

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Phillips, Ronnie J.

### Research Report Narrow banking reconsidered: The functional approach to financial reform

Public Policy Brief, No. 17

**Provided in Cooperation with:** Levy Economics Institute of Bard College

*Suggested Citation:* Phillips, Ronnie J. (1995) : Narrow banking reconsidered: The functional approach to financial reform, Public Policy Brief, No. 17, ISBN 0941276058, Levy Economics Institute of Bard College, Annandale-on-Hudson, NY

This Version is available at: https://hdl.handle.net/10419/54328

### Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



# WWW.ECONSTOR.EU

The Jerome Levy Economics Institute of Bard College Public Policy Brief

# Narrow Banking Reconsidered

The Functional Approach to Financial Reform

Ronnie J. Phillips

No. 18/1995

The Jerome Levy Economics Institute of Bard College, founded in 1986, is an autonomous, independently endowed research organization. It is nonpartisan, open to the examination of diverse points of view, and dedicated to public service.

The Jerome Levy Economics Institute is publish ing this proposal with the conviction that it repre sents a constructive and positive contribution to the discussions and debates on the relevant policy issues. Neither the Institute's Board of Governors nor its Advisory Board necessarily endorses the proposal in this issue.

The Institute believes in the potential for the study of economics to improve the human condition. Its purpose is to generate viable, effective public policy responses to important economic problems. It is concerned with issues that profoundly affect the quality of life in the United States and abroad.

The present research agenda includes such issues as financial instability, poverty, unemployment, and problems associated with the distribution of income and wealth. Other research interests include the issues of public and private investment and their relationship to productivity, competitiveness, and the prospects for growth and employment. In all its endeavors, the Institute places heavy emphasis on the values of personal freedom and justice.

Editor: Sanjay Mongia Associate Editors: Theresa Ford, Frances Spring

A publication of The Jerome Levy Economics Institute of Bard College, Post Office Box 5000, Annandale-on-Hudson, NY 12504-5000.

Public Policy Brief is produced by the Bard College Publications Office: Ginger Shore, Director; Elena Erber, Art Director; Judith Kahn, Text Editor; Juliet DB Meyers, Assistant Art Director; Sanford Robinson, Associate Text Editor; Lisa Trager, Designer; Cathy Ruggiero, Production Manager

© Copyright 1995 by The Jerome Levy Economics Institute. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information-retrieval system, without permission in writing from the publisher.

ISSN-1063-5297 ISBN-0-941276-05-8

## Summary

Ronnie J. Phillips presents the functional approach to reform of the financial system. This approach advocates the separation of the depository and lending functions of banks. As a result of the structural separation of banks' functions, monetary and credit policy undergo a parallel separation, and government supervision and regulation of the banking industry is modified. The policy prescription developed within this approach is narrow banking, the creation of separate monetary and financial service companies with the elimination of or substantial reduction in deposit insurance. Phillips asserts that narrow banking not only meets the safety and soundness goals of bank regulation, but also maintains an institutional structure that accommodates market forces and technological innovation.

Phillips reviews the history of government involvement in the payments system. He traces the notion of backing demand deposits with federal government securities (a notion that is endorsed by the functional approach) to the early monetary system of the American colonies and to the National Banking Acts of 1863 and 1864. These acts guaranteed that the Treasury would redeem notes issued by national banks and backed by government bonds at par value. Although the currency was backed by government debt, it was not until the Emergency Banking Act of 1933 that the means of payment was backed by federal government debt. Two years later the Banking Act of 1935 created federal deposit insurance.

The functional approach maintains that insurance dulls the incentives of depositors to seek a depository institution with sound assets and the incentives of depository institutions to maintain liquidity and high asset quality. Opposing this view are those who support fractional reserve banking, in which commercial banks hold central bank liabilities against their own liabilities. This approach contends that banks perform a valuable service through their dual functions of depository and lending activity and that this system yields efficiency gains because of information symmetries and the ability to hold minimal cash balances. Supporters of fractional reserve banking argue for reform through instituting risk-based pricing of deposit insurance, using subordinated debt to monitor banks' lending activities, having depositors pay fees for insurance, and increasing capital requirements. Narrow banking advocates argue that the microeconomic efficiency benefits of the fractional reserve banking reforms do not outweigh the macroeconomic costs.

In the fractional reserve system the Federal Reserve is able to encourage credit restraint more easily than credit growth. In the functional system the Fed retains a significant role in monetary policy and a modified role in credit policy. One goal of the functional approach is to mitigate the influence of monetary policy on the credit market. Therefore, in its system monetary policy affects only those institutions, known as monetary service companies, holding liabilities backed by government debt. In other words, monetary policy is not simultaneously credit policy, as it is today.

The portfolios of monetary service companies offering demand deposits would be restricted to only "safe" assets. The underlying assumption of the narrow bank policy is that the primary function of banks is to provide a payment mechanism. Phillips describes several narrow bank proposals that vary in their definitions of safe assets. However, as the interpretation of safe assets broadens, additional safety features are linked to the proposals.

Complementing the monetary service companies are financial service companies, where savings are channeled to investors. Within this financial structure, financial holding companies may own both types of service companies, but the assets of the narrow bank remain separate from other financial units of the holding company. Establishing separate monetary and financial service companies enhances the safety of the payments system, improves the ability of the Fed to control monetary aggregates, reduces government regulation of banks, accommodates the growth of mutual funds, and eliminates or significantly reduces deposit insurance.

Phillips discusses a number of issues raised by critics of narrow banking: the availability of safe assets and the corresponding maturities of these assets; the availability and cost of funds, especially for small businesses and consumers; access to the payments system; the shrinkage of the size of the banking system; the potential difficulty with overdrafts; foreign banking operations; and the political feasibility of the functional approach.

Phillips recommends the adoption of two specific financial system reform proposals. First, he endorses the creation of monetary service companies that would serve strictly a payments function and would hold only safe assets, as prescribed by Robert E. Litan and James L. Pierce. Second, he recommends the proposal of James R. Barth and R. Dan Brumbaugh, Jr., that the federal government establish a mutual fund that holds only government securities as assets.

## Contents

Preface
Dimitri B. Papadimitriou7
-
The Functional Approach to
Financial Reform
Ronnie J. Phillips9
-

About the Author......49

## Preface

Ronnie J. Phillips, a research associate of The Jerome Levy Economics Institute of Bard College and a professor of economics at Colorado State University, presents an essay in this *Public Policy Brief* on the functional approach to financial reform. Phillips makes a timely contribution to the debate on financial reform, given the current climate for reform in Congress, legislative changes in the financial service industry during the 1990s, and the Treasury Department's mandate to study the financial service industry of the United States.

The legislative agenda for the financial service industry is expected to alter the structure, the competition, and, some would argue, the stability of the system. In response to the savings and loan debacle of the 1980s, Congress passed the Federal Deposit Insurance Corporation Improvement Act (FDICIA) in 1991. More recently, in 1994, we witnessed the passage of both the Community Development and Financial Institutions Act and the Interstate Banking and Branching Efficiency Act. Other reforms affecting the industry, including the reform of both the Banking Act of 1933 (the Glass-Steagall Act) and deposit insurance, are currently under review.

Phillips directly addresses the second matter under review as he presents the case for adopting narrow banking, the policy prescription of the functional approach to financial reform. Narrow banking divides the depository and lending functions of banks; it creates separate monetary and financial service companies and eliminates or reduces deposit insurance. Instead, deposits are backed with "safe" assets. According to Phillips and other proponents, narrow banking weds the safety and soundness goals of bank regulation with an institutional structure that accommodates market forces and technological innovation. In essence, it significantly reduces the problem of the instability within the banking system.

The Jerome Levy Economics Institute of Bard College has published several *Public Policy Briefs* on the topic of financial reform. The Institute is committed to an ongoing research program, "Reconstituting the Financial Structure," under the direction of Professor Hyman P. Minsky, a Distinguished Scholar of the Institute. This essay by Phillips contributes to this growing body of research published by the Institute.

Dimitri B. Papadimitriou Executive Director

January 1995

## The Functional Approach to Financial Reform

### Introduction

The banking legislation passed during the New Deal has provided the basic institutional structure for the financial system in the United States for six decades. It has been evident for many years that elements of this structure are obsolete and require substantial modification. As the twenty-first century approaches the financial system appears archaic, and there are new challenges to the established system of bank supervision and regulation (Pollock 1992a). Beginning with the Depository Institutions Deregulation and Monetary Control Act of 1980 (DIDMCA) and continuing through the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA), federal legislation has sought to alleviate problems with the financial system. The 103rd Congress passed the most important banking legislation since the reforms of the New Deal: the Interstate Banking and Branching Act of 1994. The signing of this act by President Clinton ends a two-hundred-year-old debate and begins a new era of banking in the United States. President Clinton also signed the Community Development Banking and Financial Institutions Act to provide funds to assist community financial institutions in improving lending and banking services to underserved communities.

The passage of both acts is important, and it is a significant accomplishment of the administration and Congress. Taken together, this legislation promises a more efficient payments and lending system, while at the same time providing for improved access to basic banking services for communities, both urban and rural, that have not had ready access to banking services.

The banking legislative agenda is not completed, however, and there are three issues that Congress must address soon. First is the repeal of the separation of commercial and investment banking that was legislated in the Banking Act of 1933, commonly known as Glass-Steagall. Repeal would allow the creation of universal banks to provide virtually all financial services in one institution. However, if we allow universal banks, Congress must address the second issue: the reform of deposit insurance that was also established by the Banking Act of 1933 and made permanent by the Banking Act of 1935. This reform must go beyond the important changes of FDICIA to a reexamination of the "too big to fail" doctrine. The need for this reexamination emerged as a result of the debacle of the 1980s. The third issue is the merging of the various bank regulatory agencies— Federal Reserve, Office of the Comptroller of the Currency (OCC), Federal Deposit Insurance Corporation (FDIC), and the Office of Thrift Supervision. Consideration of such a merger will likely entail a debate over the role of the Federal Reserve System and whether it should, like the German Bundesbank, focus exclusively on monetary policy, leaving bank regulation and supervision to an independent agency. These legislative changes, together with the possibility of increased antitrust activity as a result of merger and consolidation activity, will fundamentally alter the structure of the financial system in the United States that has been in place since the New Deal (DeYoung and Whalen 1994; Nolle 1994).

