposit credits, it is clear that any significant adjustments will materially alter the distribution of assessments across the industry. The inclusion of secured credits in the assessment base, for example, would probably shift the funding burden toward large banks, whereas the exclusion of uninsured deposits would shift the burden toward small banks. In fact, the reason the FDIC in 1935 advocated changing the assessment base from insured deposits to total domestic deposits was that the corporation thought the change would produce a fairer distribution of assessments across bank size.¹²¹

Two aspects of bank size are not addressed in the current pricing method. First, the pricing matrix is designed to capture differences in the likelihood of failure, but not differences in the antici-

pated loss severity if failure occurs. The FDIC has historically suffered much lower loss rates from large banks than from small banks. From 1980 to 2000, the average loss rate for banks under \$100 million was 22.4 percent; for banks over \$10 billion, only 5.6 percent.¹²² The exclusion of loss severity from the pricing method means that large banks pay more, and small banks pay less, than expected losses.

Second, the very largest banks pose unique challenges and risks to the FDIC. The least-cost resolution of some of these banks might pose a systemic risk to the financial system. If so, regulators might pay some creditors more funds than they would be entitled to under a normal resolution. To the extent that markets perceive these banks as “too big to fail,” the banks benefit from less-expensive and more readily available funding sources.¹²³ Large banks also impose a great deal of concentration risk on the insurance funds. Even though the loss rates of these banks tend to be low, the size of the institutions alone is enough to threaten the solvency of the deposit insurance fund. For that very reason, private insurance firms generally do not accept this level of concentration risk. The appropriate pricing for concentration risk is not at all clear.

¹²⁰ As of year-end 2000, uninsured deposits made up 15.7 percent of the liabilities of banks with assets below \$100 million, and 14.6 percent for banks above \$10 billion. Thrifts, however, depended less on uninsured deposits for their funding. See Shibut (2002), 8.

¹²¹ Bradley (2000), 10.

¹²² Shibut (2002), 42. In recent years, however, very small banks have had the lowest loss rates, largely because of a few failures of fast-growing sub-prime lenders. See Salmon et al. (2003). Loss rates are calculated as a percentage of total failed-bank assets.

¹²³ The perception that the very largest banks are too big to be allowed to fail was particularly strong in 1984 after Continental Illinois failed and the Comptroller of the Currency testified that 11 banks were “too big to fail.” Since then, the perception has faded somewhat but not disappeared. For related analyses, see O'Hara and Shaw (1990); Billett, Garfinkel, and O'Neal (1998); Morgan and Stiroh (1999); and Flannery and Sorescu (1996). Note that FDICIA required that the incremental cost of a systemic-risk determination be paid through a special assessment. The special assessment would be paid on the basis of total liabilities excluding subordinated debt; therefore, large banks' share of the special assessment would be larger than their share of regular assessments. Because the special assessment would be imposed only after the failure (and after the systemic-risk exception was invoked), large banks might well enjoy the benefits of a too-big-to-fail aura without ever paying extra for the privilege.

In summary, the FDIC's pricing method does not take into account differences in liability structure, even though these differences can materially influence the FDIC's risk exposure. Moreover, liability structure is not the only aspect of the FDIC's risk exposure that is excluded from the agency's current pricing method: loss severity and concentration risk are excluded as well. Because of the interrelationships between liability structure and these other important (but thorny) aspects of deposit insurance, we believe that the incorporation of liability structure into deposit insurance pricing would probably be beneficial, but it would also require careful thought about multiple related issues.

Failure Resolution Issues

The movement away from deposit funding also has ramifications for failure resolution, raising issues associated with depositor preference and aggravating two operational challenges the FDIC sometimes faces when resolving failed banks.

Domestic Depositor Preference

In 1993, Congress passed the Omnibus Budget Reconciliation Act, which amended the Federal Deposit Insurance Act (FDI Act) and instituted depositor preference nationwide. The law states that when banks fail, deposit liabilities are to receive priority over general trade claims. Before the law was passed, deposits and general trade claims shared the same priority class.¹²⁴ As the banking industry's reliance on nondepository funding has increased, so also have the ramifications of this change.

The change was not part of a banking bill, was made with very little debate, and has received relatively little attention in the United States since being enacted. However, questions have been raised about both the lack of deliberation before the provision was enacted and the change itself.¹²⁵ Here we briefly review the questions and examine certain possible changes to depositor preference.¹²⁶

Background. In 1983, the FDIC advocated a national depositor preference statute as a means to increase market discipline, reduce the corporation's costs, and permit the use of purchase and assumption (P&A) transactions for more failures.¹²⁷ At the time, the FDIC was allowed to select any resolution method if it were less costly than a payout, but in the absence of depositor preference, use of a P&A agreement required the FDIC to satisfy all general trade claims. In depositor preference states, in contrast, the FDIC could execute a P&A agreement without satisfying all general trade claims (except for national banks located in the state). The FDIC found this to be an excellent way to reduce costs (particularly those associated with contingent claims related to lawsuits, loan guarantees, and loan commitments) while simultaneously simplifying the resolution transaction, minimizing the FDIC's cash flow requirements, and reducing the scope of its liquidation operations.¹²⁸ Large banks strenuously objected to depositor preference, arguing that it

¹²⁴ In 1993, 29 states had depositor preference laws, but these laws did not apply to national banks. See Curtis (2000), 243.

¹²⁵ See Silverberg (1994) for an account of the events leading up to enactment of the change. The change was motivated by budgetary considerations. In fact, we found no in-depth analyses of the depositor-preference provision that came to a favorable conclusion. For criticisms, see the Shadow Financial Regulatory Committee (1993); Ely (1993); Silverberg (1994); Bureau of National Affairs (1994); Ratway (1995); Kaufman (1997); Marino and Bennett (1999); and Curtis (2000).

¹²⁶ There are other aspects of the payment priority order used in a receivership that might merit a review in light of recent changes in bank liability structure. Failure resolution practices vary widely across the world, and there are significant disagreements among economists and attorneys about the optimum policies. Although most of them are unrelated to bank liability structure, one area of disagreement is related: the appropriate treatment of secured credits. Some researchers argue that the use of collateral is unfair to general (unsecured) claimants; others argue that creditors should be allowed to protect themselves from loss by demanding collateral. For more general discussions about issues related to the appropriate resolution policy for failed banks, see Aghion, Hart, and Moore (1992); Contact Group on the Legal and Institutional Underpinnings of the International Financial System (2002); and Hadjiemanuil (2004).

¹²⁷ See FDIC (1983, 1985) and Silverberg (1986).

¹²⁸ Without the P&A transaction, the FDIC was required to execute a payout transaction or an insured deposit payout, both of which required more cash at resolution and more liquidation activity in the receivership. See Silverberg (1986) for details.

would hinder their ability to compete with foreign banks and nonbanks in affected markets.¹²⁹

The Financial Institutions, Reform, Recovery and Enforcement Act (FIRREA) in 1989 explicitly allowed the FDIC to treat depositors differently from other general trade claimants at resolution.¹³⁰ Therefore, the FDIC's interest in depositor preference waned.¹³¹ Nonetheless, depositor preference was passed in 1993 for budgetary reasons.¹³²

Analyses and concerns. The priority status of claimants affects more than just the treatment of creditors once a bank fails. It also influences the behavior of the various stakeholders (creditors, banks, regulators) before failure, and it influences decisions about the method to use for failure resolution. Judgments about depositor preference should therefore consider the dynamic effects of the priority rules in light of appropriate policy goals.

In discussing this issue, we find it helpful to look to the goals for bankruptcy proceedings. Aghion, Hart, and Moore articulated three generally accepted goals for bankruptcy proceedings:

1. Maximize the ex post value of the firm.
2. Distribute the firm value appropriately across the claimants.
3. Preserve the ex ante bonding role of debt (that is, maintain the disciplinary role of debt and penalize the firm's management).¹³³

Most observers agree that the appropriate distribution to claimants in a bank resolution is one that retains the statutory priority order in place at the time of failure. Because of the role banks play in facilitating commerce, many economists have articulated a fourth goal that applies to banks: the optimum treatment of a failing bank—particularly a large bank—should minimize the harmful effects to the overall economy. Disorderly or contracted proceedings that disrupt the bank's ability to continue operations are more likely to cause harm to the overall economy.¹³⁴ With these

goals in mind, we review the literature on depositor preference and consider options for change.

Birchler examined bankruptcy priority rules from a contract theoretic viewpoint; he found that the establishment of dual priorities (that is, depositor preference) is socially optimum, mainly because it reduces costly monitoring for senior claimants (that is, depositors).¹³⁵

Pages and Santos developed a theoretical model to examine the effect of depositor preference on the closure policy of the deposit insurer. Under depositor preference, the deposit insurer would close risky banks earlier (and at a more socially optimum time) than it would if all claims were given equal status. If the deposit insurer were a junior claimant, it would forbear much too long because it would have a stronger incentive to “gamble for resurrection.” Pages and Santos also found that the deposit insurer, as the senior claimant, would monitor healthy banks less than was socially optimum, but that as the junior claimant, it would not monitor unhealthy banks

¹²⁹ See U.S. Department of the Treasury (1991), III-17. FDIC (1989), 245-46, also discusses the issue. The markets included letters of credit and other guarantees and foreign deposits (if they were treated as general trade claims in the statute). Silverberg (1994) echoed some of these concerns and concluded that large banks might incur costs (by forming separate banks in foreign countries or taking other protective measures) to address investor concerns.

¹³⁰ In 1988, the FDIC developed a rationale for paying general trade claimants differently, as long as all claimants received at least as much as they would receive under a liquidation. See FDIC (1989). At the request of the FDIC, FIRREA explicitly codified that rationale into law.

¹³¹ See Curtis (2000) or Marino and Bennett (1999) for a more detailed discussion. Even so, the FDIC applauded passage of depositor preference at the time (see Rehm [1993]). However, the treatment of foreign deposits might not have been clear just then. In 1989, the FDIC stated that “on balance,” FDIC authority to pay foreign and domestic depositors in full (while their standing would remain the same as other general trade creditors under U.S. bank receivership law) might be superior to depositor preference. See FDIC (1989), 244-48.

¹³² The OMB estimated that depositor preference would reduce FDIC's losses by \$750 million from 1994 to 1998. See Silverberg (1994).

¹³³ Aghion, Hart, and Moore (1992).

¹³⁴ See Hupkes (2000), especially p. 49 and 81, for additional discussion.

¹³⁵ Birchler (2000).

frequently enough.¹³⁶ However, Lutton and Becher argued that supervisory monitoring would increase under depositor preference because of heightened concerns about liquidity risk.¹³⁷

One rationale for depositor preference has certainly been to reduce costs for the deposit insurer.¹³⁸ Barring any dynamic effects, depositor preference should achieve that goal. However, as described above in the section on market discipline, historical experience raises doubts about the amount of savings that depositor preference might produce in the United States. Both general trade claimants and uninsured depositors have been successful in shifting losses to the FDIC before failure. In addition, we found scant evidence that depositor preference had diminished the market discipline imposed by uninsured domestic depositors.¹³⁹ On the basis of anticipated changes in the behavior of unprotected creditors, a number of economists have concluded that savings from depositor preference in the United States are uncertain, and possibly negative.¹⁴⁰ It appears that savings from on-book creditors materialize primarily in situations in which either the bank fails suddenly (as in some fraud failures) or some claimants cannot exit from the bank quickly (long-term unprotected debt or contingent claims).¹⁴¹ To date, concerns about the ability of large banks to compete in markets associated with unprotected general claims do not appear to have been realized. From 1995 through 2005, foreign deposits have more than doubled; moreover, they grew a little more quickly than domestic deposits. It appears that most banks (even most large banks) have a large enough retail deposit base to allow most unprotected creditors to flee the bank before failure.¹⁴²

Several authors have found that domestic depositor preference would have troubling consequences if a multinational bank were to fail.¹⁴³ Curtis found that as depositor preference is currently interpreted, it is inconsistent with international law because it effectively uses assets from all affected countries to satisfy domestic depositor claims ahead of foreign claims, thereby discriminating against all other nations. He then states the inevitable result:

Insisting on the subordinate status of foreign deposits, while attempting to implement a single-entity liquidation of a U.S. multinational bank, would not be effective, as it is impossible to imagine that foreign regulators would allow it. The effect of such an attempt would simply be to force foreign governments to segregate the assets of branches in their countries for the benefit of claimants against those branches.¹⁴⁴

The practice of separating assets and claims by country at failure, commonly referred to as “ring-fencing,” is entirely legal. The FDIC would have no authority whatsoever to prevent it. And except in rare circumstances, the financial incentives to ring-fence under domestic depositor preference are very strong.

