A Proposal to Deregulate Banking

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Banks are the most highly regulated industry in the economy today because banks are viewed as special in their role of being the repository for society's money. This paper argues that the special role has outlived its usefulness and that full banking deregulation can be achieved through a democratization of access to the payments system.

The Banking Oligopoly

Money is the most liquid medium of exchange. Any commodity can be used by society as money but few have. The list includes gold and silver coins, deposit receipts for precious metals and coin, commercial drafts accepted for payment by the drawee, drafts accepted by banks, bank notes, government issued paper currency and, by far the most important in recent decades, bank deposits. Modern governments justifiably intervene to preserve the value of fiat money. Governments are also justifiably concerned that their payments system be run in the interests of society at large. Modern money and payments systems are technical monopolies enjoying strong economies of scale.

Money, as shown in Figure 1, is two-tiered. High-powered money, the venue of the payments system, is the claims of commercial banks on the central bank, and deposit money is the claims of the rest of society on commercial banks. (This discussion ignores the role of notes and coins, which, being issued by the central bank are effectively already sovereign risk money—the status to which this article argues all money should be elevated.) The majority of money is deposit money in the form of demand, notice, and time deposits. The transfer of commercial bank liabilities through the payments system at the request of depositors is the means of effecting payment in society. The potential breakdown of this payments system has pre-

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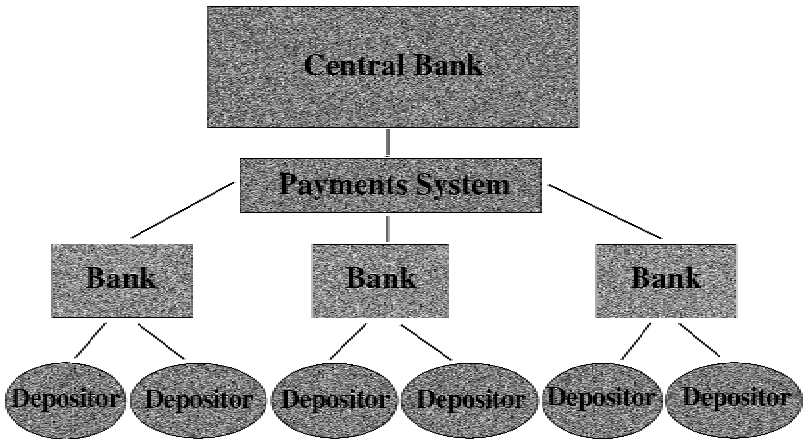
FIGURE 1
TWO-TIERED MONEY



disposed governments to protect banks' restricted access to the payments system. In return, banks submit to strict regulatory oversight.[1]

Historically, banks enjoy restricted access to payments systems because they developed them. From the inception of banks in Italy in the 11th century through the 20th century, bankers would meet periodically to exchange customer requests to make payment (Kindleberger 1993: 42–54). These payment requests would be largely netted out so that only a small fraction of total claims actually resulted in the transfer of high-powered money (gold, silver, and claims on private clearinghouses in previous times, central bank deposits in our day) at the end of the day.

The sheer volume of transactions and the strict security requirements for this daily exchange used to mean that only a limited number of highly trustworthy bankers could feasibly participate in such a clearing system. The electronics revolution, however, has changed this requirement. In order to avoid the problem of systemic risk whereby one bank's intra-day failure would cause multiple failures of intra-day creditors in the payments system, clearing and settlement systems around the world have implemented real time gross settlement systems. Under RTGS, each large payment is made to the beneficiary's account with the central clearing authority in real time,

[1]By "banks" I mean all regulated deposit taking institutions including, in various countries, credit unions and credit union centrals, building societies, and postal savings banks.

electronically, by gross, irrevocable settlement.[2] Because payment is irrevocable in real time, in the emerging RTGS payments environment, there is no intra-day credit risk between banks and, consequently, no need for the trust between banks that justified limited access to the payments system.[3]

In an RTGS system that does not allow intra-day overdrafts, a bank can only make a wholesale payment to another bank to the extent that it has, in real time, deposits with the central bank. Those deposits may be obtained through repurchase agreements (or, alternatively, collateralized loans) using specified government securities immobilized in a depository. The owner of the securities advises the depository that the securities should be made available to the RTGS to be used in repurchase agreements. Payments are made against those securities being sold back to the clearing authority.[4] With RTGS, one of the major reasons for having an oligopoly making payments in a two-tier monetary structure has disappeared. Thus, the first recommendation is to democratize the payments system.