This *Public Policy Brief* provides a framework for regulatory reform that will establish an appropriate balance between market forces and technological change, which together determine in large part how the financial system changes, and the obligation of government regulators to ensure a safe and efficient financial system.

James L. Pierce, of the University of California at Berkeley, has recently articulated what he calls the *functional approach* to deposit insurance and regulation (Pierce 1991, 1993).<sup>1</sup> This approach argues that bank regulation and supervision can be greatly simplified if viewed not in terms of the current institutional arrangement of the financial system (the legacy of the New Deal), but rather in terms of the functions that should be performed by an efficient financial system. The objective of this *Public Policy Brief* is to set forth the functional approach and to provide policy recommendations for reform of the financial system. The functional approach proposes a change in the role of government in the institutional arrangement of our financial system, but the policy prescriptions of the approach have a well-established basis in American history.

As James R. Barth and R. Dan Brumbaugh, Jr., note in the Levy Institute's *Public Policy Brief* No. 8, "The Changing World of Banking: Setting the Regulatory Agenda" (1993, 11), too often in the past legislation has been implemented with little attempt to understand whether "there were fundamental changes in the overall market for financial services that were affecting or contributing to the problems being addressed by the enacted legislation and changes in regulation." The recent concern about the growth of the derivatives market and the appropriate regulatory response is but the latest issue that has prompted congressional concern and could result in legislation.

Barth, formerly chief economist at the Office of Thrift Supervision and now a professor at Auburn University, and Brumbaugh, an economic consultant in California, outline the implications for banks and banking regulation of the changes in market forces and recent legislative initiatives. They provide a summary of possible scenarios for fundamental reform that are consistent with the new bank regulatory environment and the changing financial marketplace. The basic question, they argue, is what unique and crucial functions do banks perform that merit such great attention and protection by the federal government. When we recognize that the two functions that banks perform, deposit taking and lending, can and are being performed by other institutions, then we must ask why we persist in maintaining an outdated regulatory and supervisory structure. As Pierce (1993, 8) notes, the functional approach emerged in the mid-1980s as a response to the savings and loan crisis and concerns about the system of federal deposit insurance.

Narrow banking, a term coined by Robert E. Litan (1987a, 1987b, 1991), formerly of the Brookings Institution and now a deputy assistant attorney general for antitrust, has been the policy prescription most closely associated with the functional approach, though recently the proposal has been revised and the new depository institutions labeled "monetary service companies." This approach has been widely supported because it meets both the safety and soundness goals of banking regulation and it provides an institutional structure that can accommodate market forces and technological change.<sup>2</sup>

Historically, we have relied on banks to serve a dual function in our economy: to provide a form of money that was more convenient than currency in making payments and to channel funds from savers to borrowers. Recent technological changes and financial innovations, such as mutual funds, have raised basic questions about whether banks can continue to serve this dual function and remain competitive financial institutions (Simonson 1994). Federal deposit insurance was enacted to help provide a safe and stable payments system. However, many of the regulations used to control bank risk-taking and to make deposit insurance viable have had undesirable effects on the lending activity of banks. Fundamental change in the dual role of banks would mean change in the payments system, in lending to small firms, and in the conduct of monetary policy by the Federal Reserve (Bacon 1993).

The proponents of the functional approach to financial reform argue that fundamental change is necessary to restore the health and vitality of a financial structure that is being eroded by technological advances and market forces. They identify the necessary institutional change to be the separation of the payments system function of banks from their role as an intermediary between borrowers and lenders. This separation is a prerequisite for a safe payments system and a smoothly functioning credit market. This *Public Policy Brief* proceeds by first reviewing the history of government's role in the financial system in the United States. Next, it outlines the problems solved and the potential new problems raised by the various policy proposals that have emerged from the functional approach to banking reform. The brief concludes with two specific policy proposals.

# A Brief History of Government's Role in the Payments System

An important lesson from the history of the monetary system in the United States is that federal government debt has served as a stable backing for bank-created money. The functional approach to banking reform would require that the primary form of the means of payment, checks, be backed with assets of stable value: federal government securities. This notion has its origins in the monetary system of the American colonies. In large part because of a shortage of specie, by the 1730s bills of credit had become the principal currency. These bills were initially issued in anticipation of future taxes and redeemed in commodity money (gold or other metal coins) at some point in the future. Such bills of credit were unlikely to be inflationary because of their fiscal backing (Calomiris 1988). However, political upheavals and financial incentives for the colonies to violate their commitments led to considerable fluctuation in the value of these bills.

During the Revolutionary War the Continental Congress issued a fiat currency, known as "continentals," beginning in May 1775 on the by then well-known principle of redemption in anticipation of future taxes. The depreciation of the continentals generated great mistrust of money issued by the federal government, but in 1791 the First Bank of the United States was established through the efforts of Alexander Hamilton and others. When its twenty-year charter expired, the debate over government-issued money resumed, but a Second Bank of the United States was established in 1816.

The First and Second Banks of the United States each had national charters and issued a national currency backed by gold and government debt. After the expiration of the charter of the Second Bank of the United States in 1836, the country entered what is known as the "free banking" era. During this period much of the money stock was privately issued bank notes. Not surprisingly, this created a host of problems. Although the bank notes were by law redeemable in gold or silver at the issuing bank (and there were heavy penalties for a bank's failure to redeem them), there were problems associated with redeeming a bank note at par value outside of a small geographic region. In 1835 and in 1836 Congress considered bills to impose reserve requirements on the banks that held the federal government's funds, but these bills were tabled (Timberlake 1965, 97). However, state banking laws did require reserves in "safe" assets. The New York State free banking law, passed in 1838, required that "the state Comptroller of the Currency was to issue bank notes to promoters of a bank only after they had deposited with the Comptroller an equal dollar amount of bonds of the United States, of the State of New York, or of certain other states approved by the Comptroller" (Robertson 1968, 23). The Louisiana Bank Act of 1842 required that deposits and bank notes be backed one-third by specie and two-thirds by short-term, high-quality assets (Timberlake 1965, 98; Pollock 1992a). By the time of the Civil War about half the states had free banking laws modeled on New York's law (Robertson 1968, 23).

Because of the high social and private costs of nonpar clearance, by the 1860s proposals for a government-issued currency reappeared.<sup>3</sup> Instead of a single national bank, as had been previously established, the National Banking Acts of 1863 and 1864 established a national banking system and a national currency. The national banks could issue bank notes, but were required to hold \$111.11 in government bonds for each \$100 of bank notes issued. The national bank notes, though not legal tender, were convertible into greenbacks or gold. The national currency was created at a time when Congress had suspended the convertibility of greenbacks (issued by the Treasury) into gold; thus, it was not a foregone conclusion that national bank notes would circulate at par value. The bank notes would be issued by individual banks, and the Office of the Comptroller of the Currency guaranteed that the Treasury would redeem them at par value. Because of the required holdings of government securities, it was unlikely that the Treasury would ever incur a loss in the event of a national bank failure.

Although the government now guaranteed that national bank notes would clear at par, it did not guarantee that bank checking accounts would clear at par. Thus, the same situation developed for checking accounts as had previously existed for bank notes.<sup>4</sup> Although the Federal Reserve System was created to provide an "elastic" currency, it did not adequately resolve the issue of providing a stable backing for the primary means of payment. Unlike the National Banking Act solution, which backed currency with government debt, the Federal Reserve Act sought to back currency with short-term commercial loans (and gold). The Federal Reserve also attempted to impose par clearance of bank deposits on member banks, but with only mixed success until 1917 when new legislation bolstered par clearance of member banks (Jessup 1967). The problems with this backing of Federal Reserve notes became apparent with the inability of the Federal Reserve to halt the widespread bank runs and failures that began in the 1920s and culminated in March 1933 with the closing of all banks in the United States. In response to this crisis, the solution imposed in March 1933 was one that followed the principles set forth in the National Banking Acts to provide a stable asset (government securities) behind the means of payment.

Under the Emergency Banking Act to reopen the banks, federal government debt became eligible as collateral for Federal Reserve discounts, along with other bonds, bills, drafts, and acceptances, which were also made temporarily eligible. Moreover, the Reserve banks could make similar advances to any individual, partnership, or corporation on its promissory note secured by U.S. bonds (Kennedy 1973, 177). Banks were authorized to create special trust accounts for receipt of new deposits, though banks were opposed to this on the grounds that those who had funds were the ones who had hoarded them before the bank closings (Kennedy 1973, 165).<sup>5</sup> Confidence in the banking system was revived without an explicit government guarantee of deposits, but public pressure and congressional support (though not Roosevelt's support) led to the establishment of the federal deposit insurance system and the full restoration of confidence in the banking system.

Using government debt to back the means of payment has been relied upon throughout American financial history, and though periodically other backing has been used, we have continually returned to the principles of the National Banking Act. Although the passage of the Banking Act of 1935 expanded the use of government debt as a backing for the money supply, the United States did not fully implement the principles of the National Banking Act, but rather adopted a federal guarantee of deposits. This set the stage for problems that would emerge in the 1980s (Barth 1991). The policy prescription of the functional approach to banking reform advocates a return to the principles of the National Banking Act to establish a safe asset backing for the primary medium of exchange, demand deposits.<sup>6</sup>

### The Deposit Insurance Problem and the Dual Function of Banks

The Banking Act of 1933 established temporary federal deposit insurance and the Banking Act of 1935 made it permanent. As Carter H. Golembe (1960) and Mark Flood (1992) have argued, this reform had support in Congress, but not in the executive branch. Prior to the federal guarantee of deposits, if a bank failed, the owners of equity lost their investment, and, if necessary, depositors might have their accounts redeemed at something less than par value. Another feature of the national banking system prior to the 1930s was double liability. This meant that a bank shareholder who held stock at, for example, the par value of \$1,000 would be liable for \$1,000 on demand by the bank's creditors if the bank had bad loans and was in danger of failing. Presumably, double liability was an incentive for shareholders to scrutinize a bank's loan activities closely. What Congress did in the early 1930s, in large part in response to its perception of public demands for a safe payments system, was to guarantee deposits and to abolish double liability. Why did Congress do this?

