

REMEDY FOR BANKING CRISES: WHAT CHICAGO AND ISLAM HAVE IN COMMON: A COMMENT

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Repeated failure of banks led some economists to believe that the banking and financial system may be suffering from structural problems and is in need of fundamental reform. The Islamic monetary system is known to consider demand and investment deposits as two distinct contracts. Demand deposits are merely loans that are fully guaranteed by banks and must be returned on demand. Investment deposits are given to banks on a profit-and-loss sharing basis. They are clearly associated with risk-taking and have specific maturities which, in principle, are not revocable. Compared to conventional finance, this sounds like narrow banking. Garcia, Marino and Cibils (2000) find similarities between narrow banking and Islamic banking. As narrow banking seems to be an uncommon concept among specialists in Islamic economics, this comment is rather expanded to explain the what and why of narrow banking. The paper concludes that narrow banking bears similarities with Islamic banking. Under narrow banking, the role of investment banks would carry features similar to Islamic banking when the relationship between savers and banks are considered. However, when it comes to financing investment, Islamic banks avoid trading future for present money, while conventional investment banks stick to the interest-based modes of finance.

I. INTRODUCTION

Stability is a basic requirement for the proper functioning of the banking system and a key to its contribution to growth and development. During the 1980s, the failure of banks became a common phenomenon that preceded economic crises. Bank lending followed a cycle that usually ended with increased bank failures and high loan losses. Bank insurance funds in countries with deposit guarantee schemes have lost substantial amounts, causing the loss of taxpayers' money. This led some economists to argue that the banking and financial system may be suffering from structural problems and is in need of fundamental reform (Spong, 1993).

The Islamic monetary system is known to consider demand and investment deposits as two distinct contracts. Demand deposits are merely loans that are fully

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guaranteed by banks and must be returned on demand. Like conventional banking, demand deposits are associated with liquidity services, e.g., checking, immediate transfer and withdrawal. Investment deposits are given to banks on a profit-and-loss sharing basis. They are clearly associated with risk-taking and have specific maturities which, in principle, are not revocable. That is why some economists insisted on the total separation between demand and investment deposits through subjecting the former to 100 percent required reserves (Al-Jarhi 1981, 1983). Compared to conventional finance, this sounds like narrow banking.

Kenneth Spong (1993) argues for the implementation of narrow banking on the basis that it would improve the competitiveness of banks and makes them more market responsive. With regard to the latter point, he suggests that narrow banking would make deposit insurance unnecessary.

Garcia, Marino and Cibils (2000) find similarities between narrow banking and Islamic banking. In Islamic banking demand deposits are perfectly guaranteed, while investments are financed through investment deposits that are similar to mutual fund shares. Some economists have insisted that Islamic banking must be complemented with 100 percent required reserves (Al-Jarhi, 1981) for stability reasons on the one hand, and to meet the absolute guarantee of demand deposits.

The real problem is how to construct financial institutions that support and enhance economic development, but are flexible enough to allow for technological innovation and market discipline (Phillips, 1992b).

As narrow banking seems to be an uncommon concept among specialists in Islamic economics, this comment is rather expanded to explain the what and why of narrow banking, how it relates to banking theory, its relationship with the long series of proposals for monetary reform, its pros and cons, and finally how it relates to Islamic banking.

II. NARROW BANKING

A. What and Why¹

The main distinguished feature of “Narrow Banks” lies in their deposit-taking function. Their deposit accounts would be entirely backed with marketable low-risk securities and currency, thereby providing a perfectly safe payments system. Their deposits would be perfect substitutes for currency. As narrow banking is specially designed to insure monetary stability, it would eliminate the need for deposit insurance.

¹ This section borrows heavily from Spong (1993).

Narrow banks' income includes interest earned on securities and fees charged for transaction service, a part of which should cover operating costs, leaving competitive returns on equity, despite operating on low margins, thanks to their small capital requirements. In addition, narrow banks would encounter very little regulatory burden.

One of the possible variations of narrow banking is to establish separate entities offering transaction accounts and related services, leaving bank lending to separate affiliate organizations funded on an uninsured basis. Affiliate activities could be left to the discipline of the uninsured investors and market forces.

Other variations include offering "deposited currency" and "collateralized or secured money," backed by liquid low-risk securities without splitting banks into transaction and lending entities. Under the latter variation, narrow banks would back their deposits with central bank accounts representing a proportionate interest in the system's portfolio of securities, in order to allow regulators to monitor directly a bank's security holdings.

B. Benefits of Narrow Banking

Narrow banking offers two significant benefits. First, it would eliminate the incongruence between bank liabilities (deposits, available at par and on demand) and assets (illiquid and risky loans). Such incongruence leads the banking system to depend upon an extensive government supported safety net that includes: deposit insurance, discount window lending and rigorous regulation and supervision to control. Second, narrow banking eliminates the need for extensive governmental involvement in bank lending and other policy decisions that extends far beyond the protection of the payments system.