If a multinational banking organization were to fail and ring-fencing had been adopted, the FDIC might end up controlling the resolution process only for the assets and liabilities located in the United States.¹⁴⁵ Planning and operations would

¹³⁶ Pages and Santos (2003); Kaufman (1997), 59. The prompt corrective action (PCA) provisions of FDICIA may reduce (but not eliminate) the importance of incentives to close banks at the optimum time. The mandatory examination schedule in the United States, and the fact that the FDIC is not the primary federal supervisor for many banks, may reduce the importance of the findings about the deposit insurer's incentive to monitor banks.

¹³⁷ Lutton and Becher (1994), Rehm (1993), and Kaufman (1997) also anticipated more liquidity risk for banks that were funded with unprotected credits. For a more detailed discussion, see the section above on liquidity risk.

¹³⁸ Birchler (2000), especially p. 3; Garcia (2001), 67; and Silverberg (1994). This goal relates to the recoveries of one major creditor, rather than to the overall recoveries associated with the value of the firm as a whole (the first goal set forth by Aghion, Hart and Moore [1992]).

¹³⁹ McDill and Maechler (2003) found that domestic depositor preference resulted in a small increase in uninsured domestic deposits for most banks. The effect was much smaller than the reduction in uninsured deposits associated with FDICIA.

¹⁴⁰ Kaufman (1997); Thomson (1994); Silverberg (1994); Osterberg and Thomson (2003). One big difference between the savings associated with depositor preference in other countries and the savings associated with it in the United States may relate to insurance limits. In some countries, insured depositor preference has been coupled with a low insurance limit, a coupling that facilitates low-cost deposit insurance.

¹⁴¹ See Shibut (2002), 14–16, for a discussion of the incentives and capacity of claimants to exit from a troubled bank. See Silverberg (1994), 12–13, and FDIC (1998), 662, for examples of large contingent claims.

¹⁴² Marino and Bennett (1999).

¹⁴³ See especially Curtis (2000) and Marino and Bennett (1999), but also Silverberg (1986, 1994); Bovenzi (2002); and Marino and Shibut (2002).

¹⁴⁴ Curtis (2000), 257.

¹⁴⁵ It appears highly probable that the FDIC would lose control of foreign assets and liabilities unless a systemic-risk exception were invoked and, at a minimum, foreign depositors were paid more than they would receive under the least-cost test.

be more uncertain, since the FDIC would not know which assets would ultimately fall under its control until after the failure.¹⁴⁶ It is unlikely that the bank could be sold as a whole. There would probably be a scramble as governments sought to control the assets of the failed entity (with associated lawsuits and other overhead costs). Business lines that crossed international boundaries would be sold piecemeal, even if the aggregate values were higher. The liquidation process would be slower, so administrative costs would increase and more creditors would suffer liquidity losses.¹⁴⁷ Because of these problems, the FDIC could lose more money under domestic depositor preference than it would have lost without depositor preference despite the benefits that depositor preference yields at domestic failures.

For large international banks, ring-fencing would probably also exacerbate the market disruption associated with closure. The higher aggregate losses, the initial lack of certainty about the distribution of assets across receivership(s), and the necessarily piecemeal asset sales strategy could slow down the resolution process considerably and thus reduce market confidence. The uncertainty about the resolution process would probably compound the market disruption because it would hinder the FDIC's ability to mitigate liquidity losses and payments-processing concerns through advance dividends to unprotected creditors.¹⁴⁸

Bliss cites some benefits of ring-fencing: it places assets at the disposal of the court that is most likely to control them; it provides a way—an admittedly crude way—to settle conflicts in laws and legal objectives; and it reduces the need for cross-border data sharing.¹⁴⁹ Baxter, Hansen, and Sommer also find that ring-fencing improves supervisory incentives and may reduce the chance of costly forbearance.¹⁵⁰

Concerns about market disruption and the costs associated with ring-fencing might lead bank regulators to use the systemic-risk exception to the least-cost test if a bank with a large volume of foreign liabilities were to fail.¹⁵¹ Depending on the circumstances, use of the systemic-risk exception

could hinder efforts to meet the third goal of bankruptcy cited earlier (the ex ante bonding role of debt) through market discipline. If regulators were to provide substantial relief to creditors, there would probably be a long-term reduction in market discipline at all large U.S. banks (with associated long-term losses in market efficiency and increased risk to the FDIC).

The problems associated with ring-fencing would potentially disrupt the resolution of only a few banks since less than 1 percent of FDIC-insured banks hold foreign deposits. Moreover, most banks with foreign deposits have branches in only two countries; for these banks, both the costs and the disruptions of ring-fencing would probably be minimal. However, as of year-end 2003, the few global banks that do have branches in several countries hold more than 80 percent of foreign deposits and 30 percent of the assets of FDIC-insured institutions.

Options. There are at least four possible ways of treating depositors and general trade claimants at insolvent banks:

1. Make no changes to the current priority order.
2. Give priority status to all deposits (with foreign deposits remaining uninsured and excluded from the assessment base).

¹⁴⁶ The FDIC has recognized these problems repeatedly. See Marino and Bennett (1999); Bovenzi (2002); and Marino and Shibut (2002).

¹⁴⁷ See Contact Group on the Legal and Institutional Underpinnings of the International Financial System (2002), a study that was launched by the G-10 deputies, for a discussion of the complexities of the bankruptcy proceedings of an international bank. See Marino and Shibut (2002) for a discussion of the FDIC's resolution options for megabanks. See Baxter, Hansen, and Sommer (2004) for an alternative view.

¹⁴⁸ Both Kaufman and Seelig (2002) and Marino and Shibut (2002) emphasize the benefits of advance dividends as a means to reduce market disruption at failure. Garcia (2001) cites quick payments to insured depositors as a good practice for deposit insurers. However, with the FDIC's costs associated with ring-fencing unclear until well after failure, the FDIC would be taking a substantial financial risk if it were to pay a large advance dividend at failure.

¹⁴⁹ See Bliss (2003), especially 51-52.

¹⁵⁰ Baxter, Hansen, and Sommer (2004). They cite additional reasons to prefer territoriality as well.

¹⁵¹ If regulators decided that a systemic-risk determination was necessary regardless of the disruptions associated with ring-fencing, these concerns could lead them to provide more relief to creditors than they otherwise would.

3. Give priority status only to insured deposits.
4. Drop depositor preference altogether.¹⁵²

Each option has different strengths and weaknesses. In terms of enhancing market discipline and reducing insurance fund losses, the differences are clear for banks without foreign deposits: option 3 is unquestionably the best, followed by options 1 and 2, and lastly option 4. Recent changes in bank liability structure have probably expanded the differences among the options, but the degree of change is difficult to gauge. The differences are probably greatest for liquidity failures, unexpected failures, and failures where there is a large volume of contingent liabilities or long-term unprotected borrowing. For banks with foreign deposits, one cannot readily determine which option would most enhance market discipline or reduce insurance fund losses (although the question would be an excellent one for further study).

For a few large international banks, the current preference order will limit the options of regulators in the event of failure. Regulators may be left with essentially two choices. First, they could run a series of territorial receiverships (separate proceedings in multiple countries), where market disruption could be significant, even systemic, because continuing the normal ongoing operations of the bank would be difficult or impossible. Creditor recoveries might suffer because of competition across countries and the lost franchise value, but market discipline would certainly be imposed. Second, regulators could try to avoid territorial receiverships by paying some general claimants (for example, foreign depositors) more than they would otherwise receive under the current depositor preference treatment.¹⁵³ If the regulators succeeded, then the extent of market disruption would fall and the franchise value of the bank would be retained, but market discipline would be weakened and insurance fund losses might be larger. For banks with a substantial foreign deposit base, this option does a poor job of meeting the three goals stated above and has therefore been criticized by several researchers. Since the passage of FIRREA in 1989, no one has proposed this option.

If priority status were provided to all deposits (option 2), the financial gains from ring-fencing would be significantly reduced and U.S. banking regulators would be in a better position to contain systemic risk while still imposing losses on unprotected creditors. On the basis of a legal analysis and concerns about ring-fencing, Curtis recommended that the FDIC choose this option by changing its interpretation of the statute.¹⁵⁴

In terms of the likelihood of ring-fencing, option 3 (insured depositor preference) probably falls between options 1 and 2. If a large international bank had relatively few insured deposits and a relatively low loss rate, the financial benefits of ring-fencing would be small; in other circumstances, the benefits (and thus the likelihood) of ring-fencing would increase. Under option 4 (the elimination of depositor preference), the incentives for ring-fencing would probably be similar to those under option 2 (all-depositor preference).

Option 3 (insured depositor preference) would probably raise concerns about fairness within the United States.¹⁵⁵ To the extent that investors assume that large banks are too big to fail and therefore that large banks have de facto complete insurance coverage, small banks have a disadvantage in competing for uninsured deposits. When the FDIC was created in 1933, insured depositor preference was enacted at the same time, but in 1935 it was revoked precisely because of concerns that it was unfair to small banks. Option 2 (all-depositor preference without deposit insurance for

¹⁵² This list is not exhaustive. For example, Silverberg (1986) discussed ring-fencing and concluded that foreign deposits should be treated the same as domestic deposits in all respects (including deposit insurance and assessments). However, we excluded that option from our discussion because Congress deliberated on the insurance status of foreign deposits during the hearings that led up to FDICIA and rejected equal insurance treatment for them out of concern that that would harm the competitiveness of large U.S. banks abroad (see Curtis [2000]). Another option might be to give contingent claims a lower priority than other general trade claims, and place deposits and general trade claims in the same priority.

¹⁵³ However, some countries might still ring-fence, regardless of any clear financial incentive to do so. For example, Japanese law requires ring-fencing. The only option that would avoid all ring-fencing with complete certainty is open-bank assistance.

¹⁵⁴ Curtis (2000), especially 262.

¹⁵⁵ See Garsson (1993); Lutton (1994); and Marino and Bennett (1999).

foreign deposits) might also raise concerns about competitiveness across banks in the United States.

In conclusion, analyses of the optimum insolvency priority order for U.S. banks are scarce, and no consensus on the best approach has been reached. However, there is a consensus that the current insolvency priority order could cause very serious problems if a large international bank were to fail in the future. We recommend a thorough study of the issues rather than specific changes. Perhaps the best approach would be to commission a U.S. interagency group to study the options in more depth and make recommendations, or to have an international group tackle the research question and the difficult task of harmonizing the treatment of creditors at insolvent international banks.¹⁵⁶ After the options are studied more carefully, any recommended changes should be pursued promptly, while the banking industry is healthy and time is available for a reasoned debate.

Operational Issues

Depositor preference is not the only failure-resolution area affected by changes in bank liability structure. The movement away from deposit funding aggravates two operational challenges the FDIC sometimes faces when resolving failed institutions: one concerns situations when the FDIC has little or no advance warning of failure, and the other concerns FHLB advances.

When most banks fail, the FDIC has advance warning that failure is imminent. There is enough time to prepare, and the FDIC normally has some flexibility in selecting the failure date. Thus, most failures occur on a Friday, and most insured depositors have access to their funds on the following Monday. Often the FDIC has time before failure to perform some of the insurance administration and quietly arrange for the sale of at least some (and sometimes almost all) of the failed bank's assets.

The situation changes if a troubled bank relies heavily on unprotected credits (either uninsured

deposits or general trade claims) for funding and then fails. In this case, the timing of the failure may well be determined by the creditors, as they attempt to exit from the bank and the bank's liquidity dries up. The FDIC may have little or no time to prepare for failure. The possibility of such liquidity failures poses significant operational challenges for the FDIC, particularly if the bank is large.

The changes in bank liability structure may have increased the likelihood of liquidity failures in the future. If so, liquidity failures will still occur less often than the typical capital-driven failure,¹⁵⁷ but the combination of more unprotected funding plus a more concentrated industry will be a continuing challenge for the FDIC.

A second issue arises from FHLB advances. From 1992 to 2002, outstanding FHLB advances at commercial banks increased fivefold. The advance contracts almost always impose prepayment penalties. The FDIC has routinely paid these penalties to facilitate a quick sale of the institution's assets, but this policy has sometimes been expensive. When the Bank of the Alamo failed in 2002, the prepayment penalties amounted to 14 percent of the outstanding balance of advances. This is an area where the FDIC may want either to seek relief from prepayment penalties (perhaps by avoiding prepayment through guaranteeing the advances in exchange for the collateral, perhaps by seeking legislative remedies) or to reconsider its standard policy of prepaying advances in order to facilitate asset sales.

¹⁵⁶ In recent years, several efforts have been made to harmonize bank insolvency laws. Because of different philosophies, such negotiations are difficult. Even so, there have been some successes. In 2001 the European parliament passed the Winding-up and Reorganization Directive (which provides for a more coherent treatment of banks headquartered in the European Union), and several countries in Europe have adopted its provisions. In addition, many countries have adopted "carve-out" provisions for derivatives that follow harmonized netting agreements recommended by the International Swap and Derivatives Association (ISDA). See Contact Group on the Legal and Institutional Underpinnings of the International Financial System (2002) for an excellent discussion of the issues involved and the harmonization efforts to date.