Two points are important in understanding the actions of Congress. First, there was a general economic collapse in the real sector of the economy. The financial system has little purpose when the real sector of the economy has been devastated. Second, the Federal Reserve was restricted by law, and by accepted practice, from lending to banks in crisis to the full extent that the Federal Reserve could have done so in principle. For example, the Federal Reserve could purchase only "eligible assets" from banks. These assets were mostly short-term business loans (commercial

paper), or in older terminology "real bills." The Federal Reserve Banks were also required to hold 40 percent in gold reserves against the total of Federal Reserve notes issued.

Though the system appeared to function smoothly for several decades, the inherent flaw of a system of unlimited contingent liability has long been apparent. Deposit insurance dulls the incentives of depositors to scrutinize the soundness of the depository's assets and dulls the incentives of the institution to maintain liquidity and asset quality sufficient to limit the contingency of not meeting withdrawals (Tobin 1987, 171; Bryan 1991c, 74). The costs of regulating a payments system with federal deposit insurance are high, as is most evident by the bailout of the savings and loan industry (Barth 1991; Bartholomew 1990; Lawrence and Talley 1988, 345; Golembe and Mingo 1985, 132–135; Spong 1991, 5).

James Tobin (1985) expressed the basic dilemma. Our monetary and banking institutions have evolved in a way that entangles competition among financial intermediary firms with the provision of transactions media; this entanglement is the source of risks of default and breakdown. Protection against those risks has brought government interventions that are now seen to have inefficient by-products: bureaucratic surveillance, deposit insurance, and lender-of-last-resort guarantees by central banks. Furthermore, Tobin believes, there is no complete resolution of this dilemma, although we may hope to limit its scope.

This potential instability can be weighed against the benefits of our present banking system. One argument is that banks, because they serve both a depository and a lending function, have greater information about the creditworthiness of potential borrowers. (In other words, they will lend to a customer for whom they have a deposit record.) It is costly for others to acquire this information. Because people wish to hold money in the convenient form of bank liabilities, they find it cheaper to let the banker check creditworthiness. This is a primary argument that efficiency is promoted by fractional reserve banking, that is, by a monetary system requiring that commercial banks hold some level of central bank liabilities against the commercial banks' own liabilities.<sup>7</sup> There is also the argument that provision of both deposit and lending functions allows firms to hold lower cash balances, thereby increasing efficiency (Gilbert 1994, 14). In summary, the response to Tobin's view is that market forces played a role in the evolution of fractional reserve banking, and it was not just a matter of historical accident (James 1985; Pozdena 1991). These two different views of banking, while not necessarily mutually exclusive, lead to very different views of banking reform. Acceptance of the view that there are efficiency gains from fractional reserve banking because of information asymmetries underlies the policy recommendation of piecemeal reform because banks perform a valuable service in providing both depository and lending functions.

The efficiency view of banking implies that the problems with federal deposit insurance are amenable to reform, for example, through the pricing of deposit insurance. As originally established, fees were based on the size of the bank, rather than the riskiness of its portfolio. However, riskbased pricing of deposit insurance requires either a market indication of the appropriate price or extensive government auditors and regulators to review bank portfolios (Kareken 1985, 69-70). For publicly held banks, risk would presumably be reflected in the stock price, though this would not be a surefire indicator. Another possibility is the use of subordinated debt as a mechanism to discipline banks because the holders of such debt would have an incentive to monitor the bank's loan activities (Kareken 1985, 72). Carter H. Golembe and John J. Mingo (1985, 138) doubt that subordinated debt would prevent all bank failures. Others, such as Bert Ely (1991) and Catherine England (1991), are more optimistic that privatization and market discipline would correct the deposit insurance problems.

Another modest reform would be to have the depositors pay for the deposit insurance with an explicit fee. Some banks have done this as insurance fees have been raised for banks. Increasingly, banks are passing their costs directly to the depositors. Reform through increases in capital has also been implemented, but capital increases threaten to create more problems for weak banks, who have the greatest difficulty raising capital funds.

Ostensibly, federal deposit insurance was established to protect the small depositor. The \$5,000 limit established in the permanent program was a compromise between the \$2,500 in the Roosevelt administration's first

draft of the Banking Act of 1935 (also the level in the temporary program) and the \$10,000 advocated by Carter Glass. Today, the limit is \$100,000, which is approximately \$10,000 in 1933 dollars. John H. Kareken (1985, 58) has remarked in this context that a \$1,000 limit would take care of the low-income and unsophisticated investors.

None of these reforms resolve the dilemma that Tobin posed because they do not directly address the issue that the government allows control of the funds to remain in the hands of private agents, but at the same time promises to make good on any deposits that are adversely affected by bad or fraudulent loan activity of those agents. There is no convincing macroeconomic reason why the government should guarantee that a large financial institution will not fail (Tobin 1987, 169). As James B. Burnham (1991, 36) notes, protection for depositors at the largest banks is synonymous with an implicit policy that some large financial institutions are "too big to fail," that is, that they are too big to be allowed to fail.<sup>8</sup>

The view of the narrow bank proponents is that any perceived benefits of fractional reserve banking in terms of microeconomic efficiency must be weighed against the macroeconomic costs. When this is done, they argue, costs exceed benefits. The policy implication is that banks must be prohibited from intermingling their depository and lending functions.

There were those in the 1930s who did not think that federal deposit insurance was a desirable reform. When temporary deposit insurance was enacted beginning in 1934, there was one banker who refused to join. John M. Nichols advocated 100 percent reserve banking and practiced what he preached (Phillips 1994b). Nichols was the president of the First National Bank of Englewood, Illinois, established in 1891 on the south side of Chicago. Nichols earned his nickname "100 percent" as a result of his move early in the depression to liquidate his non-U.S. government securities and loans and hold almost exclusively cash and government securities. Nichols's bank was the only one of the 6,000 banks required to subscribe to federal deposit insurance to refuse to join the FDIC. Nichols was not alone in his view that banks were primarily responsible to their depositors and stockholders. Because loans were risky during the early 1930s, he advocated holding only safe assets. At the same time proposals came from a number of prominent economists who began to question whether it was desirable for banks to provide both depository and lending functions (Phillips 1994a). In March 1933 economists at the University of Chicago, including Henry C. Simons, Frank Knight, Lloyd Mints, and Paul Douglas (later Senator Douglas), circulated a proposal that called for the abolition of fractional reserve banking—the separation of the deposit and lending functions of banks—and the establishment of a federal monetary authority to conduct monetary policy under definite rules established by Congress. The proposal was based fundamentally on Article 8 of the Constitution, which gives Congress the sole right to coin money and protect the value thereof. The proposal to abolish fractional reserve banking sought to make monetary policy once again the prerogative of Congress.

In short, these economists believed that because bankers could be presumed to put their own self-interests above those of society, and because politicians had a penchant for abusing the lending powers of government, it would be in society's best interest to separate the respective banking functions and have Congress make definitive provisions for each. The economists believed that their proposal would reconcile the divergence of private and public interests in a manner consistent with the problems of centralization of economic and political power. The worst possible combination would be to have the government insure commercial lenders' deposits and then leave lending discretion to the banks. The overall vision was of a financial system with deposit banks serving essentially a warehouse function as trustees, small mutual savings associations for lending, and a centralized monetary authority. It was recognized in the 1930s, at least by some observers and participants in financial reform, that banks could not be permitted to serve their dual function in payments and lending without introducing the potential for the effective nationalization of the banking system. To avoid this eventual outcome, they believed that a clear statement by Congress of government's role in the payments and credit systems was absolutely essential for the continued smooth functioning of the financial system and for the stability of the real sector of the economy.

### Defining Government's Role in the Payments System and Lending

The separation of the depository and lending functions of banks requires a parallel separation in the role of government. Currently, one of the main duties of the Federal Reserve is to undertake policies that lead to the creation of an amount of money in the economy consistent with full employment and price stability. Through the use of its tools—reserve requirements, open market operations, and the discount window—the Fed adjusts bank reserves and, depending on the multiplier, the money supply grows accordingly. At the same time the Fed is also responsible for the growth of credit. In fact, we have come to view these tasks as intertwined because under the present system monetary policy is simultaneously credit policy. As Mingo (1985, 7) observes, the logical outcome of this system is that the Federal Reserve must regulate and supervise more of the financial system. This is because the Fed does not have a great deal of control over the money supply as the definitions broaden beyond M1.

The functional approach to reform would separate monetary policy from credit policy, which would mean that the Federal Reserve would play the major role in monetary policy and have only a minor involvement in lending.<sup>9</sup> Kareken (1985, 65) has argued that in the absence of government involvement, laissez-faire would have provided us with a safe and stable payments system. He reasons that fractional reserve banking would not have been tolerated by individuals and, therefore, would have lost in market competition.<sup>10</sup> Tyler Cowen and Randall Kroszner (1990) have taken this premise and argued that mutual fund banking is the wave of the future if government will reduce its involvement.<sup>11</sup> The dramatic growth of mutual funds and their increasing acceptance, despite the lack of explicit government guarantees, lends credibility to this argument. However, the problem for mutual fund banking without commodity money is that the central bank is left as the ultimate supplier of "outside" money, and mutual fund shares are ultimately redeemable in central bank money.

