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SHOULD BANKS BE "NARROWED"?

An Evaluation of a Plan to Reduce Financial Instability

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Preface

In late 2001 and in 2002 the Argentine economy and government were in the midst of a crisis. A failure of the banking system both contributed to the atmosphere of economic and political turbulence and was aggravated by it. This episode echoed crises that have occurred all over the world, seemingly at an accelerating rate in recent years.

The economic importance of the banking system has been widely recognized by economists from Hyman Minsky to Milton Friedman to today's New Keynesian school. These economists have produced a wide range of theories on the macroeconomic impact of banks, some emphasizing their role in money creation and others their credit-granting function. Economists have also proposed measures aimed at reducing the fragility of the banking system.

One such measure, adopted in the United States in the 1930s, created a program through which the government insured deposits. Another proposed safeguard, which was also considered by the U.S. government during the Depression, would protect the value of transactions deposits by requiring the banks to back them fully with safe assets such as short-term government securities or reserves. The latter safeguard has the advantage, proponents say, of minimizing "moral hazard," or excessive risk-taking by agents who are insured against losses, since all liabilities other than transactions deposits would be uninsured. Following the recent events in Argentina, academics and policymakers are once more debating whether this idea could be implemented in emerging economies to prevent or alleviate banking crises.

The Levy Institute has had a long-standing interest in this proposed reform, which has been called "narrow banking" (Phillips 1992a, 1992b, 1995; Spong 1993). In this policy brief, Biagio Bossone evaluates narrow banking from

the perspective of modern theories of financial intermediation. These theories portray the status quo banking system as a solution to otherwise intractable problems of imperfect information, risk, and even moral hazard. The system's characteristic coupling of liquid liabilities with illiquid assets—seen by some as an undesirable "mismatch"—in fact contributes greatly to the efficiency of the economy. Bossone argues that these efficiency gains outweigh the disadvantages associated with the existing legal framework.

I believe Bossone's contribution will stimulate and inform the lively ongoing discussion about the future of banking. As always, I invite your comments.

Dimitri B. Papadimitriou, *President*
November 2002

Should Banks Be "Narrowed"?

Competition delivers autos in the popular colors. So why has it never delivered [safe transactions] balances? My answer is that because owners of transactions accounts and other bank balances have, generation after generation, mistakenly relied on governments for protection, there has been nothing for competition to deliver. It would seem to follow that under laissez-faire banking policy . . . there would be no fractional reserve banking.—J. H. Kareken, 1985

. . . using narrow banking to cope with the potential problems of banking illiquidity is analogous to reducing automobile accidents by limiting automobile speeds to zero.—N. Wallace, 1996

The idea of narrowing the activity of deposit-issuing banks to encompass only the funding of fully safe assets, so as to rid depositors of the risk of issuer default, has been championed over time by eminent regulatory experts and well-known academics, including at least three Nobel Prize winners.[1] In some industrialized countries, proposals to adopt narrow banking regimes have been given serious consideration by policymakers, especially in the aftermath of major banking crises. Surprisingly, such proposals have often received support from prominent bankers. Narrow banking proposals have recently been considered for emerging countries, as well, and policy advisers within international financial institutions and governments have not been immune from the appeal of narrow banking as a remedy for bank weakness in postcrisis countries.

Narrow banking proposals are meant to deal with a potentially detrimental mismatch in modern banking between demand-deposit liabilities (often implicitly or explicitly insured by the government) and the risky and opaque loans used as collateral for those liabilities. This mismatch gives bankers an incentive to seek out high-risk, high-return projects while depositors remain indifferent, secure in the knowledge that their accounts are protected. The results are often disastrous.

The more traditional remedy is for governments to intervene through regulatory instruments and safety nets (such as prudential rules, deposit insurance, and lender-of-last-resort facilities). The regulations are intended to reduce the likelihood of shocks to banks (and of systemic transmission of shocks) as well as to mitigate the financial cost of crises, when they occur. But the mismatch keeps the implicit cost of these public safety nets high, and tends to be widened by the very presence of the safety nets.

Proposals to introduce narrow banking are designed to resolve the dilemma posed by the fact that the traditional remedy for fragility creates vexing problems of its own. If adopted, proponents argue, narrow banking would "break the Gordian knot between deposit taking and commercial lending" (Litan 1987, p. 145). Narrow banks would specialize in deposit-taking and payment activities; would be prohibited, or restricted, from lending to the private sector; and would invest all their deposit liabilities in assets of very high quality. The riskier activities of banks would be transferred to separate entities, whose liabilities would not be insured. The result would be to reduce the asset-liability "mismatch" maligned by the current system's detractors.

Advocates of narrow banking hold that there would be no need for prudential regulations under narrow banking. Nonbank intermediaries could operate under securities-firm regulations. They would be free to engage in all types of nonmonetary financial activities using nonguaranteed funds and would be allowed to fail. Under narrow banking, market discipline would more effectively elicit prudent investment behavior, while the financial system could be deregulated significantly, thereby achieving higher levels of efficiency.

