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# Is This the Minsky Moment for Reform of Financial Regulation?

by

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## **ABSTRACT**

The current financial crisis has been characterized as a “Minsky” moment, and as such provides the conditions required for a reregulation of the financial system similar to that of the New Deal banking reforms of the 1930s. However, Minsky’s theory was not one that dealt in moments but rather in systemic, structural changes in the operations of financial institutions. Therefore, the framework for reregulation must start with an understanding of the longer-term systemic changes that took place between the New Deal reforms and their formal repeal under the 1999 Financial Services Modernization Act. This paper attempts to identify some of those changes and their sources. In particular, it notes that the New Deal reforms were eroded by an internal process in which commercial banks that were given a monopoly position in deposit taking sought to remove those protections because unregulated banks were able to provide substitute instruments that were more efficient and unregulated but unavailable to regulated banks, since they involved securities market activities that would eventually be recognized as securitization. Regulators and the courts contributed to this process by progressively ruling that these activities were related to the regulated activities of the commercial banks, allowing them to reclaim securities market activities that had been precluded in the New Deal legislation. The 1999 Act simply made official the de facto repeal of the 1930s protections. Any attempt to provide reregulation of the system will thus require safeguards to ensure that this internal process of deregulation is not repeated.

**Keywords:** Financial Regulation; Financial Crisis; Subprime Crisis; Mortgage Affiliate Regulation; Financial Legislation; Supreme Court and Financial Deregulation

**JEL Classifications:** G21, G24, G28

## **I. A MINSKY MOMENT?**

The recent instability in the mortgage markets, driven by the securitization of nonconforming subprime and Alt-A mortgages, was initially characterized by some market analysts as a “Minsky Moment.” Yet, in March of 2007, the Chairman of the Federal Reserve considered “the impact on the broader economy and financial markets of the problems in the subprime markets seems likely to be contained” (Bernanke 2007). Nonetheless, this relatively small one trillion dollar sector of the mortgage market soon produced a crisis of the entire U.S. financial system, which, in the words of Treasury Secretary Paulson, was “the worst financial crisis in the nation’s history” (Paulson 2008). This more general financial crisis was also baptized a “Minsky Moment.”

However, those who are acquainted with Minsky’s work will recognize that his approach had little to do with “moments.” It was about the sustained, cumulative processes in which periods of stability induce an endogenous increase in potential financial fragility. Fragility provides the fertile ground for financial instability, leading to a process of debt deflation and a full-blown Minsky crisis. On this basis, the initial subprime crisis was not the result of a Minsky process of increasing financial fragility, but rather the result of a simple Ponzi scheme that was preprogrammed into nonconforming mortgages and the structured products for which they served as collateral (Kregel 2008). While the development of the system that produced these destructive financial instruments may have been part of a longer-term process, the inherent fragility of the instruments was not. Nonetheless, Minsky’s analytical framework, based on analyzing cash receipts and cash commitments, has been a particularly appropriate tool for understanding that these mortgage structures were inherently fragile from their creation and, thus, preordained to generate financial instability and a Minsky crisis.

The fact that the subprime crisis was able to spread to the rest of the financial system and set off a full-scale bout of systemic instability and debt deflation is, however, the result of a Minsky process of sustained and increasing financial fragility in the rest of the financial system. To understand this process does not require an analysis of the financial instruments implicated in the crisis, but of the evolution of the U.S. financial system, starting from the implementation and deterioration of Glass-Steagall New Deal legislation. An analysis of the “moment” is not a sufficient for this purpose.