C. Questions About Narrow Banking

The adoption of narrow banking would require a significant transformation of the current financial system raising legitimate questions regarding the overall benefits, weaknesses, and implementation concerns of narrow banking.

1. Does narrow banking provide stability?

In his evaluation of narrow banking, Miles (2001) postulates that under narrow banking, banks operate like finance companies, and other non-bank financial institutions (NBFI's). If finance companies can provide stable lending during conditions of tight credit, narrow banking should be preferable. However, finance companies are more vulnerable to tight credit conditions than commercial banks.

Miles sees that NBFIs suffer from high agency costs and provide a less stable

supply of credit relative to deposit-insured banks. He relates the greater stability of banks to the deposit-insurance subsidy they enjoy. The removal of this subsidy would put banks and NBFIs on a more equal footing in the competition for loans, but according to Miles, the supply of lending in the economy would then be less stable, bringing back the question of how to provide stable credit without distorting regulation. Miles' results simply imply that narrow banking, in the form of a growing NBFIs sector, has no place in financial development.

Bossone (2002) argues that narrowing the scope of banking would, at best, produce uncertain benefits in terms of greater financial stability while exacting heavy costs in terms of efficiency and credit availability. Narrow banking is seen by Bossone to sever the link between liquidity, money, credit, and economic activity. He claims that narrow banking suppresses bank money as an instrument to finance lending to the private sector, thereby creating "market incompleteness"². Financial firms would jump to fill in the gap by undertaking conventional banking activities, bringing back the risks that narrow banking was supposed to eliminate.

Bossone warns that proposals to move to narrow banking in developing countries 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 non-credible government commitment to refrain from insuring deposits or widely held financial instruments.

Bossone, however, does not object to employing narrow banking to weak banks at times of crises in order to improve their balance sheets (World Bank 2001). He does not object to 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.

2. What would happen to credit availability?

Narrow banking would, in a conventional banking system, redirect all credit functions of depository institutions toward bank credit affiliates and other market lenders. A shift toward other market lenders is already occurring. Narrow bank lending affiliates could help banking firms reduce their costs and run their lending operations more efficiently.

To attract funding, affiliates would have to meet market standards for capitalization, asset quality, and other performance measures. Much of the equity the banking system could be diverted to credit affiliates.

² Market incompleteness occurs whenever mutually beneficial trades of goods or services are prohibited.

A more flexible lending framework could enable lending affiliates to attract additional capital, using securitization and asset sales or placements to reduce overall capital needs.

3. Would limited access to market funding restrict lending by smaller banking firms and would affiliate lenders be willing to provide the same variety of loans offered by banks?

Smaller firms lack direct access to major credit markets and have to obtain much of their funding from local investors. Small banks may therefore require a lengthy transition period.

The type of lending by affiliates could differ from that of banks due to differences in funding and market pressures. However, a strong demand for certain varieties would eventually entice some affiliates or other lenders to provide them.

In recent years, the credit-granting abilities of nonbank lenders have increased substantially with the growth of securitization, commercial paper, and other securities instruments. As a result, nonbank lenders, investors, and affiliates would seem to be capable of fulfilling the general credit needs of the economy. If affiliates were given freedom to participate in debt and equity markets, funding would be expected to improve.

4. Would narrow banks be competitive with other financial firms?

Narrow banks are less encumbered by regulatory burden and can offer their depositors a return competitive with low-risk investment alternatives. Their ability to offer a complete range of payments services would give them a competitive edge.

Narrow banks need only limited amounts of capital to cover fixed assets, protect against fraud and other risks and operate with low margins. Hence, they can achieve competitive returns on equity. Possible synergies between the transaction services at narrow banks and other financial products offered by affiliate companies would further increase their investment value.

Narrow banking would have several advantages when compared with traditional banking. Narrow banking would treat checking accounts as a vehicle to provide liquidity necessary for transactions purposes. It would be associated with a more flexible framework for lending and other banking functions, thereby making much of the regulatory burden unnecessary. It offers depositors complete safety.

Narrow banking focuses on transaction accounts and services. It may be better suited to provide for an efficient and stable payments system using developments

in information and communication technology. Affiliates may be able to better adjust to the shift toward direct investment and nonbank savings products.

5. Narrow banking and financial and credit market stability

Banks have provided liquidity during financial crises with the support they receive in the form of deposit guarantee, access to the discount window, and the various government commitments.

There is some concern that narrow banking would not provide the same protection against financial instability and that lending affiliates would not be immune to problems inherent in traditional banking. However, narrow banking can serve as the foundation of a stable payments system, thereby eliminating a source of economic and monetary instability. Lending affiliates would have to depend on the same factors that helped stabilize private credit markets, like strong capital backing and a longer term debt structure.

Market forces would give affiliates strong incentives to curtail funding of speculative activities. Investors who are fully at risk would be less amenable to fund questionable loans than depositors with insurance protection and short-term horizon.