¹⁵⁷ Many researchers have found that most liquidity failures are, at bottom, capital failures as well. Unprotected creditors do not usually exit en masse from banks that are unquestionably in sound condition. Even if they do, such banks can normally arrange for alternative financing.

Summary

Bank deposit growth has not kept pace with the growth in bank assets. As a result of the deposit shortfall, bank management has looked to alternative funding sources. We describe the events that led to the gap between asset growth and deposit growth, describe some of the ways bankers are addressing the shortfall, and conclude that banks will continue to need alternative funding sources since future deposit growth is not likely to meet banks' future funding needs.

Consequently, banks must continue to adapt the way they manage their liability structure. Because banks are relying more heavily for funding on wholesale funding sources and rate-sensitive deposits, liquidity risk exposure has increased and liquidity management has become more important—and more complex—for banks.

Changes to a bank's liability structure raise several issues for banking regulators. The one that has received the most attention recently is market discipline—particularly for large, complex banking organizations. The research to date shows that unprotected investors monitor bank performance and respond to changes in risk exposure. Supervisors play an important role in ensuring that markets have accurate data on banks, since troubled banks otherwise tend to overstate capital. The evidence is weaker when it comes to the ability of markets to encourage banks to reduce their risk exposure when troubles arise. We expect that in the future, the disclosure of information to markets will receive more emphasis and the use of market data to inform and enhance the supervisory process will increase; market data may be incorporated into future deposit insurance pricing mechanisms as well.

Regulators have responded to the additional complexity of bank liability management by making several updates to their examiner guidance on liquidity risk. Regulators might want to weigh whether further action is necessary in order to better monitor the increasing use of wholesale funding. It may also be worthwhile for regulators to seek better ways of measuring liquidity risk.

An additional issue for banking regulators is whether the FDIC's insurance-pricing mechanism should be changed so that it better captures the relationship between bank funding strategies and the FDIC's risk exposure. We summarize the rationale for change and find that the relationship among funding strategies, bank size, and fund exposure is too complicated for there to be any easy solutions.

Finally, we discuss issues that center on failure resolution: domestic depositor preference and operational matters. Changes in liability structure have highlighted the importance of priority status when banks become insolvent. Economists have questioned the cost savings attributed to domestic depositor preference as well as the effects if a multinational bank were to fail. We describe the effects of four options and recommend further research—with prompt pursuit of the appropriate changes—while the banking industry is healthy and time is available for a reasoned debate. Changes in liability structure may also have two other effects on failure resolution: they may decrease the amount of preparation the FDIC can do before failure, and they may affect the way the FDIC handles FHLB advances at failed banks.

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The Resolution Trust Corporation and Congress, 1989–1993

PART I: 1989–90

Lee Davison*

Policymaking is forever a work in progress, balancing the concerns of the regulated with the interests of society, and making adjustments as new imbalances inevitably arise. Good policy begins with good supporting legislation, and the process of making these laws leaves behind a rich trail of lessons for the future. This article looks back at an important episode involving the FDIC—the creation and operation of the Resolution Trust Corporation (RTC)—and highlights the political give-and-take that is often necessary to craft important legislation. The legislative history of the RTC, reflected both in the consequences of the statute that created it and in debates over subsequent legislation concerning the agency, was affected by the unique use of taxpayer dollars to protect insured depositors at failed thrifts. Readers should note, however, that this article only tangentially examines everyday RTC operations, which often (though not always) proceeded largely unaffected by the debates over the RTC’s management structure and funding that were central to the legislative debate. When the RTC started its work, hundreds of insolvent thrifts needed to be closed, their insured depositors protected, and their assets returned to the private sector. Hundreds more would fail after the RTC opened, and in all, the RTC would resolve 747 failed thrifts and dis-

*pose of more than \$450 billion in failed thrift assets before closing, a year earlier than originally planned, in 1995. The RTC successfully accomplished the broad public policy goals set out for it in 1989. The legislative story does, however, provide a window into understanding the environment in which the RTC operated. Readers interested in more details on the RTC’s operations may want to consult the FDIC’s study, *Managing the Crisis: The FDIC and RTC Experience 1980–1994* (1998). The legislative history of the establishment of the RTC, “*Politics and Policy: The Creation of the Resolution Trust Corporation*,” appeared in *Banking Review* 17, No. 2 (2005). The continuation of that legislative history, covering the years 1989–1993, is presented in two parts: Part I appears here; Part II will follow in an upcoming issue. —Editor’s note.*

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The statute that created the Resolution Trust Corporation (RTC) in 1989—the Financial Institutions Reform, Recovery, and Enforcement Act of 1989, or FIRREA—spelled out the agency’s mandate with a good deal of specificity, even providing a date for the agency’s shutdown just six years from its opening.¹ Such specificity, as well as the size of the initial funding (\$50 billion), indicated that the agency would get a good deal of congressional attention. Nevertheless, given FIRREA’s detailed content and the short time horizon it set for the RTC, one might think that a history of RTC-related legislation in the years after FIRREA would be relatively brief. One would be wrong. In each of the four congressional sessions from 1990 through 1993, significant RTC legislation was proposed or enacted: in 1991 two RTC laws were passed, and in 1993 another one was;² in 1990 and 1992 Congress considered but failed to pass RTC legislation.

Broadly speaking, during the life of the RTC Congress repeatedly sought to address two main issues. The first, and one that Congress found particularly hard to confront, was that of additional RTC funding. It quickly became apparent that the \$50 billion provided by FIRREA in 1989 would prove inadequate. And when Congress did muster the political will to appropriate more funds (twice in 1991), those funds, too, proved insufficient (according to estimates at the time). Legislation providing still more funding did not pass until 1993. The second main issue that Congress repeatedly sought to address was that of the management and operation of the RTC. This broad issue encompassed a whole range of smaller ones, including management structure, methods and speed of disposing of assets and resolving failed institutions, contract oversight, provision of affordable housing, and the hiring of minority firms to do RTC work. These issues of management and operations were debated in the context of each major bill.

The debates leading to the passage of FIRREA had not been marked by overt partisanship (except for the arguments over budgetary treatment of RTC funding). Once the RTC was in existence, however, it was a highly visible part of the George H. W.

Bush administration and a target for congressional critics, most often from the opposing party. A year after the RTC had been created, one observer noted that “the RTC can’t make a move without somebody in Congress taking a shot at them . . . it’s like being in a giant fishbowl where people not only look at you, but they line up along the sides, take harpoons, and start throwing them at you.”³ By 1992, the unpopularity of voting funds for the RTC meant that it had become hard to get even Republican support for the RTC’s funding needs, a situation exacerbated by the election of a Democratic president in 1992. But although the debates on proposed RTC legislation were often highly politicized, they were also substantive and demonstrate that Congress was attempting to make major and minor adjustments in an agency with vast responsibilities that had been started from scratch in 1989 and was expected to operate effectively under intense scrutiny.

Post-FIRREA Issues (1989–1990)

The RTC’s early operations (1989–90) were of great interest to many in Congress and generated much activity both in the legislature and within the administration. Although none of the legislation proposed during this period succeeded, the debates as well as the failed bills they accompanied contributed to the substance of the legislative

¹ As enacted, FIRREA made the RTC a limited-life (the corporation was to terminate by year-end 1996) entity that would manage and resolve all formerly FSLIC-insured institutions placed under conservatorship or receivership from January 1, 1989, through August 9, 1992. As of the date of enactment, the RTC was to succeed the Federal Savings and Loan Insurance Corporation (FSLIC) in its role as conservator or receiver of any institution. General oversight of the RTC was vested in an Oversight Board, which was to direct the RTC’s overall policy, but operational control would rest with the RTC itself. The Board of Directors of the FDIC was to serve as the RTC’s Board of Directors. (FIRREA expanded the FDIC’s Board from three to five members, adding the head of the Office of Thrift Supervision (OTS) and a member to be nominated by the president). The FDIC would be the RTC’s “exclusive manager.” For a detailed discussion of the creation of the RTC, see Lee Davison, “Politics and Policy,” *FDIC Banking Review* 17, no. 2 (2005).

² In 1991, Congress passed the Resolution Trust Corporation Funding Act of 1991 (Public Law 102-18) and the Resolution Trust Corporation Refinancing, Restructuring and Improvement Act of 1991 (Public Law 102-233). In 1993, it passed the Resolution Trust Corporation Completion Act of 1993 (Public Law 103-304).

³ Steve Klinkerman, “The High Road Is Costing the RTC Time and Money,” *American Banker* (August 16, 1990).

changes that would be enacted in 1991 and illustrate the terms of the debates about the RTC overall.

During 1989–1990 three areas were most important: the first was general and multifaceted, combining concerns about the perceived slowness of the RTC's startup with concerns as to whether the bureaucratic structure outlined by FIRREA would be able to handle its appointed task. In a sense, this first area could be taken to include almost any of the agency's activities, but generally the concerns focused on the speed and manner of resolution and asset disposition. The other two areas were quite specific and dealt mainly with money—the bottom line of most of the debates over the RTC. The first of these was the need to provide the agency with working capital, and the second was the need to provide the agency with additional loss funds as it became clear that the money allocated under FIRREA would prove insufficient. (Both of these issues became embroiled in the partisan debate over the federal budget at a time when the deficit was a political lightning rod.)⁴ Because the inadequacy of loss funding was not of immediate concern in the early months of the RTC's existence, this section will examine only the early criticisms of RTC operations and the debates over the provision of working capital.

Speed

Questions about whether the RTC was moving fast enough both to resolve institutions and to sell assets began almost immediately. Expectations for the RTC were high—unrealistically so. The decision to confront the thrift crisis had been announced in February 1989; the concept of the RTC had therefore been present for six months before its August creation. Somehow, despite the obvious challenges facing it, many observers felt that results should have been expeditious.⁵ The RTC's management knew this. During deliberations in August about some of the first resolutions of failed institutions, RTC Chairman L. William Seidman noted, "I think the worst thing we can do now is not move forward quickly. . . . Mr. Brady [Nicholas Brady, secretary of the treasury] has said

. . . that we're going to do them tomorrow, and if we don't, that's big news, . . . the kind of news the White House doesn't like to hear."⁶ But although the FDIC, in consultation with other agencies, had been readying itself for the task of taking on the RTC, not until July was its precise role clear.⁷ In any case, expecting the RTC to simply start work as if it had been in existence for years was unrealistic. As former FDIC Chairman William Isaac would note before Congress in the spring of 1990, "The scale of the RTC's undertaking is breathtaking. The RTC is in the process of creating, from scratch, virtually overnight, the world's largest financial institution, all of whose assets are troubled." Isaac believed it would take the better part of a decade for the RTC to accomplish its goals.⁸

In terms of resolutions, between August 9 and September 30 the agency resolved 24 institutions, but during the final quarter of the year it resolved only another 13, and during the first quarter of 1990 only another 15. To put this in perspective, by August 8, 1989, the day before the RTC came into existence, there were 262 failed thrifts in conservatorship that the agency would inherit and an additional 140 institutions would fail by the end of the

⁴ It is, of course, impossible to divorce the issues of working capital and loss funding from the question of management: in mid- to late 1990, the expectation and then the reality of imminent shortfalls placed considerable constraints on the agency's ability to carry out its work. In short, there was no way the RTC could make continued significant progress without the necessary underpinning of adequate working capital and loss funds. Nevertheless, the lack of funds and the RTC's response to it contributed to criticism, even if the funding problem was beyond the agency's control. And criticism of the RTC in general could mean a multitude of things. The criticism might be directed at the agency itself, by the public or Congress, or the criticism might be aimed not specifically at the RTC but at the administration's conduct (whether exemplified by the Oversight Board or by the Treasury) or at "the bailout," with varying degrees of specificity or breadth. Although some detractors aimed their criticism precisely, many others did not.

⁵ John Murphy, former FDIC general counsel noted, "Let's face it, the legislation has been percolating for six months . . . [and] now that it has bubbled to the surface, people will be expecting prompt action" (Steve Klinkerman, "All Eyes Are on Seidman to Move Fast and Smart on Thrift Cleanup," *American Banker* [August 10, 1989]).

⁶ RTC Board of Directors Meeting, August 9, 1989.

⁷ See Davison, "Politics and Policy."