By the same token, regulation of the system cannot be effective if it is simply based on measures produced to remedy and reverse the conditions generated by the current “moment.” It needs to reformulate the structure of the financial system. Unfortunately, the current approach to regulation seeks to remedy the present moment by applying to existing financial institutions and their existing business models a series of cosmetic changes. These include proposals to increase bank capital ratios, set a maximum leverage ratio and a minimum liquidity ratio, along with ex post controls on executive pay and traders bonuses—and if these fail to produce stability, to provide a more efficient means of resolving insured and uninsured large scale financial institutions when they fail—but they leave the basic structure of the system unchanged. If this was only a Minsky “moment,” its analysis cannot provide the basis for effective reregulation. Effective proposals can only emerge from analysis of the longer-term structural changes from the point of view of Minsky’s financial fragility hypothesis. This paper seeks to use a Minsky *process* analysis, rather than a Minsky *moment* analysis, to identify two types of structural changes in the system that reforms must seek to redress and reverse.

The first is the way the financing of business by means of capital market instruments—in particular, structured securitization—has led to an integration of banking and finance functions. The second is the way these structures have reduced system liquidity and increased fragility by increasing financial layering. This analysis leads to the conclusion that in a purely privately owned financial system it may be impossible to fully separate deposit-taking “commercial” banks from capital market activities if securitization is maintained as the basic structure used to provide financing to business and to other financial institutions. Nonetheless, it is possible to prevent banks from engaging in particular types of financial activities, in particular, proprietary trading and the financing of certain types of arbitrage trading that are not strictly related to the financing of business. That is, there should be a distinction between those financial institutions that create credit through liquidity arbitrage and those that arbitrage credit to engage in risk arbitrage with a limitation on the ability of the former to provide credit to the latter, as well as a preclusion of their ability to engage in the latter activities.

## II. WHAT DO (SHOULD?) BANKS DO?

It is a common criticism of the current policies to support the recovery of the financial system that they are not functioning efficiently because financial institutions are not lending. Rather, the expansion of the Fed's balance sheet since the autumn of 2008 has simply expanded banks' excess reserves without increasing loans or the money supply. However, this criticism seems to ignore one of the basic structural changes underlying the recent financial crisis—banks no longer “lend” to the nonbank business section. If at all, they primarily lend to themselves, i.e., to other financial institutions. Indeed, one of the causes of the spread of the crisis was the collapse in liquidity that was the result of financial institutions no longer lending to each other.<sup>1</sup>

This is a major departure from the ideal operation of the financial system envisaged by the 1933 Banking Act. The New Deal legislation was meant to produce a system in which Federal Reserve member banks offered transactions deposits to the public, backed by deposit insurance and required reserves, and lent funds on a short-term basis to finance works in progress or other types of fully collateralized business activities. Thus, Section 16 of the Act defines the “business of banking” as “discounting and negotiating promissory notes, drafts, bills of exchange, and other evidences of debt; ... receiving deposits; ... buying and selling exchange, coin, and bullion; ... loaning money on personal security; ... obtaining, issuing, and circulating notes...” (Krooss 1969: 2755).

In addition, financial institutions in the business of banking were protected from competition from financial institutions doing other types of business. Section 21 forbid “any person, firm, corporation, association, business trust, or other similar organization, engaged in the business of issuing, underwriting, selling, or distribution, at wholesale or retail, or through syndicate participations stocks, bonds, debentures, notes or other securities, to engage at the same time to any extent whatsoever in the business of receiving deposits ...” (Krooss 1969: 2761).

Together the restrictions on permissible activities and protection of those activities were intended to provide support for the two basic functions of the financial system, providing a safe and secure transactions system by insuring the value of transactions deposits in insured banks and ensuring that financing was available to business borrowers to support their ongoing

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<sup>1</sup> This is why Richard Koo's (2009) recent attempt to use his analysis of Japan's crisis to assess the current situation (there is no lending because borrowers are busy paying down debt) does not apply. There are financial institutions that are deleveraging, that need to borrow to augment capital and support asset books, but cannot find lenders.

production operations, leaving the long-term funding of business investments to uninsured financial institutions specializing in capital market activities.