Recommendation 1: Democratize the Payments System

On the wholesale level, RTGS can eliminate the intra-day credit risk management need to restrict access to the payments system.

[2]Fedwire in the United States, initiated in 1918 and subsequently periodically modified, was the first payments system in the world to give real-time credit for deposit transfers of member banks at the Federal Reserve, initially through the use of telegraph and later by computerized high speed links in the 1970s. RTGS systems were implemented in Sweden (1986), Germany (1987), Switzerland (1987), Japan (1988), Italy (1989), Belgium (1996), Great Britain (1996), France (1997), Hong Kong (1997), and The Netherlands (1997) (see Bank for International Settlements 1997).

[3]RTGS designs differ from system to system, yet all are structured to achieve finality from the point of view of the payee bank in real time. Under Fedwire, intra-day credit risk is still borne by the Federal Reserve, which guarantees payments made by members, effectively lending intra-day balances to its members (for a small fee). Clearly, with the central government maintaining intra-day credit risk, an incentive for bank regulation still exists. But other RGTS systems minimize or eliminate that risk. The Clearing House Interbank Payments System, a private clearinghouse through which most internationally originated U.S. dollar clearings are routed, achieves finality through a combination of bilateral limits, net debit caps, loss-sharing agreements, and collateral. CHIPS clears net payments through Fedwire at the end of the day. For a description of these arrangements, see *http://www.ny.frb.org/pihome/fedpoint/*. My discussion refers to an RTGS system that does not provide intra-day credit such as in force in Japan, Switzerland, and Hong Kong. There is a rapidly growing literature on the optimal configuration of RTGS systems, given the potential for intra-day gridlock and the incentives of participating banks to minimize early payments to reduce liquidity costs. See, for example, Kahn and Roberds (1998), who model the social cost-benefit analysis of the central bank providing intra-day liquidity.

[4]Interestingly, in RTGS systems that allow participants to obtain central bank balances by repo-ing eligible government securities, short-term government debt *is* a larger component of high-powered money than are commercial bank balances with the central bank (Yam 1998).

There is no reason why other financial institutions (FIs) or, indeed, any legal person with government securities (that are also immobilized in the same securities depository) cannot have an account with the clearing authority. Just as easily as a bank, such a person could give instructions to make payment to another account with the clearing authority. And the clearing authority would do so only if sufficient securities were present for the transaction to be effected. Given the ease of electronic data processing, there is no technical reason why a clearing authority would not maintain tens of thousands of clearing accounts, where today it only maintains dozens.

Full democratization of the payments system, however, would require hundreds of millions of retail clearing accounts. Implementing such retail access involves severe additional complications. Government securities are currently only produced in wholesale denominations, and the central banks of the world have no comparative advantage in catering to retail depositors. To overcome these complications, retail depositors could obtain access to wholesale deposits by using a money market mutual fund pooling mechanism. Each such fund (called a *money fund* in the following discussion) would place its securities in the depository and would transfer ownership over them on the instructions of its equity holders.[5] The manager of a money fund could be a former bank, bringing its wealth of knowledge of servicing retail customers to the new legal form. To the retail depositor, a money fund would seem very similar to a bank deposit of today but there would be a very great difference. The money fund manager would not have discretion over the placement of funds. They would have to be placed in government securities, giving the money fund depositor (i.e., the equity unit holder) access to the payments system. Figure 2 shows this recommended structure.