The problems, therefore, are not necessarily solved by abolishing the central bank's monopoly on the issue of the monetary base. Tobin argues that a system of private competitive money would be inefficient because it would not be possible for the government to define a "dollar" as the unit of account and not issue a medium of exchange in the unit of account. Private banks could promise to pay dollars, but precisely what would they be promising to pay? Only if the government granted the private institution some exclusive rights in the issuing of government money—delegated its fiat in other words—would the money in fact circulate as a medium of exchange. The case of the Bank of England suggests that where an institution is granted legal tender status, the bank would eventually be brought under government control (Tobin 1985, 21).

Even under a commodity money system, the government must play a role in defining the numeraire. In doing so, the government will inevitably become involved with the production of money. Tobin contends that whatever inefficiencies there might be in the government's monopoly in currency supply, they are mitigated very little by having private issue of currency and coin (Tobin 1985, 22). Any gains in efficiency, and Tobin argues that these would be small, would have to be weighed against the inconvenience of handling and sorting different kinds of notes and coins. As an example, during the free banking era each bank had to have a book that depicted an example of every kind of note issued by every bank in the country. Though improvements in technology might reduce these costs today, private bank notes would lend themselves to an increase in counterfeiting. Tobin concludes that because a payments system derives efficiency from standardization and predictability, a system of competing currencies with varying exchange rates is not efficient (Tobin 1985, 22).

In contrast to the view that government should play a crucial role in the payments system, the proponents of the functional approach would reduce government's role in private sector borrowing and lending to a largely supervisory one (Golembe and Mingo 1985, 140–141; Spong 1991, 9). One goal of the approach would be to reduce substantially the impact of government monetary policy on the private credit market.<sup>12</sup> This would be a radical departure because, as noted above, presently monetary policy is simultaneously credit policy, and open market operations are intended to affect bank reserves and therefore the amount of private sector lending by banks. This change removes an asymmetry in the conduct of monetary policy. As a result of the fractional reserve system, which relies on the profit-maximizing behavior of banks, it is easier

for the Federal Reserve to restrain credit growth than it is to stimulate credit growth. When banks wish to accumulate excess reserves, there is little the Federal Reserve can do to cajole the banks into lending.

The difficulty with the Fed's undertaking credit and monetary policy simultaneously is evident in the rhetoric of politicians. On the one hand, as a result of the savings and loan problems, government regulators are looking over the shoulders of banks to make sure they are not making bad loans. On the other hand, when the economy slows down, politicians clamor for banks to lend more to get the economy moving. The problem is obvious: Banks lend "too much" when times are good and "too little" when times are bad. After having castigated the banks for their actions in the 1980s and exhorting them to get their house in order, the same people are vehement in their attacks on the banks for paying 3 percent on deposits while charging 19 percent on credit cards. The functional approach advocates argue that this is not a problem that can be adequately resolved under the present financial structure.

With the functional approach the Federal Reserve would still have its three tools of monetary policy: reserve requirements, open market operations, and the discount window. The Federal Reserve would continue to operate in large part as it does today. The main difference would be that changing the money supply through open market operations would not necessarily imply changing the amount of private sector credit because monetary policy would immediately affect only the balance sheets of institutions holding liabilities backed by government debt.<sup>13</sup>

### Monetary Service Companies

The proposals that emanate from the functional approach seek to remedy the problems of the payments system by restricting to only safe assets the portfolios of financial institutions offering transactions or checkable accounts. Litan (1987a) termed such institutions "narrow banks" and, more recently, "monetary service companies" (Litan 1993; Pierce 1993). The underlying assumption is that the primary role of banks is to provide a means of payment (Hart 1991). Some would make this compulsory (Tobin 1985, 1987; Lawrence and Talley 1988), while others would make it voluntary or make it apply only to larger, diversified institutions (Litan 1987a; Spong 1991; Burnham 1991). In restricting assets, the proposal continues in the tradition of banking legislation at least since the National Banking Acts of 1863 and 1864 (Pollock 1991).

All of the proposals agree that the intent of asset restriction is to reduce the private credit risk of the banks' portfolios. The five types of risk that narrow banking seeks to reduce are credit risks (bad loans), interest rate risks (maturity), affiliate risks (failures and raids on narrow banking assets), activity risks (bond, foreign exchange trading), and fraud risks (Lawrence and Talley 1988, 346). There is some difference, however, about what constitutes safe assets.

Kareken (1986, 39–40) has argued that financial institutions offering transactions balances should be restricted to offering only such balances and should be subject to a 100 percent reserve requirement in the form of marketable Treasury debt. In essence, banks would be split into separate businesses or companies. The narrow bank would be like a mutual fund, which would operate effectively to break up big pieces of government debt into little pieces (Golembe and Mingo 1985, 139; Lawrence and Talley 1988, 347).

Tobin (1985) proposed the creation of "deposited currency," which would combine the convenience of a checking account with the safety of currency. Deposited currency would be subject to 100 percent reserves in U.S. Treasury liabilities (short-term government securities) or in Federal Reserve deposits held by the banks. Deposited currency would be payable in notes and coin on demand, transferable by order to third parties, and secure against loss or theft. It would be a perfect store of value in the unit of account. One way to provide it would be to allow individuals to hold deposit accounts in the central bank, in branches of the central bank established for the purpose, or perhaps in post offices. A more likely alternative is to allow any bank or depository institution that is entitled to hold deposits in the central bank to offer deposited-currency accounts to customers. To enable the payment of competitive rates on the deposited currency, the Fed could subsidize them by paying interest on the noncash portions of the reserves (Tobin 1985, 25). The chief purpose of deposited currency would be to allow a totally safe asset to be held by low-income

and less sophisticated financial investors (Tobin 1987, 173; Kareken 1985, 57).

In Kenneth Spong's (1991) version of the proposal, narrow banks would hold primarily cash, Federal Reserve balances, and short-term U.S. government securities. In order to assure an adequate supply of short-term government debt, Spong recommends that the Treasury substitute shorter-term debt for longer-term in its offerings. If the amount of safe government liabilities was insufficient, the range of assets could be expanded to include other high quality, short-term debt.<sup>14</sup>

Alice Haemmerli (1985, 8) proposed the creation of a "consumer bank" that would have 100 percent FDIC insurance coverage, no upstreaming of funds from the consumer bank to any other subsidiaries, close regulation of the bank, and no limitations on geographic expansion. James B. Burnham (1991, 36-37) would allow narrow banks to hold Federal Reserve deposits, as well as deposits of other banks, both domestic and foreign, U.S. government securities of any maturity, and most government agency securities. Stuart I. Greenbaum and Arnoud W. A. Boot (1991, 4) would allow any investment-grade assets, private or government. Lowell Bryan's (1991, 79) proposal is the least restrictive on assets and would allow banks to engage in traditional or "core" activities.<sup>15</sup> "Core banks" would be permitted to lend to individuals for mortgage loans, home equity loans, credit cards, installment loans, and auto loans. The banks would continue to lend to businesses for accounts receivable financing, equipment leasing, commercial mortgages, and unsecured lines of credit. In short, Bryan would allow banks to continue in those activities in which they have been engaged for more than a century and have demonstrated a competitive advantage over nonbanks. However, banks would certainly not have an advantage in services such as individual mortgage and auto loans.

Similar to the idea of the core bank is Tobin's proposal that commercial banks be allowed to offer insured deposits and hold a diversified portfolio of short-term paper, including Treasury bills, marketable commercial paper, nonmarketable commercial loans, consumer debts, and longer-term, variable rate bonds and mortgages (Tobin 1987, 174). They would not be allowed to use depositors' money to play zero-sum games in foreign

exchange, interest rates, and securities prices. The capital account of these commercial banks would take the form of preferred stock or debt of the holding company of which the bank is a subsidiary, equal at least to a federally set fraction of the bank's assets, but not less than 5 percent.

Another similar proposal, put forward by L. William Seidman, former head of the Federal Deposit Insurance Corporation, would allow for what he termed "two-window banking" (FDIC 1987, 1992; Carns 1994). A two-window banking firm would allow savers to choose between "insured" and "uninsured" windows in which to deposit their funds. Funds placed in the insured window would receive deposit insurance and would be used by the banks to finance traditional banking activities: short- and intermediate-term commercial lending and clearing payments. There would be no restrictions on the activities in the uninsured window, since the activities would occur in legally separate institutions.

It should be noted that as one broadens the range of safe assets, the credit risk increases. It is for this reason that many of the core bank proposals include additional features such as increased capital requirements, interest rate ceilings, risk-based premiums, and other features found in less asset-restrictive proposals (Bryan 1991c, 79-80; Hart 1991, 17). One of the important advantages of narrow banks is that they would not need very much capital. To the extent that they did incur more credit risk, capital requirements would be raised. However, small capital requirements could take care of any remaining risk, and we would have a more stable payments system (Lawrence and Talley 1988, 347, 352). Federal regulators would no longer have to worry about private sector risk factors, such as shopping mall vacancy rates, creditworthiness of developing countries, and oil prices (Burnham 1991, 37). Frederick S. Carns (1994, 11–12) argues that there are benefits from additional risk-taking, and the two-window proposal would allow a middle ground between narrow banks and universal banking.

### **Financial Service Companies**

The establishment of federal deposit insurance inhibited the growth of alternative, noninsured lending institutions.<sup>16</sup> Writing several years after

the New Deal banking legislation, Henry C. Simons, a professor of economics at the University of Chicago and one of the founding fathers of the "Chicago School" of economics, expressed the view that banking continued to exist because of just such a failure to promote new lending institutions.

One reason for the persistence of banking is our lamentable failure to develop proper institutions for mobilizing the savings of middleincome families. If legislatures and economists were more concerned about giving us good, small investment trusts and less concerned about making bank accounts and life insurance safe and salable, we might get a better structure of financial organizations. (Simons 1948, 340)

With the functional approach to banking regulation and supervision, savings would be channeled to investors through separate investment institutions.<sup>17</sup> The simplest way to envision the financial structure is to look at a simplified bank balance sheet.