The “lender of last resort” function has to be maintained as economic fluctuations would continue. Liquidity would be provided directly to affiliates and other uninsured lenders in the event of a systemic credit collapse.

6. Monetary policy and narrow banking

Narrow banking raises many monetary policy questions with regard to direct monetary policy tools as well as its influence on the structure and relationship of the monetary aggregates, the behavior of the short-term securities market, and the manner in which money is created and expanded. None of these technical issues has been considered in a thorough fashion. While narrow banking does not appear to have any obvious drawbacks with regard to monetary policy, many of its policy effects will need to be analyzed more carefully before implementation.

7. International implications of narrow banking

If a country adopts narrow banking within its own borders, foreign banks entering this country would need to establish narrow banks as well as uninsured affiliates. Banks in a narrow banking country should be provided international banking charters to allow them to expand abroad by establishing separate banks that would operate without compromising the safety of narrow bank depositors.

D. Narrow Banking and Banking Theory

This section summarizes the relevant literature of banking theory done by Shy and Stenbacka (2000). Economists view depository institutions as “pools of liquidity” providing households with insurance against idiosyncratic shocks that affect their consumption needs (Shy, Stenbacka 2000). In the model of Diamond and Dybvig (1983), banks provide liquidity to depositors “who are, *ex ante*, uncertain about their intertemporal preferences over consumption sequences.” Along the same lines, Bryant’s (1980) and Villamil’s (1991) models, demand deposits serve to meet liquidity shocks that are “neither publicly observed nor can be insured”. Deposit contracts offer such insurance and consequently a Pareto efficient allocation of risk. However, Diamond and Dybvig show that there exists a second inefficient Nash equilibrium where the interaction between pessimistic depositor expectations generates bank runs and deposit insurance systems can eliminate such equilibrium. Jacklin (1987) introduces to the Diamond-Dybvig model a market for outside investment opportunities, but he stops short of considering the effects of bank runs on depositors’ welfare. He assumes a continuum of depositors, which enables banks to avoid runs completely by maintaining a reserve ratio that is no less than “the probability of a liquidity shock of a representative depositor.”

Despite its indisputable benefits, empirical observations as well as theoretical research demonstrate how deposit insurance encourages banks to engage in excessive risk taking (Cooper and Ross, 1998). As the most natural of the conceivable mechanisms for reducing the instability of the banking system, some propose narrow banking (Freixas and Rochet 1997), where banks are required to back demand deposits entirely by safe and liquid short-term assets.

Wallace (1996), using a dynamic model, argues against narrow banking by showing that it is antagonistic to the efficient provision of liquidity insurance. Meanwhile, Shy and Stenbacka (2000) show that Wallace’s result may fail to hold when consumers have access to investment opportunities outside the banking industry. Since most developed economies possess liquid investment markets outside the banking industry, there are no social gains associated with bundling deposits with risk, through combining deposit-taking and risky lending. In such case, the welfare of consumers might be better served by narrow banking. They show that the introduction of deposit insurance will always be welfare reducing under a wide-banking policy and that it cannot substitute for narrow-banking policies in “any welfare-improving way.”

Kashyap, Rajan, and Stein (1999) investigate whether there is a real economic synergy between deposit-taking and lending. Without such synergies, deposit insurance would encourage an artificial gluing together of the two activities. In contrast, narrow banking would break-up such artificial combination. Papers

favoring wide banking use ad hoc assumptions regarding the existence of such synergies which automatically justify wide banking (Kashyap, Rajan, and Stein, 1999). According to Shy and Stenbacka (2000), a strong correlation between deposit withdrawals and the degree of non-pledgeable returns on illiquid loan-financed projects will reduce the likelihood of having these synergies. They believe that such a correlation attributes a major cause for the emergence of banking crises.

The opinion of Shy and Stenbacka is in line with the predictions of the credit cycle models, e. g., Kiyotaki and Moore (1997), that the interaction between debt and collateral values can amplify fluctuations facing an economy³. Also, it would find support in Lamont's (1995) model emphasizing the macroeconomic costs of debt overhang.

In Shy and Stenbacka's model, consumers' welfare is higher under narrow-banking than wide-banking. In the latter case, consumers are unable to deposit their money in riskless banks, thereby forcing them to sacrifice liquidity. Narrow banking actually increases the variety of investment means consumers can utilize to intertemporally transfer money across periods. It adds a riskless money storage technology which is unavailable under wide banking.

E. Narrow Banking and Deposit Insurance

Narrow banking involves financing loans with longer term borrowing, rather than demand deposits. The possibility of panic would therefore become remote (Gorton and Pennacchi, 1993, and Miles, 2001), and deposit insurance, as well as its inefficiencies can be done away with.

Deposit insurance has led to greater financial stability since its inception and until the 1980s. However, it can lead to moral hazard. The savings and loan failures of the 1990s, Japan's decade-long struggles with non-performing loans, and the role of failed banking systems in many East Asian nations leading up to the 1997 currency attacks are examples of encouraging risky lending at taxpayer expense caused by deposit insurance (Miles, 2001).