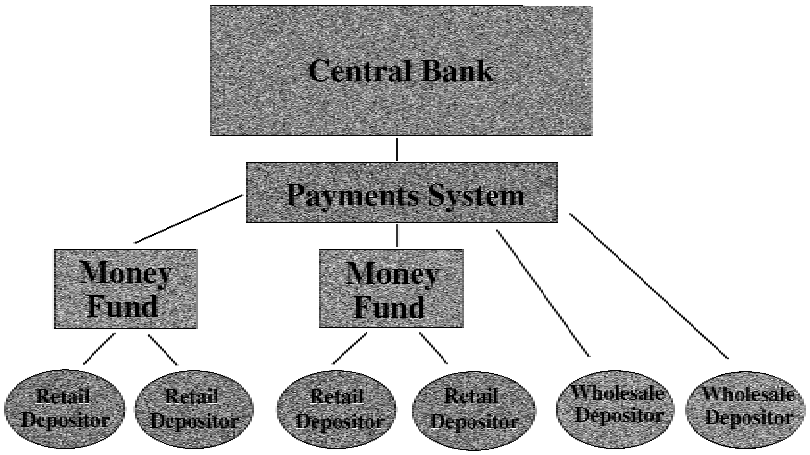
Recommendation 2: Demonetize Banking

As described above, only two activities define a bank: making payments and taking deposits from the public.[6] To protect society from

[5]Today, both bearer and registered securities are typically immobilized in depositories that record changes in ownership subject to electronic notification. Fedwire (for securities) in the United States, the Canadian Depository for Securities in Canada, and Cedel and Euroclear in the Euromarkets are examples of such depositories.

[6]U.S. banks under the federal Bank Holding Act used to be defined as "institutions that both accepted demand deposits and engaged in the commercial lending business." Since 1987, banks are defined rather circularly as any "insured bank as defined by section 3(h) of the Federal Deposit Insurance Act." The FDIC Act in turn defines an insured bank to be "a banking institution which is engaged in the business of receiving deposits, other than

FIGURE 2
Recommended System



the costs of bank failure—that is, disruption of the payments system and destruction of deposit money—governments give substantial support to banks in the form of deposit insurance, liquidity from the central bank as lender of last resort, and protection from competitors. The term "bank" is often protected in law. Investors in banks are encouraged to feel that their investments are money and are therefore riskless. Banks thereby obtain funds at lower rates of interest than do nonbanks.

Current technology can eliminate the specialness of banks in the payments system. If regulators opened payments systems but left banks with the restricted power to take deposits, however, banks could continue to attract subsidized deposits to fund risky activities (Kwast and Passmore 1997). To avoid such continuing moral hazard, regulators should demonetize banks.

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trust funds . . . and is incorporated as a bank under the appropriate jurisdictional laws." The FDIC Act's definition of "deposit" clarifies deposits as including sums from the receipt of monies "in settlement of checks, drafts, or other instruments forwarded to such bank or savings association for collection." Somewhat simpler definitions of banking in the British tradition simply refer to the taking of deposits and making of payments. In no jurisdiction that the author is aware of does the act of lending by itself qualify an institution as a bank. Banks do provide important delegated monitoring lending services (Diamond 1984) as well as underwriting, trading, dealing, trust, custodial, and advisory services. But these services are not unique to banks and the failure of a bank in these capacities does not cause society the distress of its failure to repay deposits or make ordered payments.

A demonetized bank would not forgo its funding activities, but it would have to give up the claim that it provided a riskless medium of exchange for what are, in fact, corporate debts. And to drive the point home to the public, it would have to give up the title "bank," becoming instead a nonbank FI. The FI could still issue risky short-term, retail debt, but it would have to advise creditors that their funds were at risk. To clarify the distinction between the new riskless money funds and risky investments such as FI short-term debt, FIs would be precluded from using any account but money funds to manage the receipt and remittance of payment for retail customers. FIs would manage money funds on a fee-for-service basis. With lines of credit, an FI could extend loans to customers to replenish their money funds as necessary. FIs, however, would have to maintain a clear distinction between riskless money—in money funds—and risky investments—in FI liabilities. It is precisely the lack of distinction between riskless money and risky investments that has caused many of the problems in many banking systems throughout history.