Assets	Liabilities Plus Capital
Reserves	Demand deposits
Government securities	
Loans	Bank capital

Without the thick line you have a typical balance sheet of a bank today; with the line you have the division of the bank into two legally separate entities. This "fire wall" between the two is necessary because in reality the division would have to be absolute. If there were a clear and clean line between depository and lending activities, *caveat emptor* could apply to the uninsured and less regulated business, where financial institutions would be vigorously competing with each other and with other market participants (Tobin 1985, 27). The fire wall is especially important to the two-window proposal because a single firm could pursue the activities involving insured and uninsured deposits (Carns 1994, 16–17).<sup>18</sup>

Although there would not seem to be a need to restrict the ownership of narrow banks, there would be a problem if the narrow bank assets were used to bail out a subsidiary owned by the holding company that also owned the narrow bank (Mingo 1987, 13). It is for this reason that, if narrow banks are to exist within a financial holding company, the narrow bank assets must be separate and unreachable (see Gilbert 1987, 13). Maintaining corporate separateness is both desirable and feasible. Golembe and Mingo present the strongest arguments that maintaining separateness is legal. Though they admit that there is the possibility that a bank holding company might strip the narrow bank of assets to protect another subsidiary, on balance the number of problem situations would not be great and the law is sufficiently effective that corporate separateness would be an appropriate regulatory vehicle (Golembe and Mingo 1985, 142; Gilbert 1987). A policy of unrestricted ownership of narrow banks would likely require the examination of the consolidated holding company. If this were not the case, the Federal Reserve might argue that fire walls were insufficient and that the Basel agreement would be violated. Supervision of the holding company could create an artificial impediment to entry by nonbanking firms.

Litan (1987a, 165), one of the earliest proponents of narrow banking, would authorize the creation of new financial holding companies, which would be required to separate their deposit-taking from their lending activities. In his version then, the narrow bank proposal would be an option—or enticement—for large, highly diversified financial holding companies that wished to offer transactions accounts. The narrow or safe banks of such holding companies would be required to operate as mutual funds investing only in highly liquid, safe securities, such as Treasury or other federally guaranteed instruments. The holding companies could extend loans, but only through separately incorporated lending subsidiaries wholly funded by uninsured liabilities.

Tobin (1987, 177) would allow bank holding companies to have investment bank affiliates that would be totally uninsured. They would be subject to disclosure requirements like those of the Securities and Exchange Commission and to balance sheet restrictions like those of the Investment Company Act of 1940. A complete separation would be made between the activities of the investment affiliates and those of the commercial (narrow) banks.

#### The Problems Solved

The proposal to establish separate monetary and financial service companies solves several problems with respect to the financial system. It enhances the safety of the payments system, improves the Fed's ability to control monetary aggregates, reduces the need for government regulation of banks, and accommodates, and perhaps accelerates, the growth of mutual funds. The proposal would make federal deposit insurance redundant, and the insurance logically could be done away with or maintained with minimal, if any, fees. Under Tobin's (1987, 173) proposal, deposit insurance would not be necessary for deposited currency, although it would be retained for commercial banks. Burnham (1991, 36) would expand deposit coverage to all deposits in narrow banks, thereby removing the \$100,000 limit. Spong (1991, 23–24) would extend deposit insurance to narrow banks, although it would be only to protect against fraud or macroeconomic collapse.

The central bank would have effective monetary control over the M1 money supply (currency and checkable accounts) because this will be the monetary base. Monetary control via reserve tests is effective if and only if the government, via the central bank, monopolizes and controls the aggregate supply of eligible reserve assets, the monetary base. A crucial assumption, as Tobin (1985, 28) points out, is that banks still remain weighty enough participants in financial and capital markets so that central bank operations affect quantities, prices, and interest rates determined in those markets. The monetary aggregates may not be useful as targets, but the Fed's tools will still affect the monetary base and will be transmitted to the macroeconomic variables. The payment of market interest rates on deposits will reduce the tendency to short-run shifting of accounts. In short, the money supply becomes more sensitive to interest rates (Tobin 1985, 29).

Another change will be more supervision and less regulation. As Golembe and Mingo (1985, 132) note, to regulate means to direct

according to rule and to supervise means to oversee for direction. Thus regulation sets a minimum capital-to-asset ratio, while supervision determines whether capital at any individual bank is adequate. For narrow banks, supervision is required in order to determine if the bank is indeed holding assets valued at market equal to its deposit liabilities. This should be a rather simple and low-cost task in the age of computers and highly developed securities markets. The two-window proposal would gain many of the benefits of narrow banking, but would require continued vigilance by Congress on bank structure and competition (Carns 1994, 18).

Finally, the proposal will accelerate the growth of mutual funds as investors seek higher returns. This does not mean that narrow banks will eventually disappear. As long as government money is the outside money, there will be a demand for it. The public continues to hold currency when it pays no interest, and there is no reason to believe that the public would not find it convenient to continue to hold some balances in narrow banks. Even if the size of the narrow banking sector declines, there is no reason to view this with alarm. Changes in technology and tastes will make other types of money and financial assets more attractive or less attractive. There is no theory that suggests that outside money must bear a given ratio to financial assets in order to maintain monetary control and stability. The proposal thus fits in quite well with the historical evolution of the financial system.<sup>19</sup>

### The Problems Raised

Alton Gilbert provides the following summary of the assumptions implicit or explicit in the functional approach to banking reform, or the narrow banking proposals.

- 1. Fractional reserve banks, with deposits payable on demand, are vulnerable to runs by depositors.
- 2. Disruptions in the operation of a nation's payments system disrupt its economic activity.
- 3. A valid reason for government regulation of banks is to avoid disruptions in the operation of the payments system.

- 4. The government can ensure safe operation of the payments system without assuming risk by insuring all transactions deposits, but not time and savings deposits, and requiring collateral against the transactions deposits.
- 5. These narrow banking restrictions will not diminish the efficiency of intermediation. Elimination of federal insurance of time and savings deposits and elimination of supervision of banking risk would make intermediation more efficient. (Gilbert 1993, 4)

Other than proponents of extreme laissez-faire, most economists would probably agree with assumptions 1, 2, and 3. The crucial assumptions are 4 and 5, and these must be addressed. Gilbert argues that assumption 4 is problematic because a narrow bank would likely hold balances from foreign banks, permit daytime overdrafts, and hold foreign exchange, all of which have the potential to bring about loss and perhaps failure of these "safe" banks. One way to deal with this would be regulation and supervision along the lines of the current institutional arrangements; the alleged superiority of narrow banking is thus undermined, according to Gilbert (1993, 6).

The points Gilbert makes are valid, but it is not clear that they totally invalidate the narrow banking proposals; rather they provide a recognition that, as with any proposal for reform, the costs and benefits of the proposed reform must be compared with the present system. Clearly, the problems that Gilbert points to are problems confronted by the present institutional arrangement, but this arrangement also contains the moral hazard problems associated with deposit insurance. Institutional innovations require adjustments, and undoubtedly the proposal emanating from the functional approach is not a panacea. However, there are five basic problems raised by narrow banking that could create difficulties for any transition and, as will be presently discussed, the impact on credit markets (assumption 5 above) is one of the most important for evaluating the reform.

The first question is the availability of safe assets with the appropriate maturity for a narrow bank (Litan 1987a, 169; Lawrence and Talley 1988, 349). To reduce credit risks, U.S. government securities are the most desirable. These need to be short-term government securities if interest

rate risk is to be avoided. In 1990 total demand and checkable deposits were \$571 billion, while government securities held by the depository institutions were about \$448 billion. The total outstanding amount of Treasury bills was \$482 billion and of Treasury notes \$1,218 billion. Total outstanding debt was \$3.2 trillion, of which \$2 trillion was marketable. One solution to the problem supported by both Spong (1991, 22–23) and Robert J. Lawrence and Samuel H. Talley (1988, 349) would be for the government to alter the maturity structure of the Federal debt. Because short-term rates are usually lower, there would be the additional benefit of reducing the costs of borrowing.

This problem is reduced as the class of permissible assets increases, but the trade-off is increased credit risk (Lawrence and Talley 1988, 350). Proposals such as those of Bryan (1991c) for core banking do not have a real problem of adequate assets because of their broadening of assets that can be held. Others, such as Burnham (1991) and Spong (1991), avoid the problems through allowing a long transition period (5 to 10 years) and applying the proposal only to a subset of depository institutions. Tobin (1985, 25) and Lawrence and Talley (1988, 347) would allow interest to be paid on reserves.

There is potentially a large impact on the costs and availability of funds in the credit market. A particular problem may be the availability of funds for small business loans and consumer loans. There are responses to these concerns (Minsky, Papadimitriou, Phillips, and Wray, 1993; Papadimitriou, Phillips, and Wray, 1994). First, if the supply of savings goes up as a result of this structural change, then there is no reason to fear an enormous increase in interest rates. Even if the cost does increase by a small amount, it is the price we are paying for stability of the payments system without federal deposit insurance (Burnham 1991, 43). Second, there would likely be an increase in the use of finance companies for many of the small business and consumer loans (Burnham 1991, 43; Bryan 1991c, 80). Again, once the subsidy for banks is removed, what the impact of the increased use of finance companies will be remains an open question. The finance companies must use uninsured deposits to finance their loans. Finally, if there really was a great concern over the decline in credit availability and cost, the government through the Federal Reserve or through a resurrected Reconstruction Finance

Corporation could make direct loans to the private sector. The government could also guarantee, subsidize, or help create new markets for loans that were less marketable. This would be no different than Small Business Administration lending, FHA and all other agency mortgage lending, the Farm Credit System, and community development financial institutions. In fact, it might help to focus the debate on what markets and borrowers have informational and marketability problems that cannot be resolved through other means. These lending activities would have to be done under specified, and explicit, legal constraints (Bryan 1991c, 84; Lawrence and Talley 1988, 356).