During 1989 and 1990, much of the reserves that insured deposits were depleted due to widespread bankruptcies and compromised equity positions of commercial banks. In 1991, instead of applying extensive reforms, the Congress decided to provide \$70 billion to replenish the insurance fund in line with its pledge of the

³ Holmstrom and Tirole (1998) have developed the implications arising from *limited pledgeability* of the returns of illiquid projects for asset pricing, thereby offering a theory of how agency costs should be reflected in asset pricing models, which incorporate liquidity premia.

1930s that defined deposits at insured institutions would always be at par.

Many economists stress the following factors that must be considered in relationship with deposit insurance (Spong, 1993).

- i) A safe transactions and clearing system is becoming increasingly critical to financial welfare.
- ii) Given the payments technology available today and the level of resources devoted to the banking system and its regulation, the typical depositor would prefer and expect a high degree of safety and certainty in financial transactions.
- iii) Most checking account holders use their accounts for making and receiving payments and have far less of a concern over their investment aspects. Consequently, occasional disruptions could reduce public confidence in the financial system, keep the level of business activity below its full potential, and divert an inordinate volume of resources toward tracking transactions or using less efficient alternatives.
- iv) Depositor discipline and the threat of loss for uninsured deposits may be hard to enforce. Many large depositors, for instance, may have the ability to react more quickly than the regulatory authorities in problem bank situations. They may also be able to find ways to circumvent any deposit insurance changes and thus avoid being exposed to losses.
- v) Major deposit disruptions and losses could be harmful to a wide variety of bank customers, the national economy and its credit base, and the banking and payments systems reputation.
- vi) Deposit insurance has given weak or high risk lenders virtually the same access to funds as the strongest lenders, thus diverting notable portions of bank lending toward less worthy ventures and away from alternatives more consistent with market needs.
- vii) Countries attempting to reform, especially the USA, take a few steps to encourage more market discipline and limit access to funding by problem institutions, while giving bank regulators greater responsibility for controlling bank risk taking, and leaving less of a role for bankers and other participants in the marketplace. Deposit guarantee reform is no substitute for market forces and proper bank management. It often imposes a substantial cost burden on both problem and sound banks, while turning much bank decision making away from bankers and more to bank regulators, examiners, and lawmakers.

F. Narrow-Banking and Monetary Reform

Narrow banking has been associated with monetary reform proposals since the great depression. This section provides some of the main proposals and their relationship to narrow banking.

I. The Chicago plan⁴

The Chicago economists advanced their plan of reform right after the great depression of 1930. In reaction to comments from a number of individuals, Henry Simons prepared another version in November 1933 that included a supplement on “Long-time Objectives of Monetary Management” and an appendix on “Banking and Business Cycles”. The plan emphasized that the answer lay in the abolition of fractional reserve banking, so that a reconstituted Federal Reserve would have simple rules of monetary policy; and achievement of a price-level specified by Congress.

The proposal, called for (Phillips, 1992a):

1. Outright government ownership of the Federal Reserve Banks;
2. Guarantee of deposits of member banks subject to full supervisory control over their management.
3. The issue of Federal Reserve Notes as legal tender in any amounts which may be necessary to meet demands for payment by depositors, while suspending the operations of the gold standard⁵.
4. Liquidate the assets of all member banks, pay off liabilities, and dissolve all existing banks. New institutions should be created which accepted only demand deposits subject to a 100% reserve requirement in lawful money and/or deposits with the Fed.
5. Saving deposits would be handled through the incorporation of investment trusts.
6. Present banking institutions would continue deposit and lending functions under Federal Reserve supervision until the new institutions can be put into place.
7. The government should raise the price level by 15 percent by fiscal and currency means but further inflation (beyond 15 percent) be prevented.

⁴ The narrative in this section has been adapted from Phillips, 1992a.

⁵ That entails suspension of free-coinage of gold, embargo on gold import, prohibition of private export of gold, call in all gold coins in exchange for Federal Reserve notes, suspension of the gold-clause in all debt contracts, and substantial government sale and export of gold abroad.

8. Enacting a simple rule of monetary policy.
9. Achievement of a price-level specified by Congress: this could be done through a monetary policy rule which sets money supply growth.

The plan would displace existing commercial banks by deposit banks and investment trusts. The latter would acquire funds exclusively by sale of their own securities, thereby limiting their lending capacity to the funds so obtained.

By June 1933, many of the proposals contained in the March memoranda had been enacted, except for applying the 100% reserve requirement.

The Chicago faculty prepared a draft bill which was introduced to Congress on June 6, 1934. The bill proposed to (1) segregate demand from savings deposits; (2) require banks to keep 100% reserves against their demand deposits and 5% reserves against their savings deposits; (3) set up a Federal Monetary Authority (FMA) with full control over the supply of currency, the buying and selling of government securities, the gold price of the dollar; (5) have the FMA take over enough of the bonds of the banks to provide 100% reserve against their demand deposits; and (6) have the FMA raise the price level to its 1926 position and keep it there by buying and selling government bonds.