No real-world examples of narrow banking regimes are available to assess their actual costs and benefits. Therefore, evaluating narrow banking necessarily entails theorizing that, even in the best circumstances, can only lead to conjectural conclusions. However, taking stock of the informed views accumulated on the subject over the years, and assessing the potential consequences of narrow banking against the backdrop of contemporary banking theory, may correctly identify various aspects and implications of the proposals. It would also provide policy insights for developing countries, at a time when their financial integration into the world economy renders the development of stable and efficient domestic financial systems an internationally sought objective.

This brief offers an evaluation of the theory and policy of narrow banking and answers such questions as: Would narrow banking deliver greater financial stability? If so, at what cost? and Is narrow banking advisable for developing economies? The brief rejects narrow banking on conceptual and empirical grounds, concluding that it would deprive the economy of the key functions and benefits of conventional banking. It also finds no convincing support for the practicability of narrow banking proposals.

The following two sections of this brief review the existing literature on narrow banking. The third section elaborates on the rationale offered for narrow banking by its proponents. The fourth section evaluates the claimed advantages of narrow banking relative to contemporary theories of banking. The fifth section considers the potential consequences of narrow banking for economic activity. The brief concludes by suggesting some policy implications.

Historical Antecedents

Narrow banking is the modern and more elaborated equivalent of the "100 percent reserve banking" principle, invoked by early economists to correct the inadequacy of money reserves against the stock of banknotes in circulation. Aside from the examples of the goldsmiths and deposit banks of bygone centuries, historical precedents for this principle can be traced to the early monetary system of the American colonies in the 18th century and to the U.S. government's National Banking Acts of 1863 and 1864. These precedents were based on the notion that the means of payment should be backed with federal government securities (Phillips 1995). But perhaps it is Sir Robert Peel's decision, in 1844, to revert to the 100 percent reserve regime and to divide the Bank of England into a lending department and an issuing department that constitutes the first antecedent of a narrow banking regime.

Since then, the 100 percent reserve regime has come to be seen by some as a remedy for banking system instability. Ideas for reforming the banking system accordingly have been debated in the United States since 1933, prompted at that time by a series of memoranda sent to the Roosevelt administration by a group of economists from the University of Chicago, among whom the most prominent were Frank Knight, Henry Simons, and Lloyd Mints.[2] At a time when a major overhaul of the banking industry was deemed necessary, these economists drafted what became known as the Chicago Plan. The plan

advocated the abolition of the fractional reserve regime; the adoption of a 100 percent reserve requirement on demand deposits; and the displacement of existing deposit banks by at least two distinct types of institutions, deposit banks holding 100 percent reserves and investment trusts performing lending functions funded by securities. According to the Chicago Plan, these measures would prevent new banking panics, restore full government control over the money supply, and dampen economic fluctuations (Simons 1934).

The first (and still the most comprehensive) study of the structure and implications of 100 percent reserve banking is Irving Fisher's (1935) *100% Money*, in which Fisher claimed that such a regime would keep bank checking deposits fully liquid and prevent cyclical instability. However, Fisher did not thoroughly explore the institutional issues of how best to segregate the deposit-taking and loan-making functions of a bank; he was more interested in the underlying economics, and assumed that each function could be carried out by a distinct department within the same bank.[3]

The idea of 100 percent reserve banking was revived by Maurice Allais, who in a 1948 book strongly criticized fractional banking,[4] and was endorsed by Milton Friedman in his *Program for Monetary Stability* (1959) as a way to remedy money-supply instability and reduce governmental regulatory intrusion into lending and investing activities. Friedman's proposal would make all the money stock in the system—whether currency or deposits—a government liability issued under uniform arrangements. Drawing from the Chicago Plan, all banks would hold 100 percent reserves, in Federal Reserve Notes or deposits, against all outstanding deposit liabilities payable on demand or transferable by check. In this way the stocks of money and high-powered money would coincide and, Friedman believed, instability in the money supply would be eliminated.

Friedman suggested breaking the commercial banks into two separate institutions: a pure depository, with one dollar of central bank reserve for each dollar of demand deposits and the owners' capital available for lending; and an investment trust, which would acquire capital by selling shares or securities and use capital to fund loans and acquire investments. The latter institution would not engage in money creation or destruction and would not require any special regulatory control. Friedman's proposal differed from the Chicago Plan in that it recommended that interest be paid on the 100 percent reserves.[5]

Modern Narrow Banking

Narrow banking proposals resurfaced in the U.S. in the 1980s, when tumultuous financial innovation and financial crises demanded a reassessment of the extant banking regulatory regime. Before the issue became the object of more extensive policy analysis, some reputable scholars voiced their support for 100 percent reserve banking but did not put much emphasis on the types of institution needed to implement the idea.[6] Various proposals have since been formulated. They differ in terms of the restrictions to be imposed on bank asset portfolios and in terms of institutional design.