Another alternative would be voluntary narrow banking to divide the industry into companies with marketable balance sheets and those without. Bryan (1988, 92) points out that developments in technology have allowed the securitization of many kinds of loans. Presumably, one possibility is that small business loans and consumer loans could be securitized, just as home mortgages and credit card receivables now are (Bryan 1988, 77).

Another serious problem is access to the payments system. For the narrow banking scheme to work, only narrow banks can have access to the Fedwire and the payments system. If there is an Achilles heel for narrow banking, this may be it, for it requires absolutely that the government prevent banks from gaining access.<sup>20</sup> This is why a number of authors refer to the "Chinese wall" (Burnham 1991, 37; Lawrence and Talley 1988, 348) or, in Haemmerli's (1985) term, a guarantine of the bank. Of course, there will be a strong incentive for nonnarrow banking firms to get around this restriction. By gaining access to the payments system and offering higher deposit rates, they could effectively undermine the entire scheme. However, it might be difficult for such institutions to offer rates that are much higher without assuming much higher risks. A narrow banking system should be fairly efficient in transferring portfolio returns to depositors, and any competitors would have to narrow their asset choices if they are to reach the same depositors (consider money market mutual funds as an example). To save on clearing costs or to gain better clearing services, these competitors might even have a strong incentive to convert to narrow banks.

Though all proponents of the narrow banking scheme believe that such banks would be profitable, it is recognized that the size of the banking system might shrink. The traditional banking sector may shrink anyway with the current regulatory approach, and deposit insurance concerns will undoubtedly slow bank entry into other areas. The point of comparison must then be whether an insured and restrictive system is more viable in the marketplace than a narrow banking system with few, if any, restrictions beyond narrow bank asset holdings. As noted above, there is no reason to believe that this is undesirable (Mingo 1987, 9). Gilbert (1990) argues that, from an analysis of functional cost data, the opportunity costs of holding government securities compared with other assets would indicate difficulty in narrow banks' earning a competitive rate of return. This analysis is countered by evidence that for the period 1968 to 1989 the average earnings by use of funds as a percentage of portfolio balances was highest for investment (government security) portfolios (Morgan 1991, 13).

Gilbert (1990, 16–17) also points out a potential difficulty with overdrafts, which are quite common in the financial system. Overdrafts expose banks to credit risk; this would continue to be the case for narrow banks holding deposits at other banks and conducting significant clearing operations. The giro system, or extensive use of debit cards, as proposed by Tobin, would reduce this risk exposure. However, to effectively prohibit the credit risk would raise costs, and this would raise the incentive to circumvent the narrow bank restrictions (Gilbert 1990, 18).

With respect to international competition, all foreign banks operating in the United States and accepting transactions deposits will be subject to the same restrictions. For the uninsured lending institutions, it is likely that it will be a few large holding companies or investment firms that will continue to compete globally. Bryan (1991c, 80) envisions a few large investment institutions, such as J. P. Morgan, continuing to operate on a global basis without insured funds. Burnham (1991, 41) also believes that the highly diversified financial institutions, once freed from regulations, will be globally competitive with their uninsured deposits. We could also allow narrow banking organizations to set up separate holding companies or edge corporations to engage in foreign banking activities, but these would have to be capitalized and regulated according to international standards and should have limited, if any, access to the federal safety net. Because depositor preference and current deposit insurance procedures put foreign depositors in back of insured deposits, the change to a narrow banking system might not be much different.

Finally, how politically feasible is narrow banking? L. William Seidman (1991) agrees in principle with the intent of the narrow banking reforms. However, it may well be that we will await a catastrophe on the level of the Great Depression. The alternative is to move toward the less restrictive core banking and hope that continued changes in market forces and regulation will move us toward a more stable banking system.

### The New Regulatory Environment

Recently, the issue of restructuring the bank regulatory agencies has resurfaced as a result of Treasury Department's proposal to consolidate all bank regulatory and supervisory authority into a Federal Banking Commission. This proposal continues a debate that has been going on at least since 1919 (U.S. General Accounting Office, 1977; Shull 1993; Phillips 1994a). The burden of the multiregulatory structure has provided an impetus to find a more cost-effective means of regulating the financial system and to eliminate or reduce the inherent conflicts of interest. The functional approach would involve an even more radical restructuring because financial institutions would be regulated on the basis of their function.

Are banks as we know them today doomed? They probably are, but this does not mean that they will disappear. We are in a period in which fundamental change, driven in large part by technology, has radically altered the possibilities for financial institutions. Increasingly, there are those who believe that a system that utilizes federal deposit insurance and government regulation and supervision cannot persist for long. A key policy question for today is whether government policy should continue to push the financial system along the lines of separating the deposit and lending functions of banks or attempt to maintain the current role of banks in offering deposit and lending functions with federal deposit insurance. Further complicating the issue is the prospect of expanded antitrust action by the Justice Department as a consequence of concerns about the maintenance of a competitive environment (Shull 1994).

There is a wide perception that the financial system, not only in the United States but worldwide, has a difficult road ahead. At some point change will be forced. If we alter present institutions, the impact of that change may be mitigated. If we do nothing, we may be risking a financial collapse of enormous magnitude. Even without a collapse, we will continue to suffer the costs of regulation and the federal safety net as we operate with a less efficient and less stable financial system. The challenge is to present a viable proposal, in an era of rapid technological change, that provides an appropriate balance between a government-backed, safe payments system and the demands of a dynamic market economy with expanding financial opportunities.

### A Policy Proposal

The mixture of deposit and credit functions in our financial system has continued to provide an unstable and risky banking structure, which we now support through deposit insurance and an extensive federal safety net. The recent taxpayer bailout of the thrift system and the losses experienced by the bank insurance fund indicate some of the weaknesses in this safety net. Also, the use of deposit insurance has given the poorest bank lenders the same access to funds as the most discerning lenders—a situation that is unlikely to have led to an optimal allocation of credit. This misallocation, while it has received little attention, has probably cost the economy far more than the taxpayer bailout of the thrift industry (Spong, forthcoming). Looking at the current state of the financial system, we see that banks are losing lending business to commercial paper and mutual funds, finance companies, and others. Congress and the public will continue to be interested in safeguarding the payments system, and any conceivable changes in deposit insurance—other than its abolition—will be unlikely to reduce the regulatory burden.

Legislation and regulation designed to control banking risks and to safeguard deposits and the insurance funds have put banks at a competitive disadvantage and imposed unnecessary costs. This helps explain why banks are losing loan business. In addition, cash management accounts at brokerage houses and money market mutual funds with check-writing privileges are helping to show the feasibility of using a secured asset structure to back transactions accounts. A driving force in the changes in banking has been the technology that has provided a means for new and more efficient credit markets to develop and is now reducing any real need for using liquid deposits to fund loans. If the technology today had been available in 1933, the separation of the deposit and lending functions of banks would have been more feasible.

Although deposit insurance is flawed, it is likely to remain for political reasons. What are alternative proposals today that would provide for both a safe payments system and the efficient channeling of funds from lenders to borrowers? There are two proposals, which taken together, would go a long way toward improving our financial system: voluntary choice for banks to become monetary service companies, or narrow banks, and the establishment of a mutual fund operated by the federal government and backed by government securities.

The first recommendation is to adopt the proposal of Robert E. Litan and James L. Pierce to create monetary service companies (Litan 1993; Pierce 1993). These institutions would serve strictly a payments function and would hold only safe assets such as cash, government securities, and high-grade commercial paper. Financial institutions that wished to offer federally insured deposits would have to operate as monetary service companies. As previously noted, this idea is a modification of Litan's earlier proposal for the creation of narrow banks (Litan 1993; Pierce 1993, 10–11).

The second proposal, authored by James R. Barth and R. Dan Brumbaugh, Jr., was presented in their *Public Policy Brief* (1993, 27–28). They propose that the federal government establish a mutual fund that holds only government securities as assets. There already are a number of private mutual funds that hold government securities. The Barth and Brumbaugh proposal would make this option available to all desiring a safe place for deposits. Such a mutual fund would not need federal deposit insurance. The assets of the fund would be short-term Treasury securities, and liabilities would be only demand deposits. There could be electronic deposits of all government checks. The banking services provided would be a large-scale electronic debit and credit mechanism with retail outlets, perhaps at the Post Office, much as the postal savings system once operated (Jessup and Bochnak 1992).

These proposals will provide for a safer and more efficient financial system that will carry us into the twenty-first century and would go a long way toward creating the kinds of institutions that Henry Simons believed would move us toward the *financial good society*.

## Acknowledgments

Ken Spong, Fred Carns, John Carlson, Phil Bartholomew, Alex Pollock, and Alton Gilbert provided helpful comments, but should not be held accountable for the views expressed.

## Notes

- 1. The *functional approach* to banking regulation should not be confused with "functional regulation," the proposal that the SEC regulate all securities activities, insurance commissioners regulate insurance activities, and so on. Pierce's functional approach is limited to banks and their deposit activities and does not include the regulation of the expanded activities of banks.
- 2. Though it has emerged in the past decade, the functional approach has historical precedent, as does the narrow banking proposal. In the 1930s Henry Simons, Frank Knight, Irving Fisher, Lauchlin Currie, and others proposed the separation of the depository and lending functions of banks through the creation of 100 percent reserve deposit banks and separate lending organizations established on a mutual basis (see Phillips 1994d). Litan (1987a, 166), Kareken (1986, 39) Golembe and Mingo (1985, 139), and Minsky (1994) explicitly recognize this historical connection. Benston and Kaufman (1988) make the point that, strictly speaking, the original version of the 100 percent reserve plan meant 100 percent *cash* reserves. Later versions of the 100 percent reserve plan, such as Friedman (1960), allowed for payment of interest on reserves.
- 3. According to Robertson (1968), as early as 1815 an author in Analectic Magazine suggested a national, uniform currency that would be redeemable in either specie or government debt. In 1827 Professor John McVickar published "Hints on Banking," in which he suggested each bank invest nine-tenths of its capital in government debt pledged against its note redemption (Robertson 1968, 36–37). Robertson discusses three specific plans to base a uniform national currency on government debt presented to Treasury Secretary Salmon P. Chase in 1861 (Robertson 1968, 36–40).
- 4. As Cyril James observed, "the National Banking Act failed to attain its purpose for reasons similar to those that had prevented the attainment of the aims of the Currency School under the Bank Charter Act of 1844" (James 1940, 198). The Bank Charter Act divided the Bank of England into lending and issuing departments. However, the creation of alternatives to Bank of England notes undermined the attempts to regulate the money supply through the establishment of a par value monopoly for the Bank.