As the crisis of the 1930s faded from memory, economists began to view these protections as creating a monopoly for deposit-taking banks, which, like other market restrictions, would produce economic inefficiencies in the operation of the protected banks themselves that would eventually render them vulnerable to competition from more efficient, nonregulated institutions. Indeed, it was argued that these market restrictions were not only unnecessary to provide financial stability, but that they might produce the opposite result. Characteristic of this position is the statement that “most of the individual proposals focused on increasing bank safety by decreasing competition in a particular area ... [thus] the Act, taken as a whole, was blatantly anticompetitive. ... The commercial banking sector became progressively disadvantaged relative to other sectors that could offer similar products with fewer restrictions. ... Today, there is general agreement among economists that most, if not all, of the restrictions imposed by the Banking Act no longer are necessary, if they ever were, at least for restricting risk” (Kaufman 1988: 184–5).

Indeed, the Glass-Steagall separation of deposit banks providing the short-term financing of business operations from the rest of the financial system dealing with the long-term funding of capital investment has not proven to be a stable structure for the financial system. If it ever existed, it no longer does. In a formal sense, banks no longer “lend,” because they do not own and hold the loans they originate. Instead the loans are aggregated and transformed into ersatz fixed-return capital market assets that are sold to a variety of private sector final investors who are the ultimate lenders. It is the widows and orphans who own the loans; the banks only serve as intermediaries in this process. A formal justification of this new arrangement is that it allows for a better distribution of risk throughout the system to those who are better able to bear, but it has simply resulted in a shift of the risk of short-term loans from financial institutions to the general public, many of whom do not even know they are bearing the risk.

This redistribution of risk has been facilitated by a misrepresentation of risks that takes two forms. First it is represented as a transformation of individual or idiosyncratic “alpha risk” into systemic or market “beta risk” through diversification and aggregation of the loans. Second, it presumed to allow the transformation of long-term, higher risk assets into short-term, lower risk assets. Both of these transformations involve capital market operations that were forbidden to banks under Glass-Steagall. The ability to engage in this process of redistribution and

reduction of risk is also the primary source of the competition that caused protected commercial banks to lose their traditional commercial and industrial loan business and eventually drove them to seek a release from the New Deal monopoly protections that had been transformed from protection to ensure safety from competition and an assured return to an impediment to respond to competition from nonbank providers of these two transformations.

From this point of view, the problem with Glass-Steagall was that it attempted to provide monopoly protection to ensure the stability of financial institutions, rather than the protection of the financial functions they were supposed to provide to the nonbank business sector. The important distinction in Glass-Steagall was between the short-term financing of business activity and the long-term funding of the private business investment. Once these functions became fused via risk transformation, the stability of the system became hostage to the search for lower cost means of providing financing that would produce higher returns, primarily through capital market activities.

### **III. FINANCIAL STABILITY VERSUS INCREASED EFFICIENCY**

The transformation of the business of making commercial and industrial loans was driven by the push by business borrowers for lower rates and the rising costs incurred by banks in providing business loans. This difficulty stems in part from a confusion in the traditional description of the role of banks between “deposit taking” and “deposit making.” It is the high technical costs of providing transactions accounts, as well as their regulation, that makes deposit taking a high cost activity that has resisted productivity increases, even with the introduction of automated bank tellers and other cost reduction measures.<sup>2</sup> However, the provision of transactions accounts is not directly related to the activity of financing business through loan origination. This requires “deposit making,” the granting of a loan through the creation of a deposit. This involves the creation of liquidity by a bank, an activity that has been subject to productivity improvements resulting from the application of computational advances and statistical theory. As a result, even when banks were given free Regulation Q deposits under Glass-Steagall, these deposit-taking costs made it difficult to compete with nonbanks who developed more cost effective means of creating liquidity.

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<sup>2</sup> This is also due in part to the archaic means of compensated settlement for check clearing practiced in the U.S. banking system. On this point, see Mayer (1998).