The Problems of a Monetized Banking System

As Alan Greenspan (1997) remarked, the U.S. government

> delegate[s] the use of the sovereign credit—the power to create money and borrow unlimited funds at the lowest possible rate—to support the banking system. It has done so indirectly as a consequence of deposit insurance, Federal Reserve discount window access, and final riskless settlement of payment system transactions.

Sovereign, domestic currency guarantees are very valuable. Rather than bearing commercial credit risk, the lender (here, a bank depositor) bears the risk that the country will not make payment with a medium (domestic currency) that the sovereign itself can create. In modern society, that risk is negligible. From the credit risk perspective of the guarantor, however, extending the guarantee to bank deposits is equivalent to extending a loan to the beneficiary bank in the same amount as the guaranteed deposits.

Academics have widely analyzed the moral hazard involved in deposit guarantees, the value of which increases with the risk of the project.[7] But there is a further cost to society in deposit guarantees. As guaranteed projects tend to displace unguaranteed projects, with

[7]See Merton (1977) for an analysis of the components of the value of deposit insurance. Estimates of the value of the guarantee are necessarily indirect. Kwast and Passmore (1997)

financial intermediation, banks, benefiting substantially from these subsidies, tend to displace other unguaranteed financial intermediaries. The tendency of banks to take maximum advantage of sovereign guarantees (both explicit and implied) increases the exposure of those governments who have been least able or willing to monitor and restrict lending of banks to the low-risk activities commensurate with the low-risk claims banks issue to depositors.

Governments often monitor banks ineffectively.[8] At least two-thirds of IMF countries experienced significant banking-sector problems from 1980 to 1996 (Lindgren, Garcia, and Saal 1996). The costs of each crisis ran from a few percentage points of GDP—as was the case in the U.S. Savings and Loan crisis which cost the taxpayer about $150 billion—to more than a quarter of GDP (Caprio and Klingebiel 1996: 48–52). The Asian financial crisis of 1997–98 shows that bank problems continue to plague economies.

Recommendation 3: Abolish Government Support for Banks

Once access to the payments system has been democratized and banks have been demonetized, then governments can credibly abolish the support they give to FIs. As part of this process, government supervision of FIs must also *decrease*. The reason for this paradox is that supervision leads to certification of financial health by the government. In the event that an FI that has been certified as healthy goes bankrupt, debt holders (i.e., the former depositors) might legitimately make claims against the government for losses sustained by relying on that certification.

Once a former bank's liabilities are not considered to be money, they can be more logically categorized as securities. The national public securities authority, not the former banking supervisor, should be responsible for oversight of the FI issuing securities. Public securities authorities emphasize the disclosure of information that the investors are responsible for analyzing. They do not need to prescribe

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estimate that it exceeds the 40 to 100 basis points subsidy enjoyed by such government sponsored agencies as GNMA.

[8]In his discussion of systemic risk, Kaufman (1996) concludes that existing prudential regulations are frequently inefficient and counterproductive, exacerbating social losses from bank failures. His study uncovers little evidence of uninformed, contagious runs against otherwise healthy banks. Starting from the belief that retail deposit insurance is a fact of life that cannot be altered, he argues that much of the bank regulatory system is counterproductive and should be dismantled, being replaced by a structured early intervention and resolution program.

required levels of capital, asset quality, diversification, management quality, earnings, or liquidity, which banking supervisors use, often ineffectively, to reduce the risk of the banks.[9]

Without government supervision of and support for FIs, investors would look for other assurances that the funds they lent were safe. Less risky FIs would have a tremendous incentive to provide better financial disclosure. Yet most investors have neither the time nor the expertise to analyze even well-prepared, transparent financial statements. Thus, investors would most likely rely on the analysis of and ratings given by independent rating agencies. The regulatory burden currently borne by banks subject to government oversight would not really disappear. It would be shifted from centrally controlled government inspectors to market-driven ratings analysts.