Narrow banking supporters disagree somewhat about the types of assets narrow banks should be allowed to hold. Proposals vary, from introducing a 100 percent reserve requirement that would bind banks to fully back transaction accounts with marketable short-term Treasury debt (Tobin 1985; Kareken 1986; Spong 1991; Mishkin 1999; Thomas 2000); to requiring banks to invest fully insured deposits in high-grade securities, including government paper or government-guaranteed securities of various maturities (Litan 1987; Herring and Litan 1995); to allowing banks the use of insured checkable deposits for short-term lending to consumers and businesses.

Some narrow banking proponents argue that the class of collateral assets should be broadened to include a well-diversified portfolio of traded short-term, high-grade corporate debt (Merton and Bodie 1993; Spong 1993). However, such a loosening of narrow banking restrictions is controversial since it obviously reintroduces the possibility of default (Litan 1987).[7]

On the other hand, many advocates of more restrictive versions of narrow banking propose that narrow banks frequently "mark to market" the debt held in their portfolio, meaning that they would be required to revise their books to reflect changes in the market value of these assets (Kareken 1986; Mishkin 1999). This provision would force narrow banks to adjust the value of their liabilities to that of their assets, much as mutual funds do. As a result, the nominal value of the outstanding transaction account balances would not be guaranteed and the taxpayers would not be called upon to rescue insolvent institutions.[8]

Not only do the various proposals offer differing restrictions on the assets that a narrow bank would be allowed to hold, they also propose varying

institutional arrangements. Some scholars have argued for a "functional" separation that would permit holding companies to engage in both narrow banking and regular lending but would prohibit transfers of resources between the two sides of the company (Pierce 1991; Litan 1987). They point out that this setup would permit firms to achieve economies of scope, that is, savings resulting from the combination of two separate activities. Others suggest that the two functions might best be carried out by completely separate industries or subsidiaries, thus mitigating concerns that a single bank that offered both narrow and conventional accounts could easily circumvent the law by shifting funds between different types of accounts during the course of a day (Kareken 1986).

The Case for Narrow Banking

The benefits of narrow banking seem straightforward and immediately evident. First, by locking bank assets in high-quality instruments, narrow banking regulation would minimize bank liquidity and credit risk. Second, since narrow banks would be prohibited from supplying risky loans and would collateralize deposits with high-quality assets, confidence in the value of their liabilities used to make payments could not be weakened by changes in the value of loans. Third, with payment-system access restricted to narrow banks, payments would be fully secure, because payment-system participants would be protected against liquidity, credit, and settlement risks, and because any shock to nonbanks would be isolated, with no systemic fallout (Burnham 1990; Thomas 2000).

As a result, capital requirements for narrow banks could be reduced substantially, the potential recourse to the taxpayer for depositor protection would become infrequent, and the inequitable too-large-to-fail bailout clause would be removed by making the failure of large narrow banks less likely. There would thus be much less need to subject narrow banks to special regulation and supervision (Bruni 1995; Thomas 2000). Also, since narrow banks would be protected from nonbank activities, a broader range of activities and a wider ownership structure might be permitted for their nonbank affiliates than is possible under current banking regulations in many countries (Spong 1993).

Other important benefits are associated with narrow banking. It would obviate the need for a socially costly deposit insurance mechanism, reduce

the unfair advantage enjoyed by depositors who have inside information about the quality of a bank's assets, and eliminate the subsidies for certain forms of intermediation that currently skew savers' incentives. At the same time it would protect depositors and prevent costly bank runs. It would also eliminate opportunities for banks to exploit the insurance system to cover overly risky loans. In addition, delegating lending decisions to uninsured and market-disciplined institutions would halt the dubious practice (induced by the existence of deposit insurance) of granting both weak and sound lenders equal access to funds.

Furthermore, a narrow banking regime would afford greater resiliency to the entire financial system. A failure of the market to elicit sound behavior from nonbanks would not have dire consequences for the monetary sector. While the market would or should eventually punish untoward behavior by individual institutions or investors, money and the payment system would be unaffected by such behavior.

Meanwhile, in less developed countries narrow banking would be expected to spur the kinds of salutary structural changes in the financial system that are already under way in the advanced economies. Commercial banks forced to switch to narrow banking regulation could be expected to transfer their credit exposures to existing or newly established finance companies, which typically operate with higher capital ratios and fund themselves with relatively larger volumes of long-term debt. Commercial banks would remove loans from the portfolios of prospective narrow banks through securitization, package similar types of credit into new securities, and sell them to a host of institutional investors. In addition, as commercial banks withdrew from the loan market, insurance companies, pension funds, and nonfinancial companies interested in assuming banklike functions would fill the gap and expand their lending activity.

As to the viability of the narrow banking model, its advocates cite the successful experience of the U.S. money market–mutual funds industry. The increasing demand for mutual funds products shows the potential attractiveness of narrow bank deposits and transaction services. Not least important, the industry has proven capable of weathering depositor runs (McCulloch 1986; Kareken 1985, 1986; Phillips 1995). But, as the next two sections show, the drawbacks of narrow banking are no less substantial than its virtues.