It was asset securitization that provided the means for nonbanks to challenge the monopoly protection that Glass offered to banks by producing lower financing spreads through risk reduction and redistribution. The first step in this process was the corporate issue of commercial paper as a substitute for traditional short-term bank lending, reinforced by the growth of money market mutual funds, to provide a growing demand for these assets. Then asset securitization produced further reductions in financing costs, as asset-backed commercial borrowing conduits were used to issue asset-backed commercial paper that could be purchased by a money market mutual fund. Through this process of financial layering firms were eventually able to obtain finance and funding in the most liquid, lowest interest rate market for both their short- and long-term financial requirements. For all intents and purposes these structures were equivalent to banks and formed what came to be called the “shadow banking system” or “banks without bank charters” (Anderson and Gascon 2009: 599).

Under Glass-Steagall, insured banks could not compete directly in this process because all of these product innovations required capital market operations that were forbidden to them. It is thus not surprising that both regulated banks and business firms cooperated in breaking down the monopoly that “protected” them from responding to this competition. Paradoxically, nonbank financial institutions consistently fought the actions to dismantle the Glass monopoly protections for insured banks that isolated them from competition from insured banks!

While these changes have been represented as financial innovations, they were also the result of innovative regulatory interpretations because they could not have been introduced without enabling legislation and administrative rulings by the SEC and the Federal Reserve that supported those who sought the erosion of the protections of deposit-taking banks. Again, ironically, these measures were taken with the intention protecting insured banks. It was these regulatory changes that eventually eliminated the separation of banking and finance auspicated under the New Deal regulations and produced the shift from traditional net interest margin banking to financial arbitrage risk reduction—a move that has caused the shift of bank lending away from business borrowers and toward lending to support the holding of financial assets by other financial institutions.



#### **IV. DEREGULATION TO SAVE THE DEPOSIT BANKS FROM THEIR PROTECTION**

The traditional Glass-Steagall approach to banking can be considered as a swap transaction in which a bank swaps its own liability, a deposit, for the short-term collateralized liability of a business firm. The bank's earnings are determined by the rate differential—a difference that is maximized by the efficient assessment of the credit of the borrower, reducing the rate of charge offs on loans. As Minsky has pointed out, a financial institution can only earn income on this spread if the rate on the liability is lower than on the asset. He said that this means that the bank's liabilities should have a higher liquidity premium than the assets they finance. Part of the business of banking is thus ensuring this liquidity premium. In the case of the difference between deposit liabilities and commercial and industrial (C&I) business loan assets under Glass-Steagall this is relatively straightforward. Deposit insurance, reserve balances, and supervision ensure that the bank's deposits, issued to a business firm in the form of a loan, have liquidity equal to that on currency issued by the Federal Reserve. A deposit that is a perfect substitute for currency has the highest liquidity premium and thus the lowest, risk-free interest rate.

In contrast, in a securitized lending structure, liquidity is created on the balance sheet of a separate institution (technically a trust or a special purpose entity or vehicle) that, by the magic of diversification and aggregation, “arbitrages” higher risk assets into lower risk assets and, as a result, lower liquidity assets into higher liquidity assets. This leads to a different type of swap spread and a process that focuses on the identification of market mispricing rather than improving credit assessment to increase the efficiency of the banking system.

This shadow banking securitization process has been described as “riskless arbitrage”:

When one looks at any class of properly structured loans as a national aggregate, they will perform in line with national economic trends. If properly underwritten to statistically significant standards, and appropriately assured against default, variance in performance of properly pooled and valued loans will be determined by national trends in interest rates and national economic success or failure. At various times since 1987, loans underwritten and sold in financial markets have sometimes lived up to these underwriting standards and have sometimes failed them miserably. For riskless arbitrage to work appropriately, markets must produce loans worthy of reliable and predictable arbitrage. ... In loan arbitrage transactions, the price

to arbitrage versus the gain created by spread determines profit or loss. The higher the 'spread' the more profitable it is to pool loans and fund them in high grade bond markets (the arbitrage process), assuming the ability to freely arbitrage on a consistent basis. (Feldkamp 2009: 1, note 1)

This price arbitrage involves the financial institution in the evaluation of a very different series of issues than in the traditional spread implicit in net margin lending. Instead of a spread between borrowing and lending rates determined by the ability of the bank to assess credit risk and to ensure the liquidity of its liabilities, riskless arbitrage requires just the opposite process.