Coordinated Implementation of Recommendations

If the proposed reform is to be successful, it is essential that the public understands the nature of the proposed reforms and believes the government's pledge not to rescue a large failing FI. The reforms would have to be implemented in concert. A piecemeal implementation—for example, opening the payments system without rescinding the implicit "too-big-to-fail" guarantee—would just increase the liability of the government. And the implementation would have to be accompanied by a public education campaign that explains the issues and emphasizes the following points:

- The word "bank" is to be revoked from appropriate FIs names, because the special protected status of their debts is being removed.
- Former bank supervisors (that emphasized risk control) are to be disbanded because the government is not in the business of controlling the risk of private corporations. It is up to the securities commissions (which emphasize disclosure) to see that the public is informed about the risk of debt securities.
- Investors are to sign a release for each non-money fund account saying that they understand that their funds are at risk. These releases should be in plain English, like the standard releases that investors in mutual funds currently sign.
- FIs are to strictly implement the principle that money funds be

[9]Flannery (1995) and Kaufman (1996) note that efforts of regulators to reduce the risk of banks are often inefficient and counterproductive, increasing the probability and cost of bank failures.

the only vehicle for managing the remittance of funds for retail customers.

If these recommendations are implemented as a package, the public should be able to understand their importance. Public sympathy for banks has never been high. These reforms can honestly be presented to the public as a way to use technology to reduce public subsidies to banks at the cost of requiring that individuals make their own choices concerning the amount of financial risk they will bear.

Assume that a post-reform FI becomes distressed. The government would have ample opportunity to deny that it will provide funds to the failing FI. Sophisticated investors and competing FIs could assess the value in the distressed FI and purchase it or push it into liquidation as appropriate. Other FIs would raise their levels of capital if, because of such a competitor's distress, they reassessed upward their chances of distress. The collapse of the FI itself would not adversely affect others in the payments system. It would only compromise the debt holders of the investing public who had opted to purchase the FI's risky debt.

Objections to the Proposed Reforms

The reader can legitimately raise objections to these wide-ranging proposals for financial reform. Among these objections could be that the proposed reforms would cause monetary contraction, reduction of lending, shortage of eligible securities, loss of liquidity, increased financial-sector volatility, monopoly power going into the hands of the rating agencies, declining security of the payments system, and high implementation costs. The remainder of this article will address these concerns.

Objection 1: Monetary Contraction

Because bank loans are redeposited in other banks and (after subtracting a requirement for liquidity reserves) are lent out again and so on, deposit money is a multiple of high-powered money. One possible objection to the proposed reforms is that they ignore this money multiplier. By redefining money as only high-powered money, wouldn't the reforms force a massive monetary contraction?

This objection confuses two definitions of money: the theoretical and institutional. Monetary policy—generally carried out by a central bank—is one of the major tools of implementing economic policy. Central bankers attempt to keep the growth of money supply in line with economic growth and price stability and may use monetary

policy to stimulate the economy in times of recession. Although economists confidently write in their formulas "M" for money supply, in fact there is no clear line between assets that constitute money and assets that do not constitute money. Any asset that exhibits little price volatility and is traded in liquid, deep markets can be a money substitute. Although probably none of the current measures of the money supply correspond to true theoretical money, most are highly correlated with it. That is currently the case and would be the case under the reformed regime.

In the demonitized banking system outlined above, only high-powered money—coins, notes, and government securities available for repo (or collateralized borrowing) through accounts with the clearing authority (including the government security holdings of money funds)—would be legal money. And everyone would be able to hold this high-powered money.[10] This money would be greater in amount than current measures of high-powered money but would be lower than current M1, which includes all demand and notice deposits in the banking system.

In the new system, however, many persons would consider their short-term loans to top-rated FIs to be money substitutes, the same way that corporate treasurers today consider investments in commercial paper to be a cash substitute. Consumers may wish to keep 40 percent of their liquid savings in the money fund and 50 percent in the top-rated FI, to enjoy, for example, the 0.5 percent higher interest rate. They might also invest 10 percent in a C-rated FI to enjoy a higher interest rate. Because they consider the 50 percent (but not the 10 percent) to be liquid, it should theoretically be included in the money supply. Note, however, that although that 50 percent would *not* be calculated as part of money, it would be correlated with it. If the central bank finds that, with the current supply of money, prices are dropping rapidly and the value of its currency on foreign exchange markets is increasing, it can increase the supply of money. The theoretical money supply—whatever it truly is—would also increase, leaving the central bank with the means of adjusting the money supply to prevent contraction.