Narrow Banking vs. Banking: Insights from Theory

Considered in light of modern theories, the case for narrow banking is not very compelling. In this section the narrow banking concept is compared to contemporary theories of banking as a mechanism for serving several economic purposes: liquidity generation, collection of information, efficient joint production of deposit-taking and lending, and money creation.

Banks as Liquidity Generators

An important strand of research, conducted by Diamond and Dybvig (1983, 1986), stresses the role of banks as insurers against "liquidity shocks," or unexpected needs for money. Banks perform this function by transforming illiquid assets (those that are difficult to convert quickly and cheaply into cash) into liquid deposits. The averaging out of withdrawal demands from a large number of depositors allows banks to stabilize their deposit base and transfer deposit ownership without liquidating the assets. From this angle, the social benefit of banking derives from an improvement in risk sharing, i.e., the increased flexibility of those who have an urgent need to withdraw their funds before the assets mature (Diamond and Dybvig 1986).

In fact, the benefit of banking cannot be fully appreciated if either the asset or the liability side of the bank balance sheet is considered in isolation. A synergistic benefit results when banks use their stable deposit base to finance time-consuming production technologies that yield goods and services. In this way, banks are able to provide a pattern of returns to depositors that is superior to what they could obtain by holding only illiquid assets or only perfectly liquid (non-interest-bearing) assets such as cash.[9] Thus, banks provide liquidity to depositors and simultaneously insure that patient money will be available to meet the needs of producing enterprises.

The link between liquidity and production is explicitly recognized in two studies by Diamond and Rajan (1998, 1999). These authors argue that the vulnerability of the current banking system to runs, which is emphasized by its detractors, offers a subtle advantage: bankers can "credibly" offer their services to depositors at a fair interest rate. This is because all parties are aware that if bankers threatened to renege on their obligations to depositors, a run on the bank would ensue, driving bankers' excess profits to zero. Since depositors know that this possibility would be unacceptable to

bankers, they can entrust their deposits to banks without fear of unexpected reductions in their returns. Bankers, in turn, are able to perform the socially useful function—otherwise not possible—of providing funds for productive activities. Direct loans that bypass the banking system are not protected in this way because, unlike in the case of banks, entrepreneurs cannot commit by issuing demand deposits since their profits cannot be driven to zero by runs.

The essence of the theoretical advances described in this section is that production requires patient money and involves risk, while agents with money may not be as patient and risk-inclined to lend it to firms; banks provide a mechanism to reconcile both sets of preferences by generating liquidity. Narrow banks are designed precisely not to do so.

Banks as Collectors of Information and Efficient Producers of Deposit-Taking and Lending Services

Unlike most depositors, banks have the resources to acquire private information about the creditworthiness of borrowers. In the absence of banks, individual investors might be unable to distinguish between good borrowers and bad, an inability that would divert resources from their most productive uses and discourage people from lending. On the other hand, bank depositors remain confident that banks will not exploit their lack of information, because depositors retain the power to costlessly redeem their balances at full value.

This aspect of deposits bears two important implications. First, it allows banks to mobilize more resources for illiquid investments than would be possible if they had to rely exclusively on alternatives to deposits (such as equity and non-demandable, long-term debt), since investors would not be willing to replace all their deposits with riskier instruments. Second, by making claims on a bank withdrawable on demand, the deposit contract gives depositors an incentive to monitor the bank; if enough of them agree on a negative assessment of the bank's performance, they can call for bank liquidation (Calomiris and Khan 1991). Deposit contracts therefore act as a disciplining device.

It should also be noted that the production of lending and deposit-taking services is more efficient if processed by the same institution (Kashyap, Rajan, and Stein 1999). Deposits, like loan commitments, provide cash on demand. Since commitments to supply cash need to be supported by a buffer stock of

cash and safe securities, banks can economize on such resources by combining the two types of services (provided deposit and loan withdrawals do not occur all at once). Banks can thus hold a smaller buffer than would be required of two institutions offering lending and deposit-taking services separately. The result is that banks can offer liquidity services to their customers at lower prices than those charged by other intermediaries. By separating deposit and lending services, narrow banking would suppress this second synergistic effect and generate inefficiency in the supply of liquidity to the private sector.

Banks as Creators of Money[10]

Banks, as financial intermediaries, transfer resources from their depositors to their borrowers. Viewed in this way, banks appear similar to mutual funds. But banks can do more; they can create new money. They do so each time they credit a borrower's account in the amount of a new loan. Of course, such deposits are eventually spent by the borrower. If such spending implies deposit transfers across accounts held with the same bank, the bank can create and mobilize deposits with no need for reserve money. If spending implies transfer across accounts held at different banks, interbank credit arrangements (such as netting or overdraft facilities) allow banks to create deposits while economizing on reserve money.

By suppressing banks' money-creation power, narrow banking would make credit to the private sector scarcer and more costly because nonbanks would be able to fund their assets only to the extent that investors were willing to hold nondemandable debt or nondebt instruments, such as stock. This would make lending costlier and reduce liquidity in the system since, by regulation, nonbank debt cannot be used as money.