A 'riskless arbitrage' arises whenever a market participant can acquire a commodity at a lower price in one market than the price at which it can sell that same commodity in another market and lock in a price differential that guarantees a profit. ... In financial market 'riskless arbitrage' participants: (1) originate or acquire loans at a rate on the 'high' side of a rate spread and (2) 'pool' them in a manner that either properly diversifies and moderates individual loan loss risk or insures against default, provides assured servicing and collection for pool investors and, ultimately, justifies a superior rating for securities backed by the pool. The arbitrageur then sells securities priced at the 'low' side of a rate spread in amounts that lock in a differential which guarantees profit. (Feldkamp 2009)

Here it is the diversification and structuring of the securitization that produces risk reduction along with the distribution of the assets into the overall market that increases liquidity and converts higher rate, more risky, assets into lower rate, less risky, assets. The process has nothing to do with the credit quality of the borrowers or the ability of the bank in assessing them; the income that is generated comes not so much from the interest spread or margin as the addition of the fees and commissions that result from the loan originations and the underwriting of the securities.

Since this process of price arbitrage involves the creation of affiliate structures, underwriting, and other capital market activities that regulated banks could not undertake while subject to Glass, they were forced to seek exemptions from their monopoly protections in order to offer similarly competitive loans to business. This required the creation of special entities that could engage in such capital market and other underwriting activities and this is precisely what insured banks sought to do with the aid of regulators.

## V. ESCAPING PROTECTION WITH THE HELP OF THE PROTECTORS

The legislators who wrote the New Deal legislation were convinced that the collapse of the system had been caused by the creation of state-chartered affiliates by national banking associates, which allowed them to operate in capital market activities that were forbidden to them under Federal legislation. Section 20 forbid member banks from being “affiliated in any manner ... with any corporation, association, business trust, or other or similar organization engaged principally in the issue, floatation, underwriting, public sale, or distribution at wholesale or retail or through syndicate participation of stocks, bonds, debentures, notes or other securities (Krooss 1969: 2760), while Section 21 forbid any firm engaged in such activities from “the business of receiving deposits subject to check or to repayment upon presentation of a passbook, certificate of deposit, or other evidence of debt, upon request of the depositor” (Krooss, *ibid*: 2761). The intention was to separate the deposits of the public from exposure to any capital market activities and, in particular, to prevent member banks from owning or dealing in equity. To reinforce the point, Section 13 states that:

No member bank shall: (1) make any loan or any extension of credit to, or purchase securities under repurchase agreement from, any of its affiliates, or (2) invest any of its funds in the capital stock, bonds, debentures, or other such obligations of any such affiliate, or (3) accept the capital stock, bonds, debentures, or other such obligations of any such affiliate as collateral security for advances made to any person, partnership, associate, or corporation, if, in the case of any such affiliate, the aggregate amount of these loans, extensions of credit, repurchase agreements, investments, and advances against such collateral security will exceed 10 per centum of the capital stock and surplus of such member bank, or if, in the case of all such affiliates, the aggregate amount of such loans, extensions of credits, repurchase agreements, investments and advances against such collateral security will exceed 20 per centum of the capital stock and surplus of such member bank [with an over collateralization of 20 percent on the value of all such operations]. (Krooss 1969: 2752–3)

However, in 1985, the Fed ruled that bank holding companies could acquire as subsidiaries firms that offered both brokerage and investment advice to institutional customers. These interpretations of the New Deal banking legislation had two important implications. The

first was that it allowed banks the ability to engage in asset securitization<sup>3</sup> and the second was that, in order to absorb their additional affiliate earnings, they needed to expand the gross income of their Section 20 affiliates, which they did by expanding their matched book repurchase business. Thus, the decision by the Fed to allow banks to enter securitization also produced the expansion of banks into short-term collateralized lending through repurchase agreements.