Of course, the old rules of thumb of central banking would no longer be applicable if the reforms are implemented. Once central

[10]This substitutability of debt securities for money has long been noted. Quoting Friedman (1959: 62) on monetary policy, "Since short-term debt is a closer substitute for money than long-term, the amount of money that would be consistent with price stability if long-term debt were sold would imply risking prices if the same amount of short-term debt were sold instead."

bankers learned how to navigate in the new regime, however, they would be no less able to control the money supply than they are today.

Objection 2: Reduction of Lending

Banks have been subsidized under the current system with the result that lending by depositors to banks and by banks to ultimate borrowers has been higher than it would have been in the absence of these subsidies. Objection 2 observes that the drop in lending implied by the reforms would cause economic contraction. The author acknowledges that a drop in lending would likely occur. I believe, however, that the real problem has not been the amount of debt (or equity) in society but its productivity.

To maximize the rate of economic growth of an economy, capital should be channeled into those activities that provide the best return. If the owners of capital are risk-averse, then the risk of those activities, as well as their expected returns, should be considered before investing. The owners of capital are the people best placed to honestly evaluate the risk and expected returns of projects. If they have neither the time nor the expertise to do so, they must find agents. FIs house those agents. But if the agents are removed from the risk-return preferences of the ultimate owners of capital by sovereign guarantees, the agents can hardly be expected to consider those risk-return preferences.

If a given, retail, capital owner—call her Miss Prudence—wishes simply to maintain her purchasing power without placing any of it at risk, she should be allowed to do so. Under the current banking system, she is not. Her savings can only be placed in a bank that then puts them at risk. If that risk is realized, she (along with other taxpayers) pays the cost of the central authority making good on its guarantee that her purchasing power, preserved in the bank, was indeed riskless.

Under the proposed reforms, risk-averse savers may place their funds in money funds, which will bid up the price of short-term government securities pledged in the clearing system so much that the short-term interest rate drops to zero. The government may find that if it issues more such securities it will engender inflation. If this were the case, then the incentive for investors to place funds in the securities of FIs and other corporations—which would offer attractive, positive rates of real return—would be greatly enhanced.

Investors other than Miss Prudence would seek better rates of return but, being aware that they were placing funds at risk, they would analyze (or pay agents to analyze) the link between promised returns to their funds and the risk of those funds.

Objection 3: Insufficient Government Securities

With governments' fiscal budgets increasingly in surplus, some may fear that the supply of specified government securities eligible for repurchase in the settlement system could be insufficient to meet the demand for high-powered money. This fear is misplaced because in the short run, there are sufficient securities, and in the long run either (1) the government can make available more securities to meet demand, or (2) other securities could be declared eligible.

Currently, there are sufficient securities in the United States. The U.S. public debt is now $5.72 trillion, down only marginally from $5.77 trillion in December 1999, and well above the levels of the early 1990s. That is about five times M1 (current transactions balances), nearly 38 percent more than M2 (which includes small-denomination time deposits and balances in retail money market mutual funds), and about the same size as M3 (which includes wholesale time deposits). That amounts to about $20,000 per capita, probably exceeding the requirements for individuals' riskless investments at today's substantially positive interest rates.

The treasury market is relatively efficient, with price equating supply and demand. There is considerable room for prices of government securities to be bid up (from increased demand following the reform) to reflect the true social demand for riskless funds before the interest rate on riskless debt hits zero percent.