As a consequence of this bill, the only money that would exist would be either currency issued by the Federal Monetary Authority, or in demand deposits backed 100% by lawful money (gold) or government securities. The legislative bill would retain squarely within the federal government the power given to it in the Constitution to create money and maintain its value. This bill would also achieve the other long-run New Deal objectives of raising the price level and to strengthen government's influence on economic activity, in this case, through monetary policy.

The Chicago plan did not lose because its principles were rejected but as a matter of pure political expediency. In fact, the banking legislation passed during the period moved in part toward the Chicago plan reforms.

The 100% reserve idea did not disappear after the passage of the Banking Act of 1935. Irving Fisher spent the remainder of his life lobbying Congress and the public on the need for 100% reserves. In recent years, we have seen the emergence of "narrow banking" or "core banking" proposals which are in the tradition of the 100% reserve plan. If we are ever again faced with economic and particularly financial problems on the level of the Great Depression, the clamor for the separation of the depository and lending function of banks may reappear.

II. Maurice Allais Proposals

Maurice Allais views the credit created by fractional reserve banking as the equivalent of counterfeiting. Following Irving Fisher, Henry Simons, and others in the 1930s, both Allais and Milton Friedman have long advocated this reform (Allais 1948; Friedman 1960).

Recently, James Tobin (1985, 1987) and others (Litan 1987, Spong 1989, Burnham 1991) have advocated narrow banking to enhance the safety of the payments system and eliminate the costs associated with the present system of federal deposit insurance (Phillips, 1992b). Tobin proposes two types of financial institutions: those that keep demand deposits subject to 100% reserves and those which lend on the basis of an issue of equity (investment trusts).

Allais criticized the Chicago plan for defining the money supply as currency plus demand deposits while he defines it to include, in addition, all other financial assets viewed as money (Phillips 1992b).

At any time, bank assets maturities are shorter than the maturities of their liabilities (Allais 1948). The degree of substitutability of time deposits for cash is crucial to the creation of money *ex-nihilo*. The degree of substitutability is unity for demand deposits and less than unity for time deposits. The total money supply should thus be defined as currency, demand deposits, and a portion of time deposits that are considered as substitutes for cash. The Chicago plan implicitly assumes the latter to be zero.

Simons was aware of this problem, as he recognized that savings-deposits, treasury certificates, and even commercial paper are almost as close to demand deposits as are demand deposits to cash. He noted that little would be gained by putting demand deposit banking on a 100% basis, while at the same time, increasing disposition to hold, and the facilities for holding, liquid "cash" reserves in the form of time deposits (Phillips, 1992b).

Allais' proposal requires deposit banks to be subject to a 100% reserves and be forbidden to make loans. Lending institutions would be managed on the principle that all lending for a given term would be financed by borrowing of at least the same term. Whereas now banks borrow short and lend long, Allais would require that they borrow long and lend short (Allais 1948: 525).

Allais has six fundamental objections to the system of fractional reserve banking:

1. The creation and destruction of money by private banks;

2. Sensitivity of the credit mechanism to short-term economic fluctuations;
3. The basic instability engendered by borrowing short and lending long;
4. The distortion of income distribution by the creation of ‘false claims’;
5. The impossibility of control over the credit system; and
6. Efficient control of the aggregate money supply is impossible.

The two fundamental principles guiding reform as advanced by Allais are:

- The creation of money should be the business of the state, and of nobody else, and
- No money should be created outside the monetary base, so that no one would be entitled to the benefits that attach to the creation of bank money (Allais 1948).

It remains an open question whether you can find reasonable estimates for the substitution ratios between time deposits and cash. This is perhaps the greatest difficulty in the implementation of Allais’s reform next to the political hurdles.

III. Reaction to the Financial Crises of the 1980s

According to Anthony Solomon, the 1980s “deregulation of deposit institutions (both commercial banks and thrift institutions)-while maintaining virtually unlimited access to the extensive safety net of cheap Federal deposit insurance without forceful, independent, official supervision-was a recipe for disaster, ” (Solomon,1992). Some of his major recommendations are:

Restrictions on Federal deposit insurance (resembling some “narrow- bank-proposals)

Increased accountability of banks’ management and boards, and the imposition of sanctions as a deterrent

Leveling the playing field across institutions, markets, and countries, necessitating comprehensive regulation across functional lines

Pollock notes the severity and scope of problems plaguing finance in recent years (Pollock, 1992). He points to a disturbing pattern in the ratio of capital to loans (e.g. loan leverage), the ratio of loans and assets to capital, and the unabated acceleration of asset leverage.

Pollock recommends uncollateralized money or narrow banking as the framework for the optimal banking system to ensure the stability of banks and the payments system by enforcing collateral requirements to secure the stock of money.