## **VI. HOW THE REGULATORS AIDED AND ABETTED THE DECLINE OF THE STABILITY OF BANKS**

Additional legislation was required in order to allow the transformation of traditional commercial bank lending into securitized lending. There were two steps involved. Since the process involved capital market activities, they required appropriate SEC interpretations of legislation governing the activities of nonbank financial institutions, as well as appropriate interpretations of bank holding company legislation by the Federal Reserve. An asset securitization is based on the creation of an independent, arms-length legal structure, usually called a special purpose vehicle or entity, by a regulated commercial bank. This creates a conundrum for securities legislation. If its liabilities are classified as securities, then they are subject to regulation by the SEC and to reporting to the SEC under the 1940 Investment Company Act.

The definition of an investment company under the Act would normally have subjected most structured financing securitization arrangements to SEC regulation because they issue securities to the public (typically in the form of bonds or equity interests) and invest in, own, hold, or trade securities. However, the cost of meeting these regulations would have largely offset the profitable spread operation of the “riskless arbitrage” noted above had it not been for an exemption granted in Rule 3a-7 in 1992 for issuers of asset-backed securities that excluded virtually all structured financing arrangements from the definition of an investment company; see Siclari (2001). At the same time, the SEC permitted shelf-registration for such structures, opening the way for full implementation of “riskless arbitrage.” This was simply a parallel of the allowance that had been granted to investment banks for securities underwriting under Rule

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<sup>3</sup> An issue that Minsky considered crucial but did not discuss in great length in his published work; see Minsky (2008).

415. While these securitization structures were first experimented with in mortgage lending, they soon spread to all types of private assets and eventually allowed banks to use their own commercial loans as collateral for securitized structures. This opened an additional method for banks to organize and operate security affiliates, but in difference from Section 20 affiliates, these special purpose entities were not regulated and were not consolidated for financial reporting purposes.

In 1984, the Supreme Court ruled that the Federal Reserve had the authority to allow regulated banks to acquire brokerage firms as a subsidiary in a bank holding company (468 U.S. 207, 104 S.Ct. 3003) and, in 1985, the Fed ruled that bank holding companies could acquire as subsidiaries firms that offered both brokerage and investment advice to institutional customers. Interpretations issued in 1986 and 1987 further relaxed Section 20 restrictions and then expressly allowed regulated banks to engage in securitization via affiliation with companies underwriting commercial paper, municipal revenue bonds, and securities backed by mortgages and consumer debts—as long as the affiliate did not principally engage in those activities. The decision interpreted “principally engaged” as contributing more than 5 percent (subsequently raised to 10 percent) of gross revenues. Both rulings were subject to legal appeal by investment banks seeking to protect themselves from encroachment from regulated commercial banks, but both decisions were upheld by the relevant legal jurisdictions. In addition, the FDIC ruled that Glass did not apply to nonmember insured banks and allowed them to engage in securities activities.

## **VII. SECURITIZATION AND MONEY MARKET MUTUAL FUNDS AS SUBSTITUTES FOR BANK DEPOSIT ACCOUNTS**

Money market mutual funds (MMMF) first appeared in 1971 and were considered short-term investment pools subject to registration requirements under the 1940 Investment Company Act. From 1983 they were regulated under SEC Regulation 2a-7 to guarantee that the underlying net asset value of a fund’s assets would support the advertised guarantee of a \$1 per share net asset value. Defaults by commercial paper issuers in 1989 and 1990 led to additional risk limitations on credit quality, diversification, and maturity for such structures. It also set limits on asset concentration, requiring 95 percent of assets be invested in Treasury securities and no more than 1 percent of its remaining 5 percent of assets in any one issuer. MMMFs originally invested in

short-term government paper and commercial paper, and represented a major competitor for both bank depositors and bank borrowers.<sup>4</sup> In 1982, Congress authorized such accounts for regulated banks in the form of money market deposit accounts.