⁸ Robert Trigaux, "RTC Must Rely on Sales Mentality for Its Role in Bailout to Succeed," *American Banker* (May 9, 1990). Many observers were more impatient than Isaac, but pessimists were far less sanguine than he about the RTC's prospects: in October 1989, John Oros, a partner at investment banking company Goldman Sachs, declared it likely that "our grandchildren will be buying assets from the RTC" ("5-Year RTC Cleanup Called the 'Big Lie,'" *National Mortgage News* [October 2, 1989]).

first quarter of 1990.⁹ (See Figure 1 for the number of conservatorships and resolutions during the agency's existence.) By early 1990, the volume of criticism, particularly from House Democrats, had begun to rise significantly. Rep. Bruce Vento said he thought the RTC had failed to hit the ground running and it was "not too early to suggest that they should be doing more." He noted that the 37 resolutions carried out in 1989 had been "deposit sales, not really the sale of institutions, and they were not very complicated deals."¹⁰ Rep. Frank Annunzio stated that the RTC "has spent more time posturing for more money than in using what they have."¹¹

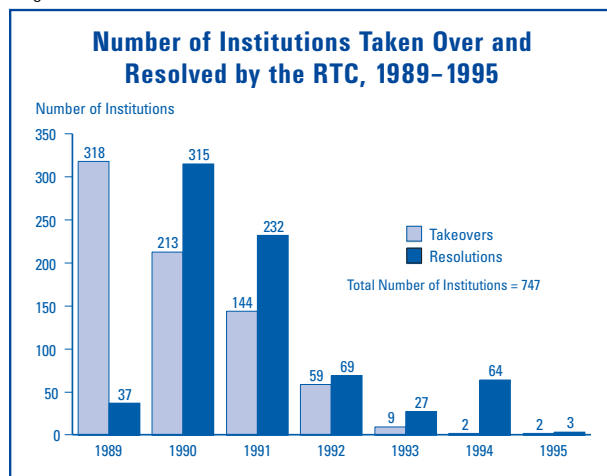
No matter where one stood with regard to the RTC's performance, it was clear that the agency was not resolving failed thrifts at a rate that kept pace with the growing number of thrifts in conservatorship (institutions in conservatorship still operated, but were under RTC control). The RTC's most obvious response to the criticism was the so-called Operation Clean Sweep announced by Seidman in March 1990. Designed to assuage critics, restore the RTC's credibility in the eyes of potential acquirers, and demonstrate progress, this ambitious plan called for 141 resolutions by the end of June. The agency exceeded this goal, resolving 155 institutions with total assets of \$44.4 billion in just three months.¹²

Although Operation Clean Sweep might have mollified critics of the resolution process, it made

the asset-disposition part of the agency's task more difficult by adding substantially to the RTC's inventory of assets, particularly problem assets. And in fact, the agency's strategy for disposing of its inventory at first (and also later) provided fertile ground for disapproval. During the debate on passage of FIRREA, most concerns had centered on the idea that the RTC would move too quickly to sell off assets (particularly real estate), swamping an already severely depressed market, especially in the Southwest. These fears persisted during the agency's early days. Sen. Phil Gramm of Texas stated that if distressed thrifts' assets were disposed of too quickly, the effect might be to "bankrupt every healthy bank and thrift left [in the Southwest]."¹³ The RTC was certainly aware of these fears. RTC Board member Robert Clarke, during a discussion in October 1989, noted that "there has been so much sensitivity to this issue of dumping. And people are going to be, as you know all too well . . . really be looking . . . closely."¹⁴

Once the RTC was operating, however, the fear of dumping was gradually replaced by the fear that the RTC was not moving quickly enough to divest itself of the assets of resolved institutions.¹⁵ By mid-1990, with the inventory of assets rising and the prospect of more to come, many people realized that if the agency did not move assets quickly, it would never finish the job. In addition, people had come to believe that the only way to return real estate markets to normal was to get RTC properties back into the private sector. Ken Guenther of the Independent Bankers Association noted, "The attention has shifted from dumping to speeding up the disposition process . . . in some markets,

Figure 1



⁹ Resolution Trust Corporation, *1989 Annual Report* (1991), 51-55 and *Annual Report 1990* (1991), 87-88.

¹⁰ It should be noted that the RTC's management was inclined to do more complicated deals, but the Oversight Board's cautious attitude inhibited such activity.

¹¹ Robert M. Garsson, "Vento Urges Abolition of RTC Oversight Board," "Tough Scrutiny Ahead for RTC," and "Banking Panel Faults Bush on Pace of S&L Resolutions," *American Banker* (January 8, 22, and 24, 1990). For the debate over working capital, see the relevant section of this article.

¹² FDIC, *Managing the Crisis* (1998), 127.

¹³ Steve Klinkerman, "Southwest Fears Impact of Real Estate Liquidation," *American Banker* (August 16, 1989).

¹⁴ RTC Board of Directors Meeting, October 24, 1989.

¹⁵ Seidman noted in January 1990 that "on one side are the anti-dumpers, on the other side are the fast sellers" (Robert D. Hershey, Jr., "Savings Rescue Cost Seen Rising," *New York Times* [January 25, 1990]).

nothing will stabilize until we get rid of the overhang of RTC properties.”¹⁶ Texas congressmen were complaining that the RTC was moving too slowly—at a “snail’s pace.”¹⁷

As the need for swift action began to outweigh fears of dumping, constraints that FIRREA had put on the RTC (and especially the agency’s interpretation of the requirements for selling assets in “distressed areas”)¹⁸ came under fire. In June 1990, with the expected costs of the thrift rescue escalating and the argument becoming more partisan, House Democrats’ condemnations of the agency’s methods became more pointed. Rep. Vento told Treasury Secretary Brady, “There is an appearance to many of us that the RTC is floundering and the oversight board isn’t doing what it can. It’s simply not moving the assets.”¹⁹

To facilitate speedier sales of assets, the RTC began to alter its asset-disposition policies. For example, in early May 1990, it decided to adopt a more flexible approach to real estate sales in distressed areas.²⁰ By June it began to move toward a policy of using bulk sales to rid itself of at least some of its asset inventory. Though there was opposition to this strategy as creating a lack of competition among bidders (and as handing “sweetheart deals” to large investors), possibly lowering asset sale prices because of attendant discounts, and possibly hurting some real estate markets, such concerns were largely trumped by the desire to get assets moved out of the RTC quickly.²¹ Undoubtedly the changes were to some extent a response to clamor in Congress, but they were much more a function of the newly created agency’s finally getting some experience under its belt and responding to the marketplace. In the area of asset-disposition policy and practice as in the area of resolutions, demonstrable change was a response both to public debate and to experience.

Management Structure

Both resolutions and asset disposition were embroiled in debates about the RTC’s management structure, which for Congress became one of the more contentious elements of the thrift

cleanup. The most visible issue was the relationship (as created by FIRREA) between the Oversight Board and the RTC. Though ostensibly the two bodies worked together, they had different purposes. The RTC was an operational entity, run by its own board of directors, with a mission primarily of resolving institutions and selling assets. The Oversight Board was a policy and watchdog entity with a mission of setting the general policies under which the RTC would accomplish its goals, controlling the purse strings, and keeping watch on the use of taxpayer funds; it was not to intrude too deeply into RTC operations.²² Seidman at one point described the RTC as the body and the Oversight Board as the mind. On the surface this division of function might seem fairly straightforward: the Oversight Board would set policy, and the RTC, working within those policies and therefore in accordance with the Oversight Board’s directives, would do its job. The operational reality, however, was much more complex.

A complicating factor was the existence of two sets of personnel with different viewpoints and experience. (It should be noted that this discussion is based primarily on certain RTC materials and the public debate; unfortunately, equivalent internal

¹⁶ Steve Klinkerman, “RTC’s Aggressive Policy Garners Favorable Reviews,” *American Banker* (April 3, 1990).

¹⁷ “RTC Too Slow in Disposing of Real Estate Assets,” *National Mortgage News* (April 16, 1990).

¹⁸ See U.S. House Committee on Banking, Housing, and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, Resolution Trust Corporation Task Force, *Disposition of Assets* (May 4, 1990), 30. Fears of asset dumping and potential damage to local real estate markets had prompted legislators to add a provision in FIRREA requiring that the RTC not sell property in those areas for less than 95 percent of the market value established by the RTC.

¹⁹ Stephen Labaton, “Savings Debate Gets Partisan Tone,” *New York Times* (June 15, 1990).

²⁰ By then the RTC had its own market experience to go on and could lower an asset’s market value by taking this experience into account: if it had not been able to sell a property after six months (four months for residential properties), the market value could be lowered by up to 15 percent; if the property continued unsold for another three months, the market value could be lowered by another 5 percent. If the property still remained unsold, it would be reappraised, but the market value would not be raised if the reappraisal was higher than the most recent market value set by the RTC (Paulette Thomas, “Resolution Trust Corporation to Slash Prices of Hard-to-Sell Realty from Sick S&Ls,” *Wall Street Journal* [May 9, 1990]).

²¹ Paul Duke, Jr., “Bailout Officials Set Plan to Sell S&L Real Estate—Stockpile Would Be Sold in \$500 Million Chunks over the Next Few Years,” *Wall Street Journal* (June 11, 1990).

²² For example, individual transactions were not part of the Oversight Board’s purview.

Oversight Board materials were unavailable. Oversight Board members and staff doubtless held their own views on the Board's relationship with the RTC.) The RTC was essentially run by FDIC staff and executives while the Oversight Board had a strong Treasury Department component and so represented the administration's point of view. The FDIC was an independent agency with experience in financial institution failures and resolutions, and its board was accustomed to being able to adjust policies to suit its needs. Moreover, the FDIC's insurance fund came not from the taxpayer but from premiums paid by banks. The Oversight Board members, who had other time-consuming posts, would be able to spend relatively little time on RTC business, and both they and their staff, though experienced in banking, housing, or real estate development, had to come to grips with a new organization.²³ However, with substantial taxpayer money involved, it was appropriate for the administration to be involved in how the RTC accomplished its goals.

This bifurcated structure was a recipe for conflict. Each entity might genuinely believe it was pursuing the best course available, but the two did not necessarily share a single vision. What the Oversight Board perceived as a "general policy," the RTC might see as an operational matter.²⁴ There was constant tension over who had the power to make decisions and concern about perceptions of who was responsible for results.

Although FIRREA demanded that the Oversight Board create general policies, RTC executives thought the Oversight Board was attempting to write a set of rules for a process that was ill-suited to being governed by rules.²⁵ In these executives' experience, judgment had to be applied in the making of decisions, but the politics of the S&L cleanup had led to statutory mandates as well as Oversight Board authority constraining the ability to make such judgments. Moreover, the RTC's executives believed that the need for the Oversight Board to overcome the difficulties of starting from scratch further complicated matters. The RTC would, of course, have to follow Oversight Board policy (although the agency could and did seek to change that policy); Seidman warned RTC staff specifically not to exercise judgment but to

follow the rules. Although FDIC staff had previously had more flexibility, Seidman noted, "we didn't [previously] have a statutory standard and we didn't have anybody upstairs to raise the issue about how we were operating."²⁶

As the RTC began its work, the officials involved sounded conciliatory notes about this somewhat cumbersome relationship. Treasury Secretary Brady said it would be a "cooperative effort." Seidman publicly predicted a good working relationship with the Oversight Board.²⁷ Tension, however, was present from the outset. The RTC wanted to move immediately to sell five institutions but the Oversight Board prevented it from doing so, believing that the transactions were too complicated inasmuch as many key policies had not yet been formulated.²⁸ RTC Executive Director David Cooke stated that the Oversight Board had asked the RTC to "stay with fairly simple, small transactions" until policies could be determined; he said, diplomatically, that he did not mind this since the organization was just getting on its feet.²⁹

²³ As structured by FIRREA, the Oversight Board had five members. Three of these were government officials: the Secretary of the Treasury (Nicholas Brady, who served as the board's chairman), the Chairman of the Federal Reserve Board (Alan Greenspan), and the Secretary of Housing and Urban Development (Jack Kemp). The other members were individuals to be nominated by the president and confirmed by the Senate. The first such members were Philip Jackson (a former Fed governor) and Robert Larson (the CEO of a real estate development firm). The Senate confirmed Jackson and Larson in April 1990.

²⁴ For example, in December 1989 there was some suggestion that the Oversight Board might be interested in setting RTC employment ceilings. When RTC Executive Director David Cooke, remarking that this seemed to be outside of the Oversight Board's territory, asked the RTC Board if it wanted to provide guidance to the Oversight Board, the RTC Board's members declined, with Seidman noting, "If this is oversight, they might as well handle everything" (RTC Board of Directors Meeting, December 12, 1989).

²⁵ RTC Board of Directors Meeting, January 9, 1990.

²⁶ RTC Board of Directors Meeting, October 24, 1989.

²⁷ Barbara A. Rehm, "21-Year Veteran of FDIC Climbs to Top RTC Post," *American Banker* (August 10, 1989).

²⁸ Jim McTague, "RTC Told to Delay Major Deals; Key Policy Issues Must Be Resolved First," *American Banker* (August 14, 1989).