- 5. I am grateful to Alex Pollock for bringing this to my attention. Pollock calls the principle employed in the National Banking Acts and the Emergency Banking Act of backing money with "safe" assets "collateralized money."
- 6. The use of government debt as a stable backing for money assumes that such securities are "default-free." There have been numerous instances in history where sovereign governments have, in fact, defaulted. However, assuming continued political stability in the United States, the continuation of federal government powers of taxation, and the ultimate monetization of federal debt, the risks of default appear negligible. If the U.S. government were to default on its obligations, more serious problems would arise that would likely overshadow provisions for an acceptable means of exchange.
- 7. Under a fractional reserve gold standard, as it operated in the United States before the New Deal, gold was held as reserves against bank liabilities.
- 8. The phrase "too big to fail" is a misnomer. Policymakers fear the consequences of allowing large banks to default on their debts, but no one fears the consequences of wiping out stockholders. The phrase "too big to default" is more descriptive of the problem.
- 9. As noted, a basic premise of the functional approach to banking reform is that the money issued by the federal government should be backed by stable assets. Though this implies that the Federal Reserve would control M1, it does not necessarily mean that government should have a monopoly on all forms of money. Indeed, in a system characterized fundamentally by financial innovation, it is impossible to define only one thing as money. There is an interesting discussion of this issue in correspondence between Henry Simons, who favored, in principle, a government monopoly based on money creation, and F. A. Hayek, who argued that such a monopoly could not be maintained over time (see Phillips 1994d).
- 10. Benston and Kaufman [1988, 56] point out that money market mutual funds, which guarantee return but not nominal value, have largely given way to the opposite, presumably in response to the market. The conclusion is that the public wishes to have a guaranteed nominal value, even at the expense of return. The question not addressed is whether the result would be the same in the absence of government money with a guaranteed nominal value. To date, all money market mutual funds operating in the United States are redeemable in government money. The two-window approach, as described by Carns (1994), stands or falls with this observation, which, if true, raises the issue of whether sufficient funds could be raised to finance all net present value commercial projects without combining liquid deposits and illiquid commercial loans as in traditional banks.
- 11. Huertas's (1987) proposal that banks hold marketable assets that are continuously marked to market is similar. Also see Gorton and Pennacchi (1992).
- The separation of monetary policy from the private credit market was a primary intent of the 100 percent reserve plan in the 1930s (Fisher 1935; Phillips 1994d).

- 13. There might be secondary effects on private sector credit. If lenders maintain some cash reserves to support everyday operations, then more highpowered money in the system would encourage more lending. This also assumes that an adequate supply of government debt is available for the payments system. The lack of government debt posed problems for the National Banking System and in the debates over the 100 percent reserve plan in the 1930s. However, because of the present large government debt, the issue is less significant.
- 14. Spong noted that narrow banks could offer savings accounts, but the returns would differ little from transactions accounts (Spong 1991, 16). However, organizations that owned narrow banks would probably be better off offering mutual fund-like savings instruments through affiliates.
- 15. For a similar proposal that banks be allowed to hold marketable assets, see the report by the Brookings Task Force (1989).
- 16. During the New Deal there were numerous proposals to augment the availability of credit for the private sector through government intervention. The Reconstruction Finance Corporation, established under President Hoover, played an important role in reviving the banking system (Todd 1993). Adolf Berle and Gardiner Means each advocated that a nationwide system of credit banks be established, and others had similar proposals (see Phillips 1994d).
- 17. The functional approach requires that only monetary service companies have access to the payments system and that the asset portfolios of narrow banks be legally separate from any affiliate lending institutions. This is discussed in more detail below.
- 18. Pollock (1992b) would only require safe assets to be pledged against demand deposits with no line of separation beyond this.
- 19. Under narrow banking the shift out of demand deposits may be no worse than under the current system and might actually even be lessened. Disincentives to hold deposits under the current system include the prohibition of interest on demand deposits, nonearning reserves, deposit insurance premiums, capital requirements, and regulatory costs—all of which could be lowered or eliminated with narrow banking. Though narrow banks would have a limited asset choice, so would any competitors that were seeking to offer funds on demand without a government safety net to support them.
- 20. The payments system comprises both the Federal Reserve provided system, Fedwire, and private payments clearing such as ACH (Automated Clearing House). The concern is with potential losses to the Fed in the event of a bank failure before final settlement. However, as more competitors enter into the payments system, the potential losses to the Fed will likely diminish. Though the problem may not disappear, its importance as an argument against narrow banking may decrease.

## References

- Angermueller, Hans (1985), "The Emerging Shape of Banking Business," speech given at the Deutsche Bank Seminar, Frankfurt, West Germany, June 27.
- Bacon, Kenneth H. (1993), "Banks' Declining Role in Economy Worries Fed, May Hurt Firms," Wall Street Journal, July 9.
- Barth, James R. (1991), *The Great Savings and Loan Debacle* (Washington D.C.: American Enterprise Institute).
- Barth, James R., and R. Dan Brumbaugh, Jr. (1993), "The Changing World of Banking: Setting the Regulatory Agenda," *Financing Prosperity in the Next Century, Public Policy Brief* no. 8, The Jerome Levy Economics Institute of Bard College.
- ——— (1994), "The Role of Government and Markets in the Aftermath of the Savings and Loan Debacle," paper presented at a meeting of the Western Economics Association, Vancouver, B.C., June 30-July 3.
- Bartholomew, Philip F. (1990), *Reforming Federal Deposit Insurance* (Washington, D.C.: Congressional Budget Office).
- Benston, George J., and George G. Kaufman (1988), "Risk and Solvency Regulation of Depository Institutions: Past Policies and Current Options," Federal Reserve Bank of Chicago, Staff Memoranda 88:1.
- Brookings Task Force on Depository Institutions Reform (1989), Blueprint for Restructuring America's Financial Institutions (Washington, D.C.: The Brookings Institution).
- Bryan, Lowell (1988), Breaking Up the Bank (Homewood, Ill.: Business One Irwin).
- ——— (1991a), "A Blueprint for Financial Reconstruction," Harvard Business Review, May-June.
- ——— (1991b), "Core Banking," McKensey Quarterly, 1: 61-74.
- ——— (1991c), Bankrupt: Restoring the Health and Profitability of Our Banking System (New York: Harper Business).
- Burnham, James B. (1991), "Deposit Insurance: The Case for the Narrow Bank," Regulation, 14 (Spring): 2.

- Calomiris, Charles (1988), "Institutional Failure, Monetary Scarcity, and the Depreciation of the Continental," *Journal of Economic History*, 48: 47–68.
- Carns, Frederick S. (1994), "The Two-Window Proposal for Banking Reform," Federal Deposit Insurance Corporation, unpublished.
- Cowen, Tyler, and Randall Kroszner (1990), "Mutual Fund Banking: A Market Approach," *Cato Journal*, 10 (Spring/Summer): 1.
- DeYoung, Robert, and Gary Whalen (1994), "Banking Industry Consolidation: Efficiency Issues," The Jerome Levy Economics Institute of Bard College, Working Paper no. 110.
- Ely, Bert (1991), "The Narrow Bank: A Flawed Response to the Failings of Federal Deposit Insurance," *Regulation*, 14 (Spring).
- England, Catherine (1991), "Are Banks Special?" Regulation, 14 (Spring).
- Federal Deposit Insurance Corporation (1987), Mandate for Change: Restructuring the Banking Industry (Washington, D.C.: FDIC).
- ——— (1992), Report to the Congress on the Findings and Recommendations Concerning the "Two-Window" Deposit Insurance Proposal (Washington, D.C.: FDIC).
- Fisher, Irving (1935), 100% Money (New York: Adelphi).
- Flood, Mark (1992), "The Great Deposit Insurance Debate," *Review*, Federal Reserve Bank of St. Louis, 74 (July/August).
- Friedman, Milton (1960), A Program for Monetary Stability (New York: Fordham University Press).
- Gilbert, R. Alton (1987), "Banks Owned by Nonbanks: What Is the Problem and What Can Be Done About It?" *Business and Society*, Spring.
- ——— (1988), "A Comparison of Proposals to Restructure the U.S. Financial System," Review, Federal Reserve Bank of St. Louis, 70 (July/August).
- ——— (1990), "The Narrow Bank Proposal: Does It Solve the Deposit Insurance Problem?" Federal Reserve Bank of St. Louis, unpublished.
- ——— (1993), "Comments on Proposals for Changing Bank Supervision and Regulation," paper presented at the conference "Safeguarding the Banking System in an Environment of Financial Cycles," Federal Reserve Bank of Boston, November 18.