III. ALTERNATIVES TO NARROW BANKING

Bossone (2002) offers some alternatives to narrow banking that, he claims, would contribute to increased financial market completeness, spur competition within the banking sector, and strengthen market discipline, without suppressing conventional banks. In his words, “the patient’s health would be restored through good medicine, not euthanasia”.

Bossone refers to Mishkin (1999), where the latter has proposed a free-choice regulatory alternative that would allow banks to provide customers with a choice between safe accounts and traditional ones. The alternative would not eliminate the risks inherent in conventional banking, but keeps the money creation power to banks, provide cautious investors with risk-proof money instruments, and allow financial institutions and their customers the option of conventional and/or narrow banking instruments.

Bossone finds the alternative put forward by Bryan (1991) appealing. According to Bryan’s “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.

Bossone offers two more alternatives that 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 that gives banks, in the event of liquidity problems, the right to suspend deposit convertibility for a predetermined interval during which it would liquidate its assets in an orderly fashion. Meanwhile, banks’ deposits would continue to circulate in the payment system. In order to induce depositors to accept such a provision, the bank would commit to pay an interest penalty or a premium on the deposit interest rate in the event it invoked the option.

Banks could also issue subordinated debt, as proposed by Keehn (1989), Wall (1989) and Calomiris (1999). In the event of insolvency, a bank would have to make good on its subordinated debt only after depositors were reimbursed. Presumably holders of these securities would be more capable than most depositors of ascertaining the soundness of a financial institution. Their assessments 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.

IV. NARROW BANKING & ISLAMIC BANKING

Islamic banking provides for payment-settlement as well as credit-provision arrangements. The former arrangements center around demand deposits while the latter depends on using Islamic modes of finance to provide credit to the economy. We can therefore look at Islamic banking from three vantage points. The first relates to the relationship between demand depositors and banks. The second relates to the relationship between savers and banks. The final vantage point relates to the relationship between banks and fund users. The three relationships are explained below.

A. Demand Depositors and Islamic Banks

Demand deposits in Islamic finance are considered as loans that must be paid on demand. The monetary system must therefore be structured to eliminate all risk involved in fulfilling banks obligations towards demand depositors. That is why some economists called for the application of 100 percent required reserve ratio to demand deposits (Al-Jarhi, 1983). The proposal for 100 percent required reserve ratio can also be justified on the basis of efficiency, stability and equity. The reasons for the first two bases run similar to those used in support of narrow banking.

On the side of efficiency, the banking system requires no deposit guarantee scheme, is more responsive to market forces and less encumbered with regulations. The social cost of running the banking system would certainly be less than in the case with fractional reserves. Banks under the system of 100 percent reserves are deprived from the ability to issue money (Al-Jarhi, 2002). They would therefore have less monopoly power⁶. We can therefore conclude that such a system would be more efficient.

On the side of stability, the banking system would be less likely to face runs on banks, because of the application of 100 percent reserves. In addition, debt is not sellable in an Islamic financial system, except at nominal value, while it can be swapped against assets and other goods and services. The absence of an integrated debt market reduces the possibilities for the phenomenon of hot money to play a role at times of crisis (Al-Jarhi 2003).

On the side of equity, we must note that money as a means of exchange owes its quality to the general acceptance by the public. Naturally, the direct benefits of

⁶ Banks would be expected to continue to enjoy monopoly profit, to the extent that banking licences are not given to all applicants, but they will forgoe monopoly profits from issuing money.

issuing money (seigniorage) should be given to the public, rather than to a small group of bankers. Seigniorage should, therefore, be given to the government to spend for the benefits of the public.⁷ Some have found that share of banks from the monopoly rent of issuing money in several member countries of the Islamic development bank are no less than one percent of GDP and could go even much higher (Al-Jarhi, 2002). Therefore, we can say that the fractional reserve system redistributes wealth to the advantage of few bankers and at the expense of the whole society. This certainly runs contrary to equity.

B. Savers and Islamic Banks

Savers can carry out direct investment, purchase financial instruments or hold investment deposits. The latter option amounts to entrusting a bank with investing ones savings. Investment deposits can be unrestricted, i.e., authorizing the bank to place their proceeds in the general investment pool of the bank, or restricted, i.e., authorizing the bank to place them in specific projects, sectors, or funds. According to the rules of Islamic finance, investment deposits are entrusted with banks on a profit-loss-sharing basis. The bank sets from the beginning the percentage of profit that would be allocated to each investment-deposit holder. Investment deposits are not guaranteed except in cases of negligence or unethical behavior on the part of the bank.

This is similar to the mutual fund or investment bank concept that has been associated with narrow banking. The main difference is that the same bank can provide demand deposit services and accept investment deposits at the same time. Each bank can handle both transactions and investment services simultaneously.

While investment deposits are not guaranteed, the following measures or something similar can be applied:

- Banks can set up provisions from their own resources against unexpected losses.
- Banks can set provisions from their own resources to stabilize profits distributed to investment depositors. In times of low profit, banks can simply reduce their profit share and increase the share of depositors, while debiting the difference to the profit stabilization provisions.
- The monetary authority can set rules, e.g., capital adequacy, to increase the ability of banks to meet their obligations to investment deposit holders in cases of negligence or unethical behavior.