Alternatively, nonbanks could borrow or purchase money from the central bank, against collateral or in exchange for securities, and, in turn, lend it to the business sector. But the nonbanks' cost of lending would be higher than that of conventional banks because the latter can fund their loans by creating deposits. The central bank could take over the money-creation process by lending uncollateralized reserves to nonbanks, but this would come at a risk for the central bank. Moreover, this would place on central banks the burden of pricing loans efficiently—a task to which they are ill suited. In the end, narrow banking would return the money-creation process to the central bank, but it would do so at a considerable efficiency loss to the economy.

Since it relies heavily on reserve money, a narrow banking regime is vulnerable to catastrophic failure. In the event of a net overall reserve shortage, nonbanks would need the proper safe assets ("eligible securities") to raise reserves, but might be unable to buy or to borrow them, precisely because they don't have enough reserves! The class of eligible securities could be broadened so as to allow wider access to reserve money, but in most cases, holders of these securities would have to lend them, or their cash equivalent, to the reserve-deficient banks. In both cases the holders of the securities would bear the related credit risk. Once more, it is necessary that some entity within the system obtain the power to create liquidity (money or securities, as necessary) at a risk.[11]

The importance of the money-creation feature of banking survives despite ongoing financial market transformations and the banks' reduced involvement in direct lending to production. Bank lending is still vital to small and medium-sized businesses. It is undoubtedly the case that, in the advanced economies, nonbank quasi money and financing products are drawing business away from banks, and that nonbanks are offering products that allow investors and consumers to economize on less remunerative bank deposits. Nevertheless, money transactions do take place via deposit transfers across bank accounts, and the acceptance by the public of nonbank products depends on these products' convertibility into bank deposits. This system presupposes the existence of banks and their readiness to supply deposits to refinance such products when necessary.[12] Contrary to what its advocates assert, narrow banking would hamper the development of the nonbank financial sector.

Today's banks increasingly specialize in retail services or wholesale businesses. Through both channels, they continue to use lending and loan commitments to supply the economy with the money needed to effect transactions. Narrow banking, at least in its more conservative versions, would close off those channels, at a major loss to the society. Theory strongly suggests that forcing a synchronization of maturities between bank assets and liabilities, and dealing with the difficulties generated by traditional banks by eliminating them entirely, would dissipate the significant benefits associated with the current system—benefits derived from making demandable deposits available to finance a relatively broad range of assets.

Potential Consequences of Narrow Banking

Aside from the theoretical considerations already described, important operational issues surround the impact of narrow banking on finance and the real economy. These issues need to be discussed.

The Supply of High-Quality Assets

All narrow banking proposals must confront the question of whether the economy contains enough assets of the kind that are eligible to be used as collateral for transaction deposits. If narrow banks were required to hold government paper only, the supply of money would depend on the government's debt-management strategy. To the extent that a country ran large fiscal deficits, the stock of outstanding public securities might be enough to meet the economy's monetary needs. But this might not be the case if, for example, the country cut its fiscal deficits and reduced its stock of debt (see Schinasi, Kramer, and Smith 2001).

More important, tying the provision of monetary services to public debt management and assigning it to the government might not be a good policy. Similarly, doing the reverse—tying public debt management to monetary and payment-system objectives—does not appear sensible.

The alternative is to extend the admissible narrow bank portfolios to a broader class of assets, including private-sector securities. This, obviously, would affect the creditworthiness of narrow banks and reintroduce the costs of monitoring more diversified portfolios. In particular, if narrow banks were permitted to hold high-grade corporate bonds, one would have to question whether, in the absence of bank commitments to provide loans to corporations when needed, the quality of such bonds would remain the same.

Narrow Banks and Safety Nets: Part 1

Can narrow banks do without safety nets? Insuring narrow bank deposits is usually seen as necessary only for the purpose of protecting depositors against the residual risk of bank fraud (Mishkin 1999). For narrow banks to survive without safety nets, they must be perceived by the public as being financially viable and fully safe. The viability issue will be addressed later in this discussion. As to the safety issue, narrow banks are clearly as good as

their assets. Currently, even under regulations requiring narrow banks to hold only short-term government paper, full safety cannot be achieved in the absence of a credible commitment from the issuing banks to convert, on request, all deposit holdings into cash, at their full stated value. To the extent that narrow bank collateral is not accepted in the economy as money, there remains a chance that depositors will rush to their banks if they perceive that their collateral is losing value or becoming illiquid, or if they fear that other depositors might do the same.

Perceptions of less-than-full safety may become significant when fluctuations in the market value of government paper are marked and when the risk of government default is not negligible.[13] (Consider the case of Argentina in 2001–02.) Developing countries may suffer from both these problems. Ghosh and Saggar (1998) discuss the significant market and capital loss risks that narrow banks would be likely to confront in developing economies. In particular, they point to the many historical cases of governments' and central banks' deliberately inflicting capital losses on public-debt holders through inflation, debt repudiation, and outright manipulation of yields. Since extensive exposure to a single borrower (i.e., the government) might not be advisable in some countries, an alternative might be to permit narrow banks to hold foreign assets (although this would introduce a dimension of foreign exchange risk).