- ———— (1994), "Economic Benefits of Combining Payment and Lending Services in Banking," Federal Reserve Bank of St. Louis, unpublished.
- Golembe, Carter H. (1960), "The Deposit Insurance Legislation of 1933," *Political Science Quarterly.*
- Golembe, Carter H., and John J. Mingo (1985), "Can Supervision and Regulation Ensure Financial Stability?" The Search for Financial Stability: The Past Fifty Years (San Francisco: Federal Reserve Bank of San Francisco).
- Goodhart, Charles (1988), The Evolution of Central Banks (Cambridge, Mass.: MIT Press).
- Gorton, Gary, and George Pennacchi (1992), "Money Market Funds and Finance Companies: Are They the Banks of the Future?" in M. Klausner and L. White, eds., *Structural Change in Banking* (Homewood, Ill.: Irwin).
- Greenbaum, Stuart I., and Arnoud W. A. Boot (1991), "Modified 'Narrow Bank' Is Best Reform Plan," *American Banker*, August 23.
- Haemmerli, Alice (1985), "Quarantine: An Approach to the Deposit Insurance Dilemma," *Banking Expansion Reporter*, 4 (September): 7–10.
- Hart, Albert G. (1991), "How to Reform Banks—and How Not To," Challenge, March-April, 16–24.
- Huertas, Thomas F. (1987), "Redesigning Regulation: The Future of Finance in the United States," in *Restructuring the Financial System* (Kansas City: Federal Reserve Bank of Kansas City).
- James, Christopher M. (1985), "Discussion of Kareken's Ensuring Financial Stability" in The Search for Financial Stability: The Past Fifty Years (San Francisco: Federal Reserve Bank of San Francisco).
- James, F. Cyril. (1940), The Economics of Money, Credit and Banking (New York: Ronald Press).
- Jerome Levy Economics Institute of Bard College (1991), The Nature and Necessity of Financial Reform, Public Policy Forum, April 6.
- Jessup, Paul (1967), The Theory and Practice of Non-par Banking (Evanston, Ill.: Northwestern University Press).
- Jessup, Paul, and Mary Bochnak (1992), "A Case for a U.S. Postal Savings System," Challenge, 35 (November/December).

Kareken, John H. (1985), "Ensuring Financial Stability" in The Search for Financial Stability: The Past Fifty Years (San Francisco: Federal Reserve Bank of San Francisco), 53–86.

——— (1986), "Federal Bank Regulatory Policy: A Description and Some Observations," *Journal of Business*, 59 (January): 3–48.

- Kennedy, Susan (1973), The Banking Crisis of 1933 (Louisville: University of Kentucky Press).
- Lawrence, Robert J., and Samuel H. Talley (1985), "Minimizing Regulation of the Financial Services Industry," *Issues in Bank Regulation*, Summer, 21-31.
- ——— (1988), "Implementing a Fail-Proof Banking System," Proceedings of a Conference on Bank Structure and Competition, Federal Reserve Bank of Chicago.
- Litan, Robert E. (1986), "Taking the Dangers Out of Bank Deregulation," Brookings Review, 4 (Fall): 3-12.
- ——— (1987a), What Should Banks Do? (Washington, D.C.: The Brookings Institution).
- ——— (1987b), "Commentary on 'Proposals for Financial Restructuring," Restructuring the Financial System (Kansas City: Federal Reserve Bank).
- ——— (1988), "Reuniting Investment and Commercial Banking," Cato Journal, 7 (Winter): 803–821.
- —— (1991), The Revolution in U.S. Finance (Washington, D.C.: The Brookings Institution).
- ——— (1993), "Deposit Insurance, Gas on S&L Fire," Wall Street Journal, July 29, A12.
- Merton, Robert C., and Zvi Bodie (1993), "Deposit Insurance Reform: A Functional Approach," Carnegie-Rochester Conference Series on Public Policy, 38 (June).
- Mingo, John H. (1987), "Narrow Banks Part of Plan for Restructuring Regulatory System," American Banker, September 15, 5–13.
- Minsky, Hyman P. (1994), "Financial Instability and the Decline (?) of Banking: Public Policy Implications," paper presented at the conference "The Declining (?) Role of Banking," Federal Reserve Bank of Chicago.

- Minsky, Hyman P., Dimitri B. Papadimitriou, Ronnie J. Phillips, and L. Randall Wray (1993), "A Proposal to Establish a Nationwide System of Community Development Banks," Community Development Banking, Public Policy Brief no. 3, The Jerome Levy Economics Institute of Bard College.
- Morgan, Bruce W. (1991), "Financial Services After the Decline of Deposit Banking," *Banking Policy Report*, 10 (October 21): 1, 12–15.
- Nolle, Daniel E. (1994), "Bank Industry Consolidation: Past Changes and Implications for the Future," The Jerome Levy Economics Institute of Bard College, Working Paper no. 111.
- Papadimitriou, Dimitri B., Ronnie J. Phillips, and L. Randall Wray (1993), "The Community Reinvestment Act, Lending Discrimination, and the Role of Community Development Banks," A Path to Community Development, Public Policy Brief no. 6, The Jerome Levy Economics Institute of Bard College.
- ——— (1994), "Community-Based Factoring Companies and Small Business Lending," An Alternative in Small Business Finance, Public Policy Brief no. 12, The Jerome Levy Economics Institute of Bard College.
- Phillips, Ronnie J. (1991), "Safe and Stable Banking: The 100% Reserve Proposal," paper presented at the Roundtable on Monetary Policy, Federal Reserve Bank of Kansas City, April 25.
- ——— (1992), "How Regulation Turned a Winner into a Loser," American Banker, October 28.
- ——— (1994a), "New Deal's Unfinished Work: Merging the Bank Regulators," American Banker, April 18.
- ——— (1994b), "Safe Banking During the Great Depression: John M. Nichols, the FDIC and 100% Reserves," Consumer Finance Law Quarterly Report, 48, no. 1 (Winter): 15–21.
- ——— (1994c), "An End to Private Banking: Early New Deal Proposals to Alter the Role of the Federal Government in Credit Allocation," *Journal of Money, Credit, and Banking*, 26, no. 2 (August, part 2).
- ——— (1994d), The Chicago Plan and New Deal Banking Reform, (Armonk, N.Y.: Sharpe).
- Pierce, James L. (1986), "Financial Reform in the United States and the Financial System of the Future," *Financial Innovation and Monetary Policy:*

Asia and the West, Proceedings of the Second International Conference Held by the Bank of Japan, ed. Yooshi Suzuki and Hiroshi Yomo (Tokyo: University of Tokyo Press).

- ——— (1991), The Future of Banking (New Haven, Conn.: Yale University Press).
- ——— (1993), "The Functional Approach to Deposit Insurance Regulation," paper presented at the symposium "Safeguarding the Banking System in an Environment of Financial Cycles," Federal Reserve Bank of Boston, November 18.

Pollock, Alex (1991), "The Same Old Banking Question," American Banker, May 6.

- ——— (1992a) "Fundamental Change Little by Little: Banking Evolution," Restructuring the Financial Structure, Public Policy Brief no. 1, The Jerome Levy Economics Institute of Bard College.
- ——— (1992b), "Collateralized Money: An Idea Whose Time Has Come Again," Challenge, September/October, 62–64.
- ——— (1993), "No Need to Reinvent the Wheel for a Community Reinvestment Bank," American Banker, July 8.
- Pozdena, Randall J. (1991), "The False Hope of the Narrow Bank," Weekly Letter, Federal Reserve Bank of San Francisco, no. 91-39, November 8.
- Robertson, Ross M. (1968), *The Comptroller and Bank Supervision* (Washington, D.C.: Office of the Comptroller of the Currency).
- Russell, Steven (1991), "The U.S. Currency System: A Historical Perspective," *Review*, Federal Reserve Bank of St. Louis, 73: 34–61.
- Seidman, L. William (1991), Testimony on Proposals to Establish a Core or Narrow Bank, Committee on Banking, Finance and Urban Affairs, U.S. House of Representatives, June 18.
- Shull, Bernard (1993), "Reorganizing the Federal Bank Regulatory Agencies," The Limits of Prudential Supervision, Public Policy Brief no. 5, The Jerome Levy Economics Institute of Bard College.

——— (1994), "The Origins of Antitrust in Banking," paper presented at a meeting of the Western Economic Association, Vancouver, B.C., July 2.

Simons, Henry C. (1948), *Economic Policy for a Free Society* (Chicago: The University of Chicago Press).

- Simonson, Donald G. (1994), "Business Strategies: Bank Commercial Lending vs. Finance Company Lending," The Jerome Levy Economics Institute of Bard College, Working Paper no. 112.
- Spong, Kenneth (1991), "A Narrow Banking Proposal," Federal Reserve Bank of Kansas City, unpublished.
- ——— (forthcoming), "Narrow Banks: An Alternative Approach to Banking Reform," in *The Stability of the Financial System*, ed. Dimitri B. Papadimitriou (New York: Macmillan).
- Timberlake, Richard H., Jr. (1965), Money, Banking, and Central Banking (New York: HarperCollins).
- Tobin, James (1985), "Financial Innovation and Deregulation in Perspective," Bank of Japan Monetary and Economic Studies, 3: 19–29.
- —— (1987), "The Case for Preserving Regulatory Distinctions," in Restructuring the Financial System (Kansas City: Federal Reserve Bank of Kansas City).
- Todd, Walker (1993), "The History of and Rationales for the Reconstruction Finance Corporation," *Economic Review*, Federal Reserve Bank of Cleveland, December.
- U.S. Congress (1991), House Committee on Banking, Finance, and Urban Affairs, Core Banks Proposal, 102nd Congress, 1st session, June 18.
- U.S. Department of Treasury (1991), Modernizing the Financial System (Washington D.C.: U.S. Department of Treasury).
- U.S. General Accounting Office (1977), The Debate on the Structure of Federal Regulation of Banks (Washington, D.C.: U.S. GAO).

## About the Author

Ronnie J. Phillips is a research associate of The Jerome Levy Economics Institute of Bard College, Annandale-on-Hudson, New York and professor of economics at Colorado State University in Fort Collins. He received a B.A. degree from the University of Oklahoma in 1973 and a Ph.D. in economics from The University of Texas at Austin in 1980. He previously taught at Texas A&M University at College Station and has been a visiting scholar in the Bank Research Division of the Office of the Comptroller of the Currency. His current research interests are banking regulation, financial institutions, and the financial history of the United States. His articles have appeared in numerous journals, including The Journal of International Economics, Southern Economic Journal, the Journal of Money, Credit, and Banking, and The Journal of Post Keynesian Economics. He is the author of The Chicago Plan and New Deal Banking Reform (Sharpe, 1994).