If the interest rate actually does drop to zero, a government should be prepared to issue whatever amount of paper investors demand. In the unlikely event that interest rates did drop to zero, the government that raises funds by issuing debt, yielding zero percent, could achieve a positive return by investing the proceeds. In the interests of promoting liquidity, the government may choose to issue such securities prior to the riskless rate of interest dropping to zero. Note that in Hong Kong, the government has no net debt but the RTGS uses Exchange Fund bills and notes issued by the government nonetheless. The government issues that debt not to raise funds for fiscal spending but to provide liquidity in the money and fixed income capital markets. The government invests the funds in marketable securities for a profit. Note that these Exchange Fund bills and notes pay positive rates of interest.

If the government does not wish to provide this liquidity, the RTGS system could expand its definition of securities acceptable for collateralizing to include nondomestic government issues. The Bank of England currently allows payments in its RGTS to be collateralized by euro-area sovereign issues, not just U.K. sterling government issues. Conceivably, even high-quality, AAA-rated corporate or securitized

short-term securities could be used as collateral, with a margining percentage and the requirement that the securities' credit rating be maintained on a daily basis. Such a requirement, however, is not necessary in the short run because, as noted above, sufficient treasury securities are already available.

Objection 4: Loss of Liquidity

The fourth objection is as follows: banks issue liquid, short-term securities and book illiquid, long-term assets. If banks were eliminated, the economy's liquidity would be reduced. Because society values liquidity, the proposed reform would eliminate social value.[11] Note that I do not advocate the elimination of financial intermediaries (and the consequent loss of liquidity). Transformed banks, FIs under a different name and without the protection of the government, would continue to intermediate, but would separate that role from monopoly access to the payments system and narrowly defined money.

Liquidity is the characteristic of an asset that allows each investor to buy and sell large quantities (relative to the holdings of that investor) without seriously affecting the asset's price. Liquid assets are characterized by symmetric information: the buyers and sellers both have the same information about the assets. The electronics revolution, by allowing information to be disseminated cheaply and widely, has dramatically increased the liquidity of assets. The 21st century will be an era of rapidly rising liquidity, regardless of what is done to change the banking system. Rapid information flows allow worldwide, cheap access to (1) bid-ask prices of financial assets (2) information about issuers, and (3) models to price financial assets. Banks' and indeed other nonbank corporations' balance sheets are increasingly liquid, a fact which is reducing the need to give banks special regulatory consideration.[12]

Objection 5: Financial-Sector Volatility

Notwithstanding—or perhaps because of—the increase in liquidity, financial asset volatility has increased. Asset price volatility in-

[11]See Wallace (1996) for a critique on the *narrow banking proposal* based on Diamond and Dybvig (1983). It should be noted, however, that Diamond and Dybvig (1983) wrote the model partly to justify deposit insurance. They assume, rather than prove, FIs' liquidity role in society.

[12]Rajan (1998) points to three factors that have eroded the requirement for regulated banks: technology, information availability, and the property rights environment. These new factors have, in his view, obviated the need for banks as specially regulated financial intermediaries.

creases the chances of financial distress of leveraged banks. In a volatile environment, an FI borrowing most of its capital may suddenly find that the value of its assets is less than the value of its liabilities. Increasing financial system transparency will increase asset liquidity and will reduce (subject to strict enforcement of rule of law) the chances of embezzlement,[13] but it will also hasten the demise of an FI that is insolvent. Under the proposed system, devoid of protection from a run, a former bank with high leverage would find that its likelihood of bankruptcy increases.

This increased likelihood of bankruptcy would not increase systemic risk. First, democratizing the payments system and demonetizing banks would insulate the two critical components of the financial system from the negative externalities of the FIs' collapse. Second, investors would force FIs, without sovereign protection, to manage their risks effectively or face an outflow of debt capital. Risk management can be effected through increasing the equity cushion, raising asset quality, and implementing sound-risk management principles.

To demonstrate their reduced risk, FIs would court the favors of rating agencies. Instead of being forced by regulators to disclose their condition, the most solvent would willingly disclose their risk management systems and conditions to the public in general and analysts in particular.

Objection 6: Excessive Power for the Rating Agencies

Without a doubt, the reforms would increase the power of the ratings agencies, but that increase in power does not equate to an unacceptable concentration of power because rating agencies are not by nature monopolistic.