Narrow banks would likely take huge capital losses if a massive sell-off of collateral occurred, even where well-developed secondary markets existed. Unless they held enough extra capital, they would be unable to face withdrawal demands.

Moreover, runs are not confined to narrowly defined transaction accounts within narrow banks, but can occur on nontransaction deposits (CD accounts, bankers' acceptances, and time deposits) that are not covered by narrow bank deposit insurance (Calomiris 1999).

In the end, as in the case of conventional banking, only an insurer (in the form of a deposit insurance mechanism or a lender of last resort) could remove the risk of default from narrow banks. Alternatively, narrow banks could be required (even more stringently) to hold only central bank notes or deposits. But even this option could not protect them from runs on the currency (unless the central bank held a 100 percent foreign reserve collateral).

Narrow Banks and Safety Nets: Part 2

Does narrow banking eliminate the need of nonbank intermediaries for safety nets? Narrow banking advocates maintain that if checking accounts were fully protected, the rest of the financial system could be left to operate without public protection mechanisms. They believe that if safety nets were removed from fractional-reserve deposits, banks would cease to finance loans with transaction deposits, would transform themselves into other types of nonbank intermediaries, and would attempt to match the term structure of their assets to that of their liabilities.

But this belief contradicts the historical facts, which show that the earliest banks developed without safety nets, let alone regulation, by conducting maturity and liquidity transformation, and by issuing banknotes in excess of reserves, much as they do today. History thus shows the existence of a natural incentive for some firms to finance dynamic portfolios of opaque assets with relatively short-term liabilities (Flannery 1994). This incentive has led to the establishment of intermediaries that specialize in the supply of liquidity and asset-transformation services (Mussa 1987) and the emergence of special intermediaries (banks) that are capable of financing loans by creating money.

Under narrow banking, such natural incentives would lead some intermediaries to compete for the provision of conventional banking services, eventually replicating the financial world that existed before narrow banking. The public would again demand safety nets for its short-term liabilities, and government guarantees would tend to migrate, along with depositor funds, to the new intermediaries.[14] If the modern banking system did not exist, we would have to invent it.

The probability of a spontaneous rebirth of a traditional, government-backed banking system would create a problem for the financial system from the day safety nets were eliminated. Investors and financial firms would be aware in advance that any government promise to limit the range of insured assets would be broken if circumstances so required. Hence, there would be no reason for either party to refrain from engaging in risky behavior, even before the resolve of the regulators was actually put to the test.[15]

The Cost of Restructuring

A practical concern about narrow banking involves the cost of breaking long-standing multifunction banks into specialized and (legally and physically) separate corporations (Benston and Kaufman 1993). It would be necessary to build new structures or redesign old ones, and employees would have to be reassigned to each organization. The accumulated knowledge that banks and their customers have about each other would be squandered.

As a least-cost alternative, some propose that institutions wishing to offer depository services (in addition to other, riskier, nonbank services) be required to keep a 100 percent reserve in government securities against their transactions-deposit liabilities.[16] The proponents of this option believe that it would protect transaction deposits from other activities of the depository institution without sacrificing scale or scope economies from "one-stop" consumer shopping.

In order for this solution to work, regulators would have to raise a sufficiently solid "fire wall" separating banks' monetary and nonmonetary financial activities. This would be necessary to prevent narrow bank assets from being used to bail out nonmonetary financial activities in the event of liquidity or solvency problems. For this reason, narrow banking proposals usually recommend that narrow bank assets be segregated and unreachable.[17]

The Viability of Narrow Banks

How attractive is the narrow banking business? Based on the experience of money market mutual funds, Spong (1993) argues that once freed from major regulatory burdens, narrow banks should be able to offer depositors a return competitive with other low-risk investment alternatives. Narrow banks would earn interest income from their assets and noninterest income from fees charged on transaction services. Also, because of their minimal capital needs, narrow banks could operate on low margins while still earning satisfactory returns on equity.

From the opposite stance, Ely (1991) believes restricting the range of investment activity would reduce narrow banks' size and income. This tendency, he contends, would be magnified if small banks were exempted from narrow banking regulation, a provision that would prompt the formation of many

small banks, especially in urban areas. The income losses associated with the smaller scale might be significant in light of recent findings on scale economies in the banking industry.[18] Moreover, in countries where banks are not free to close branches as they see fit, a reduction in activity would present would-be narrow banks with increased operating expenses, possibly leading them to reduce interest rates paid on deposits and causing outflows of funds toward nonbanks.

The reduction in size as anticipated by Ely is consistent with evidence indicating a small demand-deposit base in relation to overall banking activity. Using 1995 survey data from India, Ghosh and Saggar (1998) conclude that the imposition of narrow banking would constrict the country's banking sector. They also argue that requiring banks to invest only in government paper may lower their income substantially, even after adjusting for the gains from lower levels of nonperforming loans, and note that such gains could easily be wiped out by a single interest-rate shock similar to those experienced in India in the late 1990s.