²⁹ Barbara Rehm, "Helmsman Cooke Plots RTC Course," *American Banker* (August 14, 1989). Seidman later recalled that even small transactions created problems. The RTC had decided that as a means to show the world that it would hit the ground running, the agency would liquidate three small S&Ls and pay off their depositors. In the absence of defined policies, the Oversight Board initially chose not to make funds available. Seidman informed Deputy Treasury Secretary John Robson that if asked to explain why the thrifts had not been liquidated (he was scheduled to appear on the news), he would state that lack of funds was responsible. The Oversight Board reversed its decision and made the funds available (L. William Seidman, *Full Faith and Credit: The Great S&L Debacle and Other Washington Sagas* [1993], 204).

When Clarke asked in August 1989 about the relationship with the Oversight Board, Seidman stated that it was taking a lot of work and that

We've time and time again gotten to the brink with them where they say they don't have this or they need that in order to give us money. And I have instructed the staff at that point to tell them that we are closing shop and going home. And when they have money, we'll go back in business. And so far they've given us the money. One of these times they probably won't.

Seidman did say that he and William Taylor, the Oversight Board's acting vice president for finance and administration, were attempting to create practical solutions to their problems.³⁰ Nevertheless, in the matter of funds disbursement, the Oversight Board wanted to keep the shortest possible rein on the RTC, a policy that Seidman criticized openly just weeks after the RTC began operations, complaining that John Robson, deputy treasury secretary and the acting president of the Oversight Board, essentially had veto power over RTC management decisions because of his control over funding. In turn, Treasury was reported to be angered by public discussion of disagreement, and one commentator noted that the Oversight Board felt exposed, since it had ultimate responsibility for handing money over to the RTC.³¹

Although Nicholas Brady called the troubles mere “healthy friction” that would occur in any startup operation, others thought the system was too complex; in their eyes, the “zeal to have prudent supervision . . . meant that the buck stops everywhere.” Daniel Brumbaugh, who had been an economist at the Bank Board, said the structure led to “artificial, arbitrary outcomes.”³² Rep. Vento described the RTC and the Oversight Board as “operating for the past two months by the collective seat of their collective pants”—a management style that, he claimed, had not worked.³³ Congressmen such as Vento and Annunzio criticized initial drafts of the Oversight Board's strategic plan as vague.³⁴ The General Accounting Office (GAO) also found the early version of the plan too amorphous.³⁵ The unfavorable perceptions were reinforced by the inability of the RTC and Oversight Board to decide on the method for raising the RTC's working capital (discussed in detail below).³⁶

Daniel Kearney's appointment as Oversight Board president in October was meant to bring to the Oversight Board someone who had experience in both private sector real estate and government and who would be able to repair the frayed relationship between the RTC and Treasury.³⁷ However, Kearney resigned after only four months, citing a misunderstanding on both his and the Treasury's part about the scope of the powers vested in the position. This was generally taken to mean that Treasury had never given Kearney any real authority and that he found the situation unacceptable.³⁸ Seidman noted that Kearney was replaced on an interim basis by William Taylor, who was able to get much more done not only because he was an experienced government official but also because, after Kearney's resignation, Treasury had to be far more accommodating to avoid the repercussions from a second departure.³⁹

³⁰ RTC Board of Directors Meeting, August 15, 1989.

³¹ Nathaniel C. Nash, “Federal Savings Industry Rescue Is Entangled in Agency Disputes,” *New York Times* (August 28, 1989).

³² Paulette Thomas, “Thrift Bailout, Lacking a Chief and Floundering as Officials Feud, Slows and Grows More Costly,” *Wall Street Journal* (October 11, 1989).

³³ Jim McTague, “RTC Sales Unfair to Small Banks,” *American Banker* (October 20, 1989).

³⁴ Barbara A. Rehm, “Lawmakers Say Guidelines from RTC Oversight Board Are Vague,” *American Banker* (November 7, 1989).

³⁵ Gregory Wright, “RTC May Run Dry by 1991,” *National Mortgage News* (November 13, 1989).

³⁶ John L. Douglas, the FDIC's outgoing general counsel, stated in December that if the working capital debate was not resolved, it would put the RTC out of business, noting that the bickering with Treasury had to stop: “The RTC is a beggar at Treasury's door constantly” (Barbara A. Rehm, “No Money, Too Many Rules, and No Friends,” *American Banker* [December 11, 1989]).

³⁷ Kearney was a principal at a Boston real estate advisory firm and had previously held posts at the Department of Housing and Urban Development, the Government National Mortgage Association, and the Office of Management and Budget (OMB) as well as Salomon Brothers (Barbara A. Rehm, “Top RTC Overseer Plays Conciliator for Rival Factions,” *American Banker* (November 7, 1989)).

³⁸ Barbara A. Rehm, “Confidence in RTC Seen Waning; Kearney Exit Spells Deeper Trouble for S&L Agency,” *American Banker* (February 12, 1990); Brian Collins, “News Analysis: RTC Resignation Shows Tensions,” *National Mortgage News* (February 19, 1990); and “The Thrift Bomb,” *Wall Street Journal* (February 13, 1990). Kearney's difficulties can be illustrated by a discussion at an RTC board meeting, where it was noted that Kearney had made clear to the Oversight Board that the RTC needed more flexibility to make deals. The RTC board believed that Kearney was supportive and understood the issues but that, despite significant effort, he had been unable to make real progress. During the discussion, it was mentioned that the Oversight Board's lack of action was not the real problem because funding was controlled by Treasury and the OMB (RTC Board of Directors Meeting, January 12, 1990).

³⁹ Seidman, *Full Faith and Credit*, 205–6.

Toward the end of 1989, largely as a result of the bifurcated management structure, the RTC's operations were described as paralyzed. Noting that only 37 thrifts had been resolved since the agency had opened for business and that only 3 small thrifts had been resolved in the previous 10 weeks, one observer blamed much of the agency's inaction on the Oversight Board, which, "in its zeal to avoid even the appearance of impropriety in cutting deals, . . . has thrown out all the bargaining tools developed over the years [by the FDIC]." An attorney dealing with financial institutions predicted that it would take several months at least before the Oversight Board might liberalize the terms of deals, several more months before the terms under which assets could be sold would be determined, and then a couple of more months before the RTC would be able to react to those rules and put significant numbers of deals into the pipeline.⁴⁰

By January, public criticisms of the management structure became more and more numerous. Auburn University economist James Barth, who had been the chief economist at the OTS, said the S&L cleanup was quickly unraveling. Rep. Henry Gonzalez noted that key positions remained unfilled and important policies unannounced. Vento called for the Oversight Board to be abolished because it was too cumbersome. Another commentator called the structure "an absolute absurdity" and argued that split responsibility meant no responsibility.⁴¹ Inside the RTC, there was clearly a certain amount of frustration with the situation. Seidman remarked that he thought it was the RTC's job to run the cleanup and the Oversight Board's to finance it, and that the Board should tell the RTC what they wanted, and the RTC would do it. "We can't both have the responsibility and not have the responsibility and so we're sitting here thinking up ways to get around the fact that they don't know how to provide financing."⁴²

The split between the RTC and the Oversight Board was evident in congressional oversight hearings in January 1990. When Rep. Chalmers Wylie asked Seidman and RTC Executive Director Cooke if the Oversight Board was necessary, Seid-

man replied that when originally consulted about the structure, he had suggested either setting up a new and separate RTC with its own board answerable to the administration or allowing the FDIC to take over the cleanup, with the inclusion in FIRREA of whatever constraints were considered necessary. Seidman's implication was that the present structure was lacking. Cooke answered: "What we need at the operational arm is a fully operational board. We need a board that is available, accessible, and that we can exchange views and get decisions made." Seidman noted that people at the Oversight Board had tried hard to cooperate and that Kearney's performance was excellent, but asked, "Where did the buck stop in this whole process? If you can tell me, then we will know how to get it done, but at the present time it is almost impossible for David [Cooke] to know where to go and how to get operational decisions." After this exchange, Wylie noted that he had asked the question "somewhat facetiously, but apparently it was a better question than I first thought."⁴³ During the following week, Robson told the Senate Banking Committee that he knew of "no instance in which the working relationship between the Oversight Board and the RTC has thwarted progress toward the common goal of carrying out the mandates of FIRREA."⁴⁴

Just two weeks later, Kearney resigned. According to Rep. Charles Schumer, his departure suggested that initial startup frictions had not diminished. According to Vento, his leaving confirmed Vento's belief the Oversight Board should be abolished. Former FDIC Chairman Isaac argued that the policies set by the Oversight Board had made deals uneconomical for bankers and that much of the problem had to do with the multiplicity of man-

⁴⁰ Steve Klinkerman, "RTC Hogtied by Its Overseers," *American Banker* (December 26, 1989).

⁴¹ For these three observations, see Glenn Brenner, "Pace Slows in Bailout of Thrifts; Shortage of Funds Threatens Effort to Sell Failed S&Ls," *Washington Post* (January 8, 1990); see also Robert M. Garsson, "Vento Urges Abolition of RTC Oversight Board," *American Banker* (January 8, 1990).

⁴² RTC Board of Directors Meeting, January 9, 1990.

⁴³ U.S. House Committee on Banking, Finance and Urban Affairs, *Oversight Hearings* (January 23–25, 1990), 98–100.

⁴⁴ U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Second Oversight Hearing* (January 31, 1990), 19.

agement layers.⁴⁵ Gonzalez added his voice to those calling for change, noting that disarray and indecision were now publicly evident.⁴⁶ The *Wall Street Journal* ran an editorial suggesting that “at the end of the day, Treasury has to get out of the way and let someone make decisions.”⁴⁷ David Cooke reiterated that he had had a good relationship with Kearney and that [he and Kearney] had worked with Oversight Board staff to produce recommendations, “but where it goes from there is a mystery.”⁴⁸

Cumulatively the early record eventually resulted in proposed legislation designed to change the management structure put in place by FIRREA. In the immediate aftermath of Kearney’s departure, two bills were introduced, one in the Senate and one in the House. Sen. Robert Kerrey, who had attempted to change the makeup of the Oversight Board during the FIRREA debate, had reiterated his concerns in October. He maintained that the Oversight Board’s appointed officials were too busy with their governmental duties elsewhere to properly oversee the RTC.⁴⁹ His solution to the management problem was to create a new single board of governors to manage the RTC. It would replace both the Oversight Board and the RTC Board of Directors and would have nine members, five of whom would be independent members nominated by the president and confirmed by the Senate; the others would be members of the current Oversight Board and the Chairman of the FDIC. Although in March Kerrey’s bill was also introduced in the House (by Rep. Peter Hoagland), nothing came of it.⁵⁰ Vento, head of the House RTC task force, also introduced a bill to alter the management structure. His bill would abolish the Oversight Board and transfer its powers to the FDIC Board of Directors.⁵¹ This bill, too, failed to get anywhere, but clearly the RTC’s management structure was on its way back to the drawing board.⁵²

One reason Congress did not address the issue at this time was that just before Kearney’s resignation, Senate Banking Committee Chairman Donald Riegle said he thought FIRREA needed to be given time to work and he had “no intention of opening it back up.”⁵³ Even after Kearney left, it

was reported that Congress was unlikely to take up any structural change, and Seidman discounted the possibility of such change, noting that Bush would veto any bill incorporating a change of that nature.⁵⁴ In addition, by late March, Treasury officials were reported as having said that relations between the RTC and the Oversight Board had improved markedly. They ascribed the improvement to Seidman’s recognition that criticism of the Oversight Board “eventually sticks to him as well.”⁵⁵ As noted above, the improvement was certainly partly the result of William Taylor’s having become acting Oversight Board president in place of Kearney.⁵⁶ The RTC, Treasury and the Oversight Board were likely all chastened by the consistent criticism of them in the public debate. The structure of RTC management and its perceived effect on RTC performance would, however, return to the congressional agenda repeatedly as Congress debated RTC operations during the next several years.

⁴⁵ Nathaniel C. Nash, “Resignation at Savings Agency,” *New York Times* (February 10, 1990).

⁴⁶ Barbara A. Rehm, “Confidence in RTC Seen Waning; Kearney Exit Spells Deeper Trouble for S&L Agency,” *American Banker* (February 12, 1990).

⁴⁷ “The Thrift Bomb,” *Wall Street Journal* (February 13, 1990).

⁴⁸ Brian Collins, “RTC Resignation Shows Tensions,” *National Mortgage News* (February 19, 1990).

⁴⁹ U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Oversight Hearing* (October 4, 1989), 66–67.

⁵⁰ S. 2155 and H.R. 4386, the Resolution Trust Corporation Reorganization Act.

⁵¹ H.R. 4127, introduced on February 27, 1990.