There are two types of investors: those who simply accept the ratings agencies' ratings and those who analyze companies themselves as well as using the rating agencies. The first group ascribes paramount importance to ratings. The cost of reading a rating is near zero. So investors usually look at more than one rating on which to base their decisions. Seekers of capital, who pay to be rated, are aware of this information diversification and seek ratings from more than one source. On the other hand, investors, to minimize their work, rely on the ratings of a very limited number of prestigious rating agencies. Rating agencies can preserve their prestige only if they produce ac-

[13]Calomiris and Kahn (1991) discuss the liquidity risk booked by FIs not as a necessary provision of liquidity to society but as a device for preventing bankers from embezzling funds. Deposit insurance, however, eliminates the effectiveness of this monitoring.

curate ratings. Good analysts within the prestigious ratings agency—who themselves have personal reputations to protect—leave to join a competitor or to set up a new agency if their agency's reputation is compromised. Hence the ratings market is a contestable market where only a few can survive but where entry is inexpensive.

The second type of investor does primary credit analysis in addition to using ratings. These institutional and professional investors employ high-quality analysts themselves. By doing so, they maintain an external pool of analytical talent and an external standard against which the rating agencies are constantly judged.

Objection 7: Security of the Payments System

With the democratization of the payments system, any member of society would effectively have direct debit access to his or her holdings of high-powered money. While the idea of logging into the central bank may be daunting, the problems of security are the same as those that have been faced in implementing RTGS systems at the wholesale level for banks and debit card systems and ATMs at the retail level for the public in general. The same type of identifying procedures (ID numbers and passwords, limits to withdrawals, verification of transfers above certain amounts, denying of access if invalid information is input too frequently) provide appropriate guidelines for the design of secure systems.

But designing and implementing new systems is not cheap. Thus systems integrity is just one of the many components of the cost of implementing the proposed reforms.

Objection 8: Implementation Cost

Cost is the most valid objection to the proposed reforms. Any change to financial systems involves three sorts of costs: losses to former monopoly rent holders, systems implementation costs, and learning costs.

Even though the reforms would increase the efficiency of the capital and money markets, thereby giving net gains to society, the banks, who now enjoy monopoly rents from their low cost of funding and restricted access to payments systems, will lose out. Although many members of society would applaud cutting banks down to size, the falling bank stock prices; decreases in banking prestige, salaries and employment use; and disbanding of bank supervisory departments of governments would be painful. Banks, the very institutions that are required to implement these proposed reforms, can be counted on to resist them.

Systems implementation would also be expensive. Substantial legal, administrative, and advertising costs and systems investments would be required for redrafting of laws, changing corporate organization, reeducating society, and implementing new computer systems.

Financial market participants, from fund managers to retail depositors, would have to reappraise their borrowing, savings, and investment behavior. Moreover, as mentioned above, central banks would have to relearn how to control the money supply within a new structure. These learning costs are substantial, but very difficult to quantify.

Conclusion

In this article, I have argued that the democratization of the payments system, demonetization of banks, and repudiation of government guarantees can lead to substantial net savings for society. Increased efficiency in capital allocation, reduced regulatory burden, and reduced costs of government supervision would result. Like most reforms, the deregulation of banking also would involve costs. The task at hand is to analyze the cost of implementation and compare it with the expected benefits, bearing in mind the losses borne by society from banking crises in past years. If the expected benefits exceed the costs, then it is time to plan these fundamental reforms.

Today, however, there is no political will to mount the far-reaching reforms to banking proposed in this paper. Banking reform is neither popular nor well understood, and legislators are not keen to rewrite laws whose ink is still wet on the page. Yet the refrain "If it ain't broken, don't fix it" misses the point that it *is* broken. As the paper points out, the cost of built-in moral hazard has been large and recurring. We just do not see the effects every day. We may have to wait for the next crisis to appreciate the costs. But if we put the reforms suggested in this paper onto the social agenda, the next time support builds for banking reform of some kind, the appropriate solution will be apparent.

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