As mentioned earlier, separating lending from deposit-taking activities may also cause intermediaries to miss the efficiency gains resulting from the joint production of the two services. In the case of developing economies with great price volatility in the government securities markets, it is not certain that the risk-adjusted rate of return on narrow bank portfolios would be competitive with the return on well-diversified and well-managed conventional bank portfolios.

Private-Sector Credit Availability

Opponents of narrow banking argue that not enough credit would flow to the private sector if traditional banks were converted into narrow ones. Credit would become scarcer and more costly, most notably for smaller (firm and consumer) borrowers, because noninsured financial companies would be motivated to invest in larger enterprises. One empirical study (Bossone 2002) found a direct relationship between bank narrowness and lending rates, and confirmed the negative effect of the former on credit supply to the private sector.

The issue of private-sector credit availability as affected by narrow banks has usually been debated outside of well-defined theoretical frameworks.

Narrow banking proponents use a number of arguments to dismiss the concern over short credit supply. The proponents trust that incentives prompted by narrow banking would further the ongoing transformation of the financial system away from traditional banking and into nonbanking intermediation. They hold that experience shows that nonbanks in the advanced economies increasingly attract business away from banks. Thus, proponents assert, the entry into the market of finance companies, investment banks, and institutional investors, as well as the increasing use of alternative financing instruments to deposits (e.g., securitization, equities, and junk bonds) should maintain the supply of credit as needed.

Proponents of narrow banking argue that exempting small banks from narrow banking regulations would help protect the flow of credit to the small-business sector. If credit to small borrowers remained a concern, an explicit public support mechanism would be preferable to the continued use of distortional indirect subsidy schemes such as deposit insurance. In any event, if an overall increase in the cost of credit were to result, it would be the price that society would have to pay for greater financial stability in a system that does not subsidize risk taking through public guarantees (Burnham 1990).

However, the observations made earlier in this discussion as to the importance of the banks' role in money generation belie these arguments. Unlike banks, nonbank intermediaries cannot rely on the ability to create money in order to provide credit. Also, no efficient nonbank intermediation would be possible without bank liquidity services and money creation.

Policy Discussion and Conclusion

From the foregoing analysis it seems fair to conclude that narrowing the scope of banking would, at best, produce uncertain benefits in terms of greater financial stability while at the same time exacting heavy costs in terms of efficiency and credit availability. Narrow banking would sever the link between liquidity, money, credit, and economic activity, a link that banking has a natural incentive to establish efficiently (under stable macroeconomic conditions).

By suppressing bank money as an instrument to finance lending to the private sector, narrow banking would create what economists call "market

incompleteness," a condition that occurs whenever mutually beneficial trades of goods or services are prohibited. The consequent economic losses would lead other financial firms to fill in the gap by undertaking conventional banking activities. This would defeat the very purpose of narrow banking, because it would replicate conditions as they existed before its advent and resurrect the risks that narrow banking was supposed to eliminate.

The economic costs of narrow banking could be particularly significant for developing countries, where the need for an efficient banking system is vital as an engine of economic growth and a support for the development of a strong nonbank financial sector. Also, in many developing countries proposals to move to narrow banking should be resisted, given the absence of a well-developed secondary market for government securities, a highly volatile environment for securities prices, the existence of sovereign risk, and a noncredible government commitment to refrain from insuring deposits or widely held financial instruments.

There is some sentiment in favor of employing narrow banking in certain countries as a response to crises (World Bank 2001). In particular, weak banks could be required to operate as narrow banks in order to improve their balance sheets. Whereas selective intervention in individual banks might be justified, policymakers should be aware that banks required to operate as narrow banks would rapidly dissipate their valuable store of knowledge about industries and firms.[19]

While mandatory narrow banking regulations should be rejected, nothing should stand in the way of individual institutions' offering narrow banking services to their customers on a voluntary basis, or creating narrow bank subsidiaries that would be segregated from other businesses within the same bank holding companies.

Mishkin (1999) has proposed an efficient, free-choice regulatory solution that would allow banks to provide customers with a choice between safe accounts and traditional ones. Though this solution would not eliminate the risks inherent in conventional banking, the banks would retain their money-creation power, provide cautious investors with risk-proof money instruments, and allow financial institutions and their customers the option of conventional and/or narrow banking instruments.

Another appealing alternative was offered by L. Bryan (1991). In his "core banking" model the scope of banking would be narrowed to activities in which banks have a demonstrated comparative advantage: issuing checking, savings, and money market deposit accounts; providing payment, trust, and custody services; and offering loans to individuals, small businesses and medium-sized companies. Core banks would not lend to large corporations or developing countries, engage in highly leveraged transactions or large commercial real estate projects, undertake the global money market activities of large money center banks or large regional banks, or underwrite securities. Bryan's idea might prove to be a judicious compromise.