⁷ Ideally, seigniorage should be distributed over all citizens in proportion to their money holdings.

Obviously, such a system provides more stability to the banking system, as the profit distributed to banks will depend on the performance of their investments. Investment deposits would have preset maturities, which leave no room for runs on banks.⁸

C. Investment and Islamic Banks

Banks can finance investment through two main categories of modes of finance. The first is the profit-and-loss sharing modes, which includes forms of equity (sharing in both capital and management), and forms of fund placement or *mudharabah*. The second category includes several forms of commodity finance.

The latter category provides fixed-income placements for banks, as it provides finance of commodity purchase on the basis of mark-up. A mixture of commodity and profit-and-loss sharing finance could provide the bank the right combination of risk and return.

V. CONCLUSIONS

As seen from above, the narrow banking proposal has merits that become specially obvious in economic analysis when other opportunities of investment outside the banking sector are recognized. It bears similarities with Islamic banking, to the extent that demand deposits are guaranteed both theoretically and practically. Under narrow banking, the role of investment banks would carry features similar to Islamic banking when the relationship between savers and banks are considered. However, when it comes to financing investment, Islamic banks avoid trading future for present money, while conventional investment banks stick to the interest-based modes of finance.

⁸ Banks can offer “*passbook* investment accounts, which can be augmented and withdrawn at any time, similar to the “*passbook* saving accounts” offered by conventional banks. Such accounts are expected to earn a much lower profit share than *maturity-specific* investment deposits.

REFERENCES

- Al-Jarhi, Mabid Ali (1981), *Towards an Islamic Monetary and Financial System: Structure and implementation*, Arabic Language Publications Series No. 5, Jeddah: International Center for Research in Islamic Economics, King Abdulaziz University.
- _____ (1983), 'A Monetary and Financial Structure for an Interest-Free Islamic Economy: Institutions, Mechanism and Policy', in Ahmed, Ziauddin et al. (eds.), *Money and Banking in Islam*, Islamabad: IPS & Jeddah: KAAU).
- _____ (2002), 'Monetary Policy in an Islamic Framework', *Studies in Islamic Economics*, also in Mabid Ali Al-Jarhi and Osman Babikir (2002), *Proceedings of a workshop on Monetary and Fiscal Policies*, Jeddah: IRTI.
- _____ (2003), 'Finance for Development: Islamic Finance as an Efficient and Equitable Option', *Islamic Economic Studies*, Forthcoming.
- Allais, Maurice (1948), *Economie et l'intérêt: Exposition nouvelle des problèmes fondamentaux, relatifs au rôle économique du taux de l'intérêt et de leurs solutions*, two volumes, Paris: Librairie des Publications Officielles.
- Bossonne, Biagio (2002), 'Should Banks Be 'Narrowed'?', An Evaluation of a Plan to Reduce Financial Instability, Public Policy Brief No. 69, The Jerome Levy Economics Institute of Bard College, July.
- Bryan, L. (1991), 'Core Banking', *The McKinsey Quarterly*, (1), 61–74.
- Bryant, J. (1980), 'A Model of Reserves, Bank Runs, and Deposit Insurance', *Journal of Banking and Finance*, **4**, 335–344.
- Burnham, James B (1991), 'Deposit Insurance: The Case for the Narrow Bank', *Cato Review of Business and Government*, spring, 35-43.
- Calomiris, C.W. (1999), 'Building an Incentive-Compatible Safety Net', *Journal of Banking and Finance*, **23**(10), 1457–555.
- Cooper, R., and T. Ross (1998), 'Bank Runs: Liquidity Costs and Investment Distortions', *Journal of Monetary Economics*, **41**, 27–38.
- Diamond, Douglas W. and Philip H. Dybvig (1983), 'Bank Runs, Deposit Insurance, and liquidity', *Journal of Political Economy*, **91**(June), 401–19.
- _____ (1986), 'Banking theory, deposit insurance, and bank regulation', *Journal of Business*, **59**(January), 55–68.
- Diamond, Douglas W. and Raghuram G. Rajan (2000), 'Liquidity risk, liquidity creation and financial fragility: A theory of banking', *Working Paper 7430*, National Bureau Of Economic Research, <http://www.nber.org/papers/w7430>.