Federal and state regulators also helped to expand the acceptance of money market funds among institutional investors. For example, money market funds were approved as investments for national banks by the Office of the Comptroller of the Currency (OCC), for state-chartered banks by the Board of Governors of the Federal Reserve System and the Federal Deposit Insurance Corporation, and for federal credit unions by the National Credit Union Administration. They have also been approved as an investment vehicle for customer funds held in custody by futures commission merchants and futures clearing organizations by the Commodity Futures Trading Commission and for margin collateral by the Clearing Corporation, the New York Mercantile Exchange, the Chicago Mercantile Exchange, and the Options Clearing Corporation. State and municipal entities also hold money market funds. In addition, the SEC has approved investment of the prefunded portion of an asset-backed issuance in money market funds. Revisions of the SEC regulation in 1992 allowed repurchase agreements to be considered as equivalent to investments in the underlying securities as long as they were fully collateralized and revisions in 1997 dealt with their investment in asset-backed securities as long as they received appropriate ratings from a nationally recognized statistical rating organization, however, there was no requirement “whether the rating received must be short or long term” (Money Market Working Group 2009: 162). With the introduction of structured finance, money market funds also expanded their acquisition of asset-backed securities issued as the liability of unregistered securitized structures. It thus became possible to finance long-term corporate debt to the public by means of a money market fund that offered liquidity equivalent to that of a regulated bank deposit, but with a higher interest rate.

The general impact of the combination of money market funds and structured securitization is to convert less liquid, higher risk securities into securities that appear to be more liquid with lower risk—they offer “riskless arbitrage” or, in Minsky’s terms, they provide liabilities with a higher liquidity premium than the assets. However, the benefits that accrue to business borrowers in the form of lower financing costs are only made possible by the creation

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<sup>4</sup> In 1983, commercial paper outstanding accounted for about a fifth of the one trillion in nonmortgage loans on the books of banks and finance companies. By mid-2007, it accounted for over half of the three and a half trillion of on-balance-sheet assets. Money market mutual fund holdings of commercial paper was a third of the total (Money Market Working Group 2009: 20).

of additional liquidity for the liabilities of the entities. The impact of these structures allowed noninsured institutions to challenge the ability of banks to make their liabilities more liquid than assets through insurance and regulation. They also increased system liquidity without the same prudential regulatory measures imposed on banks to ensure the liquidity and price of deposit liabilities. It is exemplary of the U.S. regulatory system that money market deposit accounts and regulated bank deposits are considered equivalent, yet the issue of the former are regulated by the SEC, while the latter are regulated by the Fed and the OCC.

The systemic increase in liquidity was further enhanced by the already referenced interpretation of Section 20 allowing affiliation with entities not principally engaged in capital market activities. Section 16 of the 1933 Banking Act had made it clear that the purchase of “any shares of stock of any corporation” was forbidden to insured banks. Further, “the business of dealing in investment securities by the association shall be limited to purchasing and selling such securities without recourse, solely upon the order, and for the account of customers, and in no case for its own account, and the association shall not underwrite any issue of securities” (Krooss 1969: 2755).

## **VIII. INCIDENTAL POWERS UNDERMINE GLASS-STEAGALL**

However, Section 16 limiting the business of banking and precluding dealing in equities left open a massive exception by granting member banks “all such incidental powers as shall be necessary to carry on the business of banking” (Krooss 1969: 2755). Most of the exceptions that led to the progressive erosion of Glass-Steagall came in interpretations of “incidental powers.”<sup>5</sup> It was the OCC that was most active in extending the interpretation of “incidental powers” to cover activities that are not specifically mentioned as being compatible with the “business of banking” in Section 16, including equity derivative transactions and risk management activities, such as derivatives and equity trading to hedge risks arising from banking activities. These rulings eventually led to the complete reversal of the original intention of preventing banks from dealing in securities on their own account and laid the basis for the creation of proprietary