⁵² During 1990, two other bills also sought to change the RTC’s management structure. One, H.R. 4851, the Financial Institutions Oversight Reform Act introduced by Rep. William Gradison in May, was a sweeping bill establishing Treasury control over financial institutions. It would have abolished not only the RTC but also several other entities, including the Office of Thrift Supervision (OTS). Given the extreme nature of this bill, it is unsurprising that it received little attention. Another bill, S. 3112, introduced by Senator Tim Wirth in September, would have abolished the Oversight Board and created a new Board of Directors for the RTC, consisting of the FDIC’s board and two independent members to be nominated by the president. These bills show that in some quarters the notion of changing the management structure persisted throughout 1990.

⁵³ Robert M. Garsson, “Riegle Opposes Efforts to Amend S&L Bailout,” *American Banker* (February 6, 1990).

⁵⁴ Brian Collins, “RTC Resignation Shows Tensions,” *National Mortgage News* (February 19, 1990).

⁵⁵ Robert M. Garsson, “Seidman Opens 2nd Office at RTC Headquarters,” *American Banker* (March 26, 1990).

⁵⁶ Seidman predicted that Taylor would be able to be more flexible than his predecessor (RTC Board of Directors Meeting, February 13, 1990). Taylor served as acting president until June, when Peter Monroe, a former deputy assistant secretary at HUD, took the position (Linda Corman, “RTC’s New Oversight Chief Has Learned to Get Along,” *American Banker* [June 4, 1990]).

The Working Capital Problem

The \$50 billion that FIRREA provided to the RTC were “loss funds,” funds to make insured depositors whole for losses suffered by insolvent institutions. FIRREA was silent about working capital, but the need for it was obvious: the RTC would incur carrying costs associated with the assets of failed institutions until those assets could be sold. The money borrowed for working capital would eventually be repaid from those asset sales. The requirement for working capital had been communicated to Congress before FIRREA passed.⁵⁷ Just several weeks after the RTC began its work, David Cooke noted that the Oversight Board was investigating setting up a financing vehicle.⁵⁸ In October, Seidman told the Senate Banking Committee that the RTC would require working capital so that it could continue resolving institutions without resorting to “uneconomic asset disposition policies.” He emphasized that the working capital borrowings would in no way add to the \$50 billion provided for loss funds and that any working capital program would still fall under the obligation limit imposed by FIRREA (discussed below) and would therefore be determined by the underlying value of the RTC’s assets.⁵⁹ The subject of working capital was discussed again before the congressional RTC task force in October and November, when Oversight Board members, RTC officers, and the GAO all emphasized the need for it.⁶⁰

Although the need for working capital was straightforward, finding the means to provide it became highly politicized. As a result, six months would pass before the issues surrounding this funding would be resolved. To understand the debate, one must place it within the larger picture of the budget. FIRREA’s provision of the RTC’s loss funds had been marked by a partisan struggle over their budgetary treatment. Democrats had argued for all loss funds to be from Treasury appropriations. The administration preferred an “off-budget” financing method. Spending funded by appropriations would increase the reported budget deficit and make it more difficult to meet the Gramm-Rudman-Hollings (GRH) deficit reduction law’s targets; spending funded “off-budget”

would not.⁶¹ In the end, FIRREA represented a compromise—with \$18.8 billion in on-budget Treasury appropriations and \$30 billion from bonds issued by the off-budget Resolution Funding Corporation (RefCorp). Another \$1.2 billion was funneled from the Federal Home Loan Bank System through RefCorp to the RTC. Some who were involved in the process believed the Democrats saw RTC working capital as a way to try to force the president to abandon his promise not to raise taxes,⁶² although the debate was also about the transparency of the budget. But the delay in finding a solution could also be ascribed to the Bush administration’s anxiety at being seen as directing increased monies to the RTC and to its desire to at least moot the idea of using an off-budget vehicle to fund working capital in order to avoid further constraints on the administration’s spending choices during this period of high deficits. In the end, it turned out that neither Congress nor the administration preferred having the RTC as a constant companion to budget negotiations.

The Debate about Method

The administration was never publicly forthcoming about the methods it was considering using, but it was rumored that one possible way to provide working capital was to create a “Resolution Bank.” Some Democrats in Congress thought the administration wanted to create another RefCorp

⁵⁷ See for example, letter from L. William Seidman to Sen. Donald W. Riegle, Jr., June 26, 1989, reprinted in U.S. House Committee on Banking, Finance and Urban Affairs, *Oversight Hearings* (Jan. 23–25, 1990), 560ff. Seidman then noted that “RTC likely will need considerably more than \$50 billion to provide working capital to effect resolutions. . . . RTC must have the ability to raise cash or provide cash-equivalent obligations.”

⁵⁸ Brian Collins, “RTC Chafes under Tight Grip,” *National Mortgage News* (August 28, 1989).

⁵⁹ U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Oversight Hearing* (October 4, 1989), 118–19.

⁶⁰ U.S. House Committee on Banking, Finance and Urban Affairs, Subcommittee on Financial Institutions Supervision, Regulation and Insurance, Resolution Trust Corporation Task Force, *Status and Activities* (October 4 and 19, November 6 and 13, 1989), passim.

⁶¹ GRH created “maximum deficit amounts.” The law mandated that if these were exceeded, the president would be required to issue a sequester order to reduce all nonexempt spending by the same percentage.

⁶² At least this was the case according to OTS Director M. Danny Wall (RTC Board of Directors Meeting, January 9, 1990).

and this belief led to the introduction of the first post-FIRREA RTC-related piece of legislation: the Federal Agency Debt Management Act (referred to below as the Stark bill).⁶³ The bill—which was aimed specifically at the RTC even though the agency was never mentioned—would have prohibited federal agencies established after December 31, 1988, from “incurring any financial obligation other than authorized borrowings from the Treasury.” The bill was intended to underscore congressional Democrats’ opposition to another off-budget funding entity. Treasury Assistant Secretary David Mullins told Congress that although FIRREA had no explicit plan for working capital borrowing, the question had been discussed with Congress during the debate over that law. (FIRREA in fact authorized such borrowing—concern about it had engendered Rep. Gonzalez’s insistence on an obligations limit—and the method of borrowing had been left open to provide the RTC with maximum flexibility.)⁶⁴ Mullins argued that the Stark bill was unworkable and would interfere with routine RTC transactions in offering guarantees; in addition, since FIRREA provided only for \$5 billion in RTC borrowing from the Treasury, the bill would apparently limit working capital to that very insufficient amount.

Mullins also noted that the administration believed the budgetary treatment of working capital should wait until some plan was chosen but that nevertheless it would be improper to “distort” the budget by “ballooning budget expenditures in early years with amounts that will be fully repaid with budget receipts in later years.” Moreover, recording RTC working capital spending on-budget could have perverse effects. Working capital borrowing (after fiscal year 1990)⁶⁵ would count as budget outlays and potentially force budget cuts elsewhere, while the proceeds of asset sales in the later years would reduce net budget outlays, possibly allowing higher levels of government spending in those years than would otherwise be the case. Although there would be no net difference in spending over time, placing RTC working capital on-budget could arbitrarily affect the timing of government spending. Lastly, he noted that scored on-budget, RTC operations might become the

largest single discretionary determinant of budget results, making the RTC even more political. Congress, Mullins said, should “think long and hard before allowing the budget process to drive the case resolution and asset disposition process.” The administration obviously opposed the bill.

RTC Chairman Seidman said the agency would require at least \$50 billion in working capital, noting that working capital would smooth “out the timing difference between the RTC’s cash outlays and its cash inflows” and that it was also needed to replace high-cost funds as a way to lower resolution costs. The alternative was to borrow using insured deposits at a much higher cost.⁶⁶ Other alternatives to raising working capital, such as using whole-thrift transactions or slowing the pace of resolutions to correspond to asset sales, would also prove costly. He reiterated that because the bill prohibited any financing other than through the Treasury but provided no additional Treasury financing beyond FIRREA’s \$5 billion, in practical terms the bill would simply “prevent the RTC from raising adequate working capital.”⁶⁷

⁶³ H.R. 3469 was introduced on October 13, 1989, by Rep. Fortney Stark; several important House members, including Dan Rostenkowski, were co-sponsors.

⁶⁴ U.S. House Committee on Ways and Means, Subcommittee on Oversight, *Role of Federal Borrowing and Loan Guarantees* (October 31, 1989), 36ff. For the FIRREA obligations limit, see Davison (2005), 29, and the discussion in the present article.

⁶⁵ Because the GRH law applied only to prospective fiscal years, working capital outlays financed by borrowing in the current fiscal year would not trigger the need for spending cuts.

⁶⁶ Thrifts in conservatorship were still operating institutions (run by the RTC) and needed to fund their assets. The greater the amount of funding provided to the institution through loans from the RTC, the less funding the thrift would have to seek in the deposit markets at higher cost. High-cost funds replacement therefore lowered the cost to the taxpayer. For a description of the conservatorship process, see FDIC, *Managing the Crisis*, 117–18.

⁶⁷ He was also concerned that the bill might be interpreted as applying to RefCorp, an interpretation that would put it in conflict with FIRREA, and that it might prohibit the RTC from providing the assurances and indemnities against lawsuits that are routinely provided to acquirers of institutions or assets. It might also be interpreted as banning putbacks of assets, thereby increasing the need for working capital, and might make it very costly for the RTC to securitize assets. All in all, Seidman felt the bill could put the RTC out of business (U.S. House Committee on Ways and Means, Subcommittee on Oversight, *Role of Federal Borrowing and Loan Guarantees* [October 31, 1989], 51ff.).

Whereas the RTC wanted working capital simply so the agency could do its job, politics played a significant role in the debate between the administration and congressional Democrats. As Rep. Stark told Seidman, deposits in S&Ls had to be honored, and the RTC would end up with large amounts of assets that no one wanted to see dumped; working capital was therefore required. But, he noted, “We have some political differences that you’re not privy to or involved in.”⁶⁸ In mid-November congressional Democrats and the administration agreed to postpone their disagreements over the issue of working capital: the Oversight Board and the RTC agreed not to seek to raise working capital during the congressional recess and to create a plan in consultation with Congress in 1990; and for its part, the House Ways and Means Committee agreed not to send the Stark bill to the House floor.⁶⁹

This political compromise did not, however, relieve the RTC’s very real operational concerns about a lack of working capital. By late November, the agency was adhering to its schedule for resolutions but was expected to have spent all the funds allocated to it for the fourth quarter and also for the early part of the first quarter of 1990. There was some concern that unless an agreement over working capital was arrived at quickly, the pace of resolutions would be affected.⁷⁰ By mid-December, RTC management became even more concerned, for they had seen indications that the RTC’s lack of working capital and liquidity problems were now publicly known and could have adverse effects, notably in the agency’s dealings with deposit brokers who might demand higher rates, particularly because they knew the RTC could abrogate contracts.⁷¹ Seidman advised that the RTC should slow down its work and should not count on getting any working capital until the end of the first quarter. His prediction proved reasonably accurate.⁷²

By early January 1990, the administration was narrowing down the potential mechanisms for raising working capital.⁷³ The creation of another off-budget entity had been rejected, and administration officials were suggesting a combination of

Federal Financing Bank (FFB) borrowing and the sale of short-term notes backed by S&L assets.⁷⁴ Congressional Democrats supported only FFB borrowing, and without a quick decision from the administration, they would resume their push for the Stark bill. In mid-January, despite Seidman’s belief that the RTC had to slow down, the Treasury contended that the RTC had sufficient funds to continue operations through the second quarter, and the House Banking Committee reportedly remained skeptical that the RTC needed more funds; one committee staff member suggested that the agency simply use the \$50 billion in appropriated loss funds, noting “cash is cash.”⁷⁵ At this point, however, the RefCorp had sold only \$4.5 billion in bonds in October, and though it was to sell another \$5 billion on January 17, it would need four additional offerings over the following year to raise all the funds provided for in FIRREA.⁷⁶ (See Figure 2.) As William Roelle (Director of the RTC’s Resolutions and Operations

⁶⁸ *Ibid.*, 92.

⁶⁹ Robert M. Garsson, “RTC Funding Fight Put on Hold until Next Year,” *American Banker* (November 15, 1989).

⁷⁰ RTC Board of Directors Meeting, November 29, 1989.

⁷¹ Several weeks earlier, when the agency had been unable to get a clear answer on how it could draw in a timely fashion on the \$5 billion line of credit established by FIRREA, it had been forced to hold \$1 billion in reserve that might have gone toward replacing high-cost funds (RTC Board of Directors Meeting, November 29, 1989).

⁷² *Ibid.*, December 19, 1989.

⁷³ Jerry Knight, “S&L Board Unveils Its Rescue Plan; Needed Funding Remains Uncertain,” *Washington Post* (January 4, 1990). In fact, in late November, in discussions with RTC management, Kearney said the Oversight Board was ready to submit its working capital plans to the administration for discussion and was leaning toward direct borrowing from the Federal Financing Bank (FFB). (The FFB was created by Congress in 1973 to centralize borrowing by federal agencies and reduce the cost of such borrowing.) The RTC was also told that the OMB had “somehow decided that [using the FFB] may be off budget.” Cooke told Kearney that the budget status was immaterial to the RTC; Kearney replied that it was immaterial to him as well (RTC Board of Directors Meeting, November 29, 1989). As indicated above, however, the budget-scoring issue was very important to both the administration and Congress.