- Freixas, X., and J. C. Rochet (1997), *Microeconomics of Banking*, Cambridge, MA: The MIT Press.
- Friedman, Milton (1960), *A Program for Monetary Stability*, New York: Fordham University Press,
- Garcia, Valeriano, Rodolfo Marino and Vicente F. Cibils (2000), 'Remedy For Banking Crises: What Chicago and Islam Have In Common', Seminar on Islamic Banking Industry. Alexandria, Egypt, October.
- Gertler, M. and S. Gilchrist (1994), 'Monetary Policy, Business Cycles and the Behavior of Small Manufacturing Firms', *Quarterly Journal of Economics*, **109**, 309-340.
- Gorton, G. and G. Pennacchi (1993), 'Money Market Mutual Funds and Finance Companies: are they the Banks of the Future?', in: Klausner, M., White, L. (eds.), *Structural Change in Banking*, Irwin Publishing, 173-227.
- Holmstrom, B., and J. Tirole (1998), 'LAPM: A Liquidity-Based Asset Pricing Model', *NBER Working Paper No. 6673*.
- Jacklin, C., (1987), 'Demand Deposits, Trading Restrictions, and Risk Sharing', in: Prescott, E. and N. Wallace (eds.), *Contractual Arrangements for Intertemporal Trade*, Minneapolis: University of Minnesota Press.
- Kashyap, A., R. Rajan and J. Stein (1999), 'Banks as Liquidity Providers: An Explanation for the Co-Existence of Lending and Deposit-Taking', *NBER Working Paper No. W6962*.
- Kashyap, A., Stein, J. (1995), 'The Impact of Monetary Policy on Bank Balance Sheets', *Carnegie-Rochester Conference Series on Public Policy*, **42**, 151-195.
- _____ (1999), 'Monetary Policy and Bank Lending', *National Bureau of Economic Research Working Paper 4317*.
- Keehn, S. (1989), 'Banking in the Balance: Powers and the Safety Net: A Proposal', *Working Paper. Chicago: Federal Reserve Bank*.
- Kiyotaki, N. and J. Moore (1997), 'Credit Cycles', *Journal of Political Economy*, **105**: 211-248.
- Lamont, O. (1995), 'Corporate Debt Overhang and Macroeconomic Expectations', *American Economic Review*, **85**, 1106-1117.
- Litan, Robert (1987), *What Should Banks Do?*, Washington: The Brookings Institution.
- Miles, William (2001), 'Can Narrow Banking Provide a Substitute for Depository Intermediaries?', Department of Economics, Wichita State University, 30 April. <http://research.stlouisfed.org/conferences/moconf/papers/miles.pdf>
- Mishkin, F. (1999), 'Financial Consolidation: Dangers and Opportunities', *Journal*

- of Banking and Finance*, **23**, 675–91.
- Phillips, Ronnie J. (1992a), ‘The Chicago Plan and New Deal Banking Reform’, *Working Paper No. 76*, the Jerome Levy Economics Institute of Bard College.
- _____ (1992b), ‘credit Markets and Narrow Banking’ *Working Paper No. 7*, The Jerome Levy Economics Institute of Bard College.
- _____ (1995), ‘Arrow Banking Reconsidered’ *Working Paper No. 18*, The Jerome Levy Economics Institute of Bard College.
- Pollock, Alex J. (1992), ‘Fundamental Change Little by Little: Banking Revolution’, Public Policy Brief, the Jerome Levy Economics Institute of Bard College, No. 1/1992, 25-42.
- Shy, Oz and Rune Stenbacka (2000), *A Bundling Argument for Narrow Banking*, Bank of Finland June 19,
- Solomon, Anthony M (1992), ‘Personal Views on Financial Reform’, Public Policy Brief ,the Jerome Levy Economics Institute of Bard College, No. 1/1992, 13-24.
- Spong, Kenneth (1989), *Narrow Banking and its Implications for Deposit Insurance Reform*, Kansas City: Division of Bank Supervision and Structure, Federal Reserve Bank of Kansas City, 1. Spong, Kenneth (1993), ‘Narrow Banks: An Alternative Approach to Banking Reform’, *Working Paper No. 90*, Federal Reserve Bank of Kansas City, April.
- Tobin, James (1985), ‘Financial Innovation and Deregulation in Perspective’, *Bank of Japan Monetary and Economic Studies*, **3**(2), 19-29.
- _____ (1987), ‘The Case for Preserving Regulatory Distinctions’, in *Restructuring the Financial System*, Federal Reserve Bank of Kansas City, 167-183.
- Villamil, A. (1991), ‘Demand Deposit Contracts, Suspension of Convertibility, and Optimal Financial Intermediation’, *Economic Theory*, **1**(3), 277–288.
- Wall, L. D. (1989), ‘A Plan for Reducing Future Deposit Insurance Losses: Putable Subordinated Debt’, *Economic Review* (July/August), Atlanta: Federal Reserve Bank, 2–17.
- Wallace, Neil (1988), ‘Another attempt to explain an illiquid banking system: The Diamond and Dybvig model with sequential service taken seriously’, *Federal Reserve Bank of Minneapolis Quarterly Review*, **12** (Fall), 3–16.
- _____ (1990), A Banking Model in Which Partial Suspension is Best’, *Federal Reserve Bank of Minneapolis Quarterly Review*, **14** (Fall), 11–23.
- _____ (1996), ‘Narrow Banking Meets the Diamond-Dybvig Model’, *Federal Reserve Bank of Minneapolis Quarterly Review*, **20**(1), Winter, 3–13.