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<sup>5</sup> This language was originally introduced in Section 8 of the National Bank Act of 1863, granting national associations “all such incidental powers as shall be necessary to carry on the business of banking ...” but made no reference at all to securities. See Krooss (1969:1386). There has been extended debate concerning whether these powers are restricted to those expressly mentioned in the law or are subject to interpretation. In practice, the decision is left with the OCC, created in the same legislation. A 1995 Supreme Court decision (*NationsBank of North Carolina, N.A. v. Variable Annuity Life Insurance Co.*) affirmed OCC’s power to interpret Section 8.

trading by banks for their own account, as well as for dealing in derivatives and the provision of structured derivative lending, both of which led to the rapid growth of the over-the-counter market in credit derivatives.<sup>6</sup>

However, there was another aspect of the Section 20 affiliate exemption that was even more important. The limitation on earnings from capital market activities was set as a share of the gross earnings of the affiliate. This meant that it had to generate 95 percent of its income from permitted activities. Since banks were granted the ability to deal in government securities, the affiliates expanded their activities in this area, generating revenues through matched book repurchase activities in which risk is minimized by holding offsetting positions in securities repurchase (or “repos”) and reverse repos earning the bid-ask spread. The larger the earnings from these activities, the larger the nonpermissible activities allowed. This laid the basis for the growth of the entire repo market. This had two impacts. First, it provided an alternative investment for corporate short-term deposits, since Treasury bill rates could be earned on overnight money. Second, it provided the possibility for spread traders to finance their positions through the repo market. These activities eventually led to an unregulated over-the-counter market that was responsible for funding trading books with corporate money, a market that was as important in the current crisis as the credit default market.<sup>7</sup>

Over-the-counter derivatives also provided a means of defense from competition from nonregulated institutions, as they offered a way for member banks to increase the rates they could pay for deposits after Regulation Q limits were removed. This was achieved by packaging an option contract with the traditional deposit account. An example is the “market index investment account,” composed of a fixed-term deposit with a return that is linked to the performance of the equity market via an index such as the S&P 500 stock index. Depositors were offered maturities of three, six, and twelve months, combined with three combinations of minimum guaranteed return plus a percentage share of the change in the equity index. Since it is a deposit, it is subject to FDIC insurance. These accounts differ in only two significant ways from a stock mutual fund invested in the relevant index. They have a fixed maturity or

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<sup>6</sup> The OCC originally applied the “look through” principle, which allowed dealings in any financial instrument that referred to an underlying instrument that was permissible under Section 16. Thus, derivatives on government securities were permitted. It then shifted to “functional equivalence.” On this basis, it argued that since derivatives on permissible activities had been approved this should apply to similar functions of derivatives, thus allowing derivatives in almost all assets, including commodities and equities. See Omarova (2009).

<sup>7</sup> On the original development of this practice of writing matched book repos, as well as the various frauds due to lack of regulation, see Stigum (1983). On the role in the current crisis, see Gorton (2009). The early developments of this market drew Minsky’s attention, see Minsky (1957).



redemption date (although early redemptions may be permitted with penalty of loss of all interest and part of the principal) and they have a guaranteed minimum value. Banks would have to hedge these instruments by buying the index future in the appropriate proportion, an activity permitted because cash-settled futures are not considered securities; see Kaufmann (1988: 191–2).

## **IX. DEFENDING COMMERCIAL BANKING: THE EROSION OF GLASS-STEAGALL WAS TO SAVE COMMERCIAL BANKS**

The major innovations and mechanisms of cost reduction that allowed nonmember banks to gain competitive advantage over insured commercial banks in providing financing to the productive sector involved activities in capital markets that were originally precluded from the business of banking allowed to member banks under Glass-Steagall. Many of these innovations were supported by administrative decisions that reduced or eliminated regulation and supervision by relevant securities legislation. In particular, this was the