⁷⁴ Paulette Thomas, “S&L Bailout Aides Scrap Plan to Create Off-Budget Agency to Raise Financing,” *Wall Street Journal* (January 9, 1990).

⁷⁵ Barbara A. Rehm, “RTC Plans to Dispose of 50 Thrifts in 1st Period,” *American Banker* (January 16, 1990).

⁷⁶ The RefCorp was a mixed-ownership government corporation established by FIRREA to provide the RTC with \$30 billion of its initial \$50 billion in funding (see Davison [2005], 35–37. RefCorp bond offerings were made in October 1989 (\$4.5 billion), January 1990 (\$5 billion), April 1990 (\$3.5 billion), July 1990 (\$5 billion), October 1990 (\$5 billion), and January 1991 (\$6.9 billion). See Oversight Board press releases dated October 18, 1989; January 17, 1990; April 4, 1990; July 3, 1990; October 2, 1990; and January 2, 1991.

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Division) noted, “Cash is cash [only] when you get it.”⁷⁷ Shortly thereafter, the RTC indicated that in order to fund RTC operations, it might be forced to demand early repayment of the \$11.3 billion lent to 169 thrifts. The demand could force the thrifts to depend once again on high-cost funds, driving up deposit interest rates across the United States.⁷⁸ Such an eventuality belied the Treasury claim that the RTC had enough cash to last into the second quarter, and indeed, not long afterward, John Robson informed Congress that the RTC would need an infusion of working capital funds during the first quarter of 1990.⁷⁹

Despite the political jostling, it was most unlikely that the administration could persuade congressional Democrats to approve anything other than FFB borrowing. It was clear that working capital was necessary and would be provided; the politics surrounding the budgetary treatment of working capital were just as clear; and the administration undoubtedly preferred a method that would not increase the deficit.⁸⁰ In mid-February, the Justice Department ruled that the RTC had the authority to raise funds through the FFB, at last clearing the way for the RTC to be provided with working capital.⁸¹ The announcement was immediately made that the RTC would raise \$11 billion in the first quarter, with \$8 billion going for carrying costs of receivership assets and \$3 billion for the replacement of high-cost funds backing conservatorships.⁸²

The RTC had been provided with working capital, but what the additional borrowing would mean for the budget was less clear. Since the fiscal-year 1990 budget was already in place, any 1990 borrowings might increase the deficit but would not require any action under Gramm-Rudman. In 1991, however, any substantial increase in the deficit resulting from RTC borrowing might make necessary significant offsetting budget cuts (something neither party would find palatable), barring a tax increase that Bush had already forsworn. The solution was to exclude RTC working capital from the GRH budget targets, a goal accomplished by a provision approved by the Senate Appropriations Committee in April. Reportedly, the administration, the Congressional Budget Office (CBO), and the Senate leadership supported the legislative change.⁸³ In the end, the Budget Enforcement Act of 1990 effected the exclusion, whose relevant provision also had the salutary effect of excluding

⁷⁷ Barbara A. Rehm, “RTC Plans to Dispose of 50 Thrifts in 1st Period,” *American Banker* (January 16, 1990).

⁷⁸ Steve Klinkerman, “RTC Efforts to Get Cash Could Raise Thrift Rates,” *American Banker* (January 19, 1990).

⁷⁹ U.S. House Committee on Banking, Finance and Urban Affairs, *Oversight Hearings* (January 23–25, 1990), 27–28.

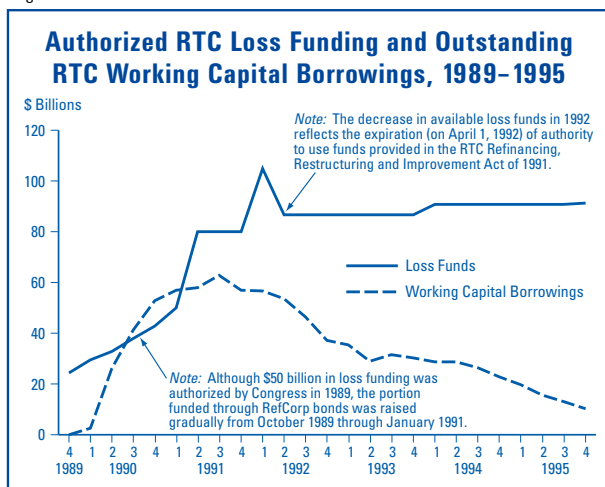
⁸⁰ Barbara A. Rehm, “Administration Plans to Find Capital for RTC,” *American Banker* (February 1, 1990).

⁸¹ Robert M. Garsson, “Justice Says RTC Can Use Federal Bank for Capital,” *American Banker* (February 16, 1990).

⁸² “S&L Rescuers Are Cleared to Use Short-Term Funds,” *Wall Street Journal* (February 16, 1990). The Treasury announced that it would increase the amounts of its weekly auctions of short-term bills and 52-week bills to raise the needed funds (“U.S. to Boost Level of Borrowing to Fund S&L Industry Bailout,” *Wall Street Journal* [February 21, 1990]). Much of these funds was not spent during the first quarter because thrift resolutions slowed; however, as the RTC contemplated a major drive to resolve 141 institutions in the second quarter, it was authorized to borrow up to \$45.3 billion (“Thrift Agency Is Cleared to Borrow \$45.3 Billion,” *Wall Street Journal* [April 12, 1990]).

⁸³ David Rogers, “Bill Seeks to End Count of RTC Fund under Deficit Law,” *Wall Street Journal* (April 26, 1990). Treasury Secretary Brady, in response to a question in May, noted, “You don’t want to complicate an already complicated set of budget negotiations . . . by swinging it back and forth with respect to working capital. It could be \$50 billion worse this year and \$30 billion better the next year, and it would raise havoc with the Gramm-Rudman target” (U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Hearing on the Semiannual Report* [May 23, 1990], 67). This was also the position of the chairman of the Federal Reserve Board, Alan Greenspan, who in January had said that the basic purpose of Gramm-Rudman-Hollings was to raise total domestic savings and that since RTC working capital was a transfer of assets, it would have no effect on domestic savings and should be excluded from the GRH calculations. He was also concerned about the false effects that receipts from asset sales might have on the budget in later years. See U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Second Oversight Hearing* (January 31, 1990), 76–77.

Figure 2



any further legislative appropriations for RTC losses from the budget deficit reduction process.⁸⁴

The \$18.8 Billion Loophole

The working capital saga was not quite over, however. Although the mechanism through which the RTC would borrow was agreed to, the possibility still existed that the agency would be unable to borrow enough working capital to fund its operations. In June 1990, Treasury Secretary Brady—even as he asked for appropriations for loss funds beyond the \$50 billion already provided—informed Congress that before the RTC spent the \$50 billion for losses, it was likely to run up against the obligation limit set by FIRREA at the insistence of Rep. Gonzalez. The obligation limit (also known as the note cap) was intended to restrict total RTC obligations to the sum of its cash, unused loss funds, and 85 percent of the fair market value of assets it acquired.⁸⁵ This meant essentially that the RTC had to hold unused loss funds in reserve in an amount equal to 15 percent of the fair market value of its assets.⁸⁶ These funds would serve as a capital cushion for repayment of debt obligations in the event that RTC's estimates of fair market values proved to be too optimistic. The Oversight Board characterized the situation as requiring immediate attention, and the RTC held out the possibility of needing to “dramatically step up asset sales to fund resolutions.” Others argued that the administration was simply applying pressure to have RTC borrowing excluded from the budget (which, as noted, did occur), and a Senate Banking Committee staffer said that although the RTC would run into the obligations limit before the end of the year, the danger was not imminent.⁸⁷ This prediction was fairly accurate, but the fear that the RTC would have to radically slow the pace of its resolutions stirred action.

The solution to the difficulty lay in an oversight: FIRREA's note cap formula implicitly calculated unused loss funds as the excess of the \$50 billion authorized by FIRREA over RefCorp funds received to date. However, RefCorp funding could only account for up to \$31.2 of the \$50 billion; the note cap (erroneously) omitted a reference to the

\$18.8 billion in Treasury funding that had also been provided in FIRREA. The RTC, to reassure Congress that it would not take advantage of the error, had been including the Treasury funding in its borrowing limit calculations regardless (i.e., as if it were no different than RefCorp funds). Until mid-1990, this compensatory calculation was of little consequence, but Treasury projected that if the RTC continued the calculation in this manner, the obligations limitation would become a real constraint by the fourth quarter.⁸⁸ Undersecretary Robert Glauber told the House Banking Committee that a literal reading of FIRREA would deduct only RefCorp contributions received from the \$50 billion in FIRREA-authorized funds to determine the amount of unused loss funds available to back new obligations. This would permit the remaining \$18.8 billion to offset the note cap's required reserve of loss funds (15 percent of the fair market value of assets) originally intended to ensure that RTC could repay its working capital borrowing. In effect, the RTC would be able to borrow for working capital up to 100 percent of the fair market value of assets acquired.⁸⁹ He added that “in the absence of action by Congress, we would be faced with the choice between using the \$18.8 billion to raise working capital and shutting down the resolution activity of the RTC,” but he said that the RTC would not take the former course without congressional approval.⁹⁰ House members at the hearing, confronted by the simultaneous request for significant additional loss funds, paid scant attention to the working capital issue, but a deci-

⁸⁴ Budget Enforcement Act of 1990, Sec. 13101 (specifically, see sec. 252(b)), 104 STAT 1388-581.

⁸⁵ U.S. House Committee on Banking, Finance and Urban Affairs, *Semiannual Report and Appearance by the Oversight Board* (June 14, 1990), 15. This description is a simpler way of presenting the limitation. More formally, the sum of contributions received from RefCorp plus outstanding obligations could not exceed the RTC's available cash plus 85 percent of the fair market value of its other assets by more than \$50 billion. Reacting to the 1988 FSLIC deals, Rep. Henry Gonzalez had insisted on including a provision that would limit the RTC's outstanding obligations.

⁸⁶ U.S. House Committee on Ways and Means, *Additional Financing Costs* (September 19, 1990), 35.

⁸⁷ Debra Cope and Robert M. Garsson, “Brady Expected to Warn Congress RTC May Run Out of Cash by Fall,” *American Banker* (June 13, 1990).

⁸⁸ U.S. House Committee on Banking, Finance and Urban Affairs, *Funding the Resolution Trust Corporation* (July 30, 1990), 15, 139.

⁸⁹ As \$18.8 billion is equivalent to 15% of \$125.33 billion, the latter figure was the effective limit on RTC working capital borrowing. Outstanding FFB working capital borrowings peaked in 1991 at approximately \$63 billion.

⁹⁰ *Ibid.*, 15-16.

sion to acquiesce in the literal interpretation would allow Congress to delay a highly contentious vote on new loss funding until after the November elections.⁹¹

Nevertheless, it took some time to get there. In late August Nicholas Brady noted in a letter to Rep. Dan Rostenkowski that although the administration had no specific proposal for adjusting the note cap, any funding legislation had to deal with the obligations limitation. A month later, Seidman again warned that without action, RTC resolutions would have to be tied to asset sales and would slow to “only a handful of institutions per quarter.” Although the RTC had not yet run up against the limit, Seidman reiterated that it would soon become a constraint. He suggested that rather than omit the \$18.8 billion in Treasury funding from the calculation, FIRREA be amended to allow the RTC to borrow 100 percent of the fair market value of its assets, noting that “since the ultimate costs will be the Government’s in any event, it does not seem that the Government is taking any real risk [if such a change is made].”⁹²

Once again, however, Congress was concentrating much more on the increase in loss funds than on operating capital. The assumption was that somewhere in the new funding legislation Congress would address the working capital issue; however, as discussed below, Congress adjourned without agreeing to any new RTC funding. Just before the adjournment, the House Banking Committee on a voice vote approved allowing the RTC to use the \$18.8 billion drafting error and the Senate followed suit.⁹³

On October 30, the RTC wrote to the Oversight Board asking that it be allowed to take advantage of the \$18.8 billion drafting error and stating that otherwise, operations would come to a halt before the end of the year.⁹⁴ Two days later the Oversight Board agreed, providing the RTC with sufficient working capital and access to loss funds to continue resolving institutions until Congress could return to the issue in the new session.⁹⁵ Gonzalez and Riegle had both written to the Oversight Board encouraging this action.⁹⁶ This interpretation of FIRREA could conceivably have been

challenged in the courts, but Gonzalez noted that with Congress having failed to pass any new funding for the RTC, he believed no one in Congress would object to the decision.⁹⁷ Once the decision was made, David Cooke told the RTC Board that the agency could move quickly to market the larger institutions it had planned to resolve during the fourth quarter, and that it could now continue through February 1991.⁹⁸

Table 1 shows what the limitations on outstanding obligations would have been under the note cap formula (see note 85) from March 31, 1990, to March 31, 1991. As the table shows, without approval to take advantage of the loophole, the RTC would have exceeded the obligations limitation before year-end. With the changed calculation, however, the agency easily complied with the limitation.⁹⁹ In hindsight, the RTC’s position would have been easier if FIRREA had dealt more directly with working capital—if doing so had even been possible. Congressional attitudes in 1990 illustrate the difficulties that would have

⁹¹ “Treasury Scrambling for Funds for RTC,” *National Mortgage News* (August 6, 1990).