Two other (not mutually exclusive) approaches would provide additional incentives for banks and depositors to exercise prudence and, at the same time, would preserve conventional banking. Banks could issue uninsured deposits bearing an option clause whereby in the event of liquidity problems the bank could suspend deposit convertibility for a predetermined interval while it liquidated its assets in an orderly fashion. During that time, the bank's deposits would continue to circulate in the payment system. In order to induce depositors to accept such a provision, the bank would commit to paying an interest penalty in the event it invoked the option, or to paying a premium on the deposit interest rate.[20]

Banks could also issue subordinated debt, as proposed by Keehn (1989), Wall (1989), and recently, Calomiris (1999). In the event of insolvency, a bank would have to make good on its subordinated debt only after depositors were reimbursed. Presumably the investors who purchased these securities would be relatively sophisticated and thus more capable than most depositors of ascertaining the soundness of a financial institution. Their assessments of the safety of the institutions involved would be reflected in the market value of the subordinated debt. In turn, these prices would provide the community with a valuable signal as to the relative stability of the issuing banks, thereby lessening the need for regulation.

These alternatives to narrow banking would contribute to increased financial market completeness, spur competition within the banking sector, and strengthen market discipline, without suppressing conventional banks. The patient's health would be restored through good medicine, not euthanasia.

Notes

1. This brief is based largely on a working paper by this author (Bossone 2002). The author thanks F. Mishkin for his feedback on preliminary discussions on narrow banking, and G. De Nicolò, P. Kupiec, and B. Drees for their helpful comments and suggestions. He also thanks his wife, Ornella Gargagliano, for her unwavering support. The opinions expressed here are those of the author only, not those of any organization with which he is affiliated.

2. For a historical reconstruction of these contributions and their political fate, see Phillips (1992b). On the Chicago Plan see also the references in Friedman (1959), Ch. 3, fn 8: 108.

3. See, for example, Fisher (1935) Ch. V, Part II.

4. For a recent reappraisal of Allais's theory, see Phillips (1992a).

5. Friedman justified this measure on three grounds. First, it would allow banks to pay interest on deposits and thus avert unproductive real resource investments by individuals anxious to economize on cash balances. Second, it would lessen the incentive for banks to evade the 100 percent requirement. Third, it would redistribute the government's monopolistic rents from money issue back to the economy.

6. See, for example, Black (1985), Tobin (1985), and Kareken (1985). Tobin (1987) elaborates on his earlier proposal, moving away from strict narrow banking and positing instead a redefinition of commercial banking that preserves the link between deposit money and commercial lending.

7. Litan discusses the consequences of broadening the class and term-structure of the securities available to narrow banks for investments, and the regulatory actions that would need to be associated with those changes.

8. As Kareken points out, there is a clear tradeoff between a contract of certain value that carries the risk of not being honored and a contract of uncertain value that will be honored with certainty. Goodhart (1988) evaluates (and supports) the idea of introducing this form of mutual-funds money.

9. If depositors hold illiquid assets, they may have to forego immediate consumption needs. On the other hand, if they hold perfectly liquid assets, they forego higher future consumption possibilities.

10. This section draws largely on Bossone (2001).

11. Note that the liquidity creation in this example rests on broadening, by regulatory fiat, the class of papers eligible for conversion into reserve money.

12. If confidence in nonbank products grows, nothing will prevent the public from accepting nonbank quasi monies as money. The issuing nonbanks would no longer need to rely on bank deposits to effect transactions. At that point, they would have an incentive to begin lending money they themselves produce, precisely as banks do.

13. In countries where government securities are free of default risk, a regulation that would permit narrow banks to hold long-term government paper (following, for example, Litan 1987) could subject banks that took advantage of that option to a considerable interest rate risk. McCulloch (1986) notes that, at the time he wrote, the Macaulay duration (and thus the interest rate sensitivity) of 30-year U.S. Treasury bonds was greater than that of 30-year amortized mortgage loans.

14. Caprio and Summers (1993) and Caprio (1997) note that under narrow banking the rise in the price of safe assets will lead investors to hold less secure paper than narrow bank deposits, thus motivating nonbanks to offer deposit accounts backed by higher-yielding assets that could be subject to default. This would induce a demand that safety nets be extended to such accounts.

15. As Calomiris (1999) notes, the absence of de jure protection on bank liabilities outside the narrow bank does not imply the absence of de facto protection by the government. Absent the government's credible commitment to not prop up banks during a crisis, narrow banking may only end up substituting ad hoc bailouts for explicit insurance coverage.

16. See Benston et al. (1989), Merton and Bodie (1993), and Benston and Kaufman (1993).

17. See the discussion of this point in Phillips (1995).

18. For an extensive review of the literature on scale economies in the banking and nonbanking financial sectors, see Bossone, Honohan, and Long (2001).

19. A few years ago, I undertook an official visit to a major emerging economy that was suffering a long period of macroeconomic instability and disproportionately high interest rates on government securities. These factors had driven most banks to disengage from lending to the private sector, instead investing in government paper. I was told by major local bankers that, if there were a transition to a stable economy and to less distorted financial prices, most banks would be unprepared to return to their previous business habits, or to make profits by selecting good risks.

20. In the early 19th century, Scottish banks adopted this solution for their notes (England 1991).

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