⁹² U.S. House Committee on Ways and Means, *Additional Financing Costs* (September 19, 1990) 5, 34. See also Paulette Thomas, “Seidman Totals Growing Costs of S&L Rescue,” *Wall Street Journal* (September 20, 1990).

⁹³ Barbara A. Rehm, “House Bank Panel Votes Added Funds to RTC,” *American Banker* (October 24, 1990).

⁹⁴ RTC Board of Directors Meeting, October 30, 1990.

⁹⁵ Stephen Labaton, “Loophole to Be Used to Keep Bailout Afloat,” *New York Times* (November 2, 1990).

⁹⁶ U.S. General Accounting Office, *Obligations Limitation: Resolution Trust Corporation’s Compliance as of September 30, 1990* (1991), 4–5.

⁹⁷ “RTC to Borrow Working Capital; Regulators Avoid Funding Halt,” *BNA’s Banking Report* 55 (November 5, 1990), 747-48.

⁹⁸ RTC Board of Directors Meeting, November 2, 1990.

⁹⁹ The GAO noted that the exclusion of Treasury contributions “effectively eliminated the 15 percent cash reserve feature and resulted in a potentially misleading assessment” of the RTC’s ability “to fund any future losses resulting from assets sales at less than their recorded value,” and suggested that FIRREA be amended to fix this problem (U.S. GAO, *Obligations Limitation as of December 31, 1990* (1991), 6–7). The GAO would later note that the Resolution Trust Corporation Funding Act of 1991, which provided an additional \$30 billion in loss funds (see the relevant section of this article for a discussion of the 1991 law), made the FIRREA obligations limitation formula even more misleading because the 1991 law did not amend the formula; thus, the additional funding was excluded from the calculation. In fact, Congress never changed the note cap formula, even as further laws (not only in 1991 but also in 1993) provided additional loss funds, and the obligations limitation never again became a constraint on RTC operations. Indeed, the GAO ceased publishing a calculation of the obligations limitation. (However, both the Senate and the House had included a revised obligations limitation formula in their abortive attempts to pass new funding legislation at the end of 1990. For the 1990 bills, see S. 3222 and H.R. 5891, 101st Cong., 2nd sess.)

attended adding anything to FIRREA that might have been portrayed as additional funding. Moreover, since the number of institutions and the volume of assets the RTC was dealing with were moving targets, any working capital provisions in FIRREA would likely have proved inadequate. And the Bush administration might have believed that it could borrow working capital quietly off-budget after the fact, although given the scrutiny attached to the RTC, any such attempt would likely have failed.

The struggle over working capital demonstrates how politicized RTC spending was and how enmeshed the agency was in budget brinksmanship at a time when the federal budget was in serious deficit. Irrespective of this, however, the number of insolvent institutions and the associated costs of resolving them kept rising. Had FIRREA not inadvertently included the \$18.8 billion loophole, the RTC's operations might have been seriously impaired by the end of 1990, and Congress would undoubtedly—although perhaps grudgingly—have been forced into a swift about-face. However, as discussed below, the politics of RTC funding often led to impasse.

The 1990 Legislative Stalemate

As noted, FIRREA's \$50 billion in loss funds was almost immediately recognized as insufficient. In January 1990, Seidman told Congress that although the \$50 billion would cover insolvencies into 1991, it was obvious that more would be needed, perhaps another \$24 billion. The reaction of Democratic Rep. Frank Annunzio was not encouraging: there was, he said, "No way you are getting money from the Congress."¹⁰⁰ Republican Rep. James Leach noted, "Congress would rather not deal with the thrift issue ever again . . . but it probably has no choice."¹⁰¹ Both of Leach's points would turn out to be true. The RTC did not get its money from Congress in that session, and Congress did have to deal with the issue again in the following session.

In March, the House Banking Committee RTC task force predicted that the RTC would require

¹⁰⁰ Paulette Thomas, "Latest Estimates Show Thrift Bailout May Cost \$24 Billion over Allocation," *Wall Street Journal* (January 25, 1990).

¹⁰¹ Robert M. Garsson, "2nd Thrift Bill Takes Shape, but Congress Is Reluctant," *American Banker* (January 22, 1990).

Table 1

Limitation on Outstanding Obligations 3/31/1990–3/31/1991 (\$ Millions)						
	A Contributions Received	B Outstanding Obligations	C Cash and Equivalents	D 85% FMV Assets	(A+B–C–D) Adjusted Obligation Level	Maximum Level
3/31/1990 ^a	29,526	2,760	3,181	13,728	15,377	50,000
6/30/1990 ^a	33,021	30,162	4,043	29,593	29,547	50,000
9/30/1990	19,221	48,864	5,113	40,985	21,987	50,000
9/30/1990 ^a	38,021	48,864	5,113	40,985	40,787	50,000
12/31/1990	24,248	54,777	5,177	40,930	32,918	50,000
12/31/1990^a	43,048	54,777	5,177	40,930	51,718	50,000
3/31/1991	31,286	58,532	5,060	43,713	41,045	50,000

Note: For an explanation of the formula used to calculate the obligations limit, see note 85.
Sources: U.S. GAO, *Obligations Limitation . . . as of March 31, 1990; June 30, 1990; September 30, 1990; December 31, 1990; March 31, 1991* (1990, 1991, 1992)

^a Calculation includes \$18.8 billion in Treasury contributions.

\$30 billion more in loss funds.¹⁰² In April, the GAO followed with another increased estimate of the cost.¹⁰³ In May, the Bush administration presented Congress with a revised estimate of the costs, stating that the current worst-case scenario might entail another \$57 billion. Commentators at the time felt that Treasury was at last presenting realistic estimates of the cost, perhaps to ensure that no higher estimates would have to be announced as the 1992 presidential campaign got under way. Treasury Secretary Brady told Congress that the administration would accept either an open-ended appropriation or some set figure, and would leave it up to Congress to decide.¹⁰⁴ Democrats criticized the administration for its conduct and were particularly unreceptive to the notion of open-ended appropriations.¹⁰⁵ Even some Republicans were unhappy with such a course.¹⁰⁶ Although it does not appear that the administration was seriously considering another off-budget vehicle, one Democrat fired a warning shot with a bill providing that any future funding had to use direct Treasury appropriation.¹⁰⁷ As summer ended, Seidman informed the House Ways and Means Committee that the RTC would need \$30–\$40 billion in new loss fund appropriations for the next fiscal year, noting, “Unfortunately, when it comes to loss funds, there really are no alternatives . . . [they] will have to come from the American taxpayer.”¹⁰⁸ Seidman’s request was endorsed by both the GAO and CBO, both of which argued that the slowdown caused by lack of funds could significantly increase the cost of the S&L cleanup.¹⁰⁹

With the session drawing to a close, Congress finally turned to the problem of the loss funds. On October 10, Brady wrote to both of the Banking Committees, noting that “RTC case resolution will virtually cease within the next two months unless additional funds are provided.” He requested legislation providing \$40 billion and removing the FIRREA note cap provisions; alternatively, if Congress chose to maintain the note cap, he requested \$57 billion. The Senate Banking Committee moved quickly to mark up a bill (S.3222) providing the \$57 billion. There was some Democratic dissent, but the Senate was clearly willing to

appropriate the amount requested by the administration.¹¹⁰

The House, however, was not. House Banking Committee chairman Gonzalez was angered by Nicholas Brady’s refusal to appear before his committee; the refusal prompted him to cancel a planned hearing on October 17. He responded by stopping work on a markup of the RTC funding bill. With congressional elections imminent, politics likely played a role here: Gonzalez and House Democrats wanted another opportunity to associate the funding request with the administration, and Brady undoubtedly did not relish the thought of appearing before the committee and serving as a target for attacks on the handling of the cleanup. Gonzalez claimed that the administration wanted to “slip this through without any real oversight,” saying he had never seen a request for authorization of funds “without the accompanying willingness of an agency or department head to defend [it] . . . in open session.” The Treasury Department’s view was that the committee had all the information it needed to make its decision and that it was the committee’s responsibility to act.¹¹¹

Gonzalez eventually relented—somewhat. The House Banking Committee moved on a bill that would provide only interim funding of \$10 billion

¹⁰² Paulette Thomas, “Resolution Trust Expected to Offer an Alternative to Cheap Liquidation,” *Wall Street Journal* (March 20, 1990).

¹⁰³ Robert M. Garsson, “Pols Shrug Off GAO Estimate of Bailout Cost,” *American Banker* (April 10, 1990).

¹⁰⁴ Nathaniel C. Nash, “Savings Failures Expected to Soar, the Treasury Says,” *New York Times* (May 24, 1990).

¹⁰⁵ Charles Schumer, “The S&L Horror Show: Act II,” *New York Times* (July 24, 1990).

¹⁰⁶ “Treasury Scrambling for Funds for RTC,” *National Mortgage News* (August 6, 1990).

¹⁰⁷ See H.R. 5029, *Resolution Trust Corporation Financing Amendments of 1990*, introduced on June 13, 1990, by Rep. Paul Slattery. The bill was never acted on.

¹⁰⁸ Paulette Thomas, “Seidman Totals Growing Costs of S&L Rescue—Congress, in Election Year, Concocts New Tax Ideas Aimed at Paying the Tab,” *Wall Street Journal* (September 20, 1990).

¹⁰⁹ Stephen Labaton, “Savings Bailout Chief Asks for \$100 Billion,” *New York Times* (September 20, 1990).

¹¹⁰ U.S. Senate Committee on Banking, Housing, and Urban Affairs, *Resolution Trust Corporation Funding Act of 1990* (October 19, 1990).

¹¹¹ Stephen Labaton, “Savings Bailout May Be Hindered By Political Impasse Over Money,” *New York Times* (October 19, 1990), and “A Patrician and Populist Clash in Savings Bailout,” *New York Times* (October 22, 1990).

(although it also addressed the \$18.8 billion loophole discussed above).¹¹² The bill also required that any additional request for funds be submitted to both Banking Committees and contain a complete six-month financial plan detailing how the monies would be spent.¹¹³ The measure was approved by the committee on October 23, but not without opposition: Democratic Rep. Doug Barnard said that “if you want to keep them on a real short leash, you shouldn’t give them anything.” Even some Republicans positioned themselves against RTC funding, with Rep. Toby Roth arguing against passing even the \$10 billion interim funding.¹¹⁴

The Senate realized that, with little time left in the session, there was not much likelihood of reconciling two very disparate bills. Accordingly, it amended its bill by replacing it with a measure essentially identical to that passed by the House committee (providing only \$10 billion in interim funding). Riegle noted that this would keep the RTC on a very tight leash and ensure that RTC funding would be one of the first measures to confront the new Congress. He expressed some dismay that they were not providing more money.¹¹⁵

The bill passed the Senate on a voice vote. However, the House failed to pass the legislation. Reports suggested that the bill had been toppled by a procedural objection from Annunzio, but at the time some thought that there might not have been enough votes for passage anyway.¹¹⁶ The House’s inaction ensured that Congress would not block the use of the \$18.8 billion loophole, for use of the loophole allowed Congress to postpone dealing with the loss-funding issue without forcing the RTC to cease resolving thrifts and would give legislators the ability to address funding early in the new Congress.¹¹⁷

¹¹² See H.R. 5891.

¹¹³ See U.S. House Committee on Banking, Finance and Urban Affairs, *Resolution Trust Corporation Funding Act of 1990* (October 27, 1990).

¹¹⁴ Stephen Labaton, “House Panel Approves More Funds for Bailout,” *New York Times* (October 24, 1990).

¹¹⁵ *Congressional Record*, S. 17722 (October 27, 1990).

¹¹⁶ Paul Duke, Jr., “Congress Fails to Provide More Funding for S&L Bailout, Raising Threat to RTC,” *Wall Street Journal* (October 29, 1990).

¹¹⁷ Gonzalez said he wanted to begin hearings after the election and before the new Congress was seated (Barbara Rehm and Robert M. Garsson, “Gonzalez Urges Hearings This Fall on RTC,” *American Banker* [October 31, 1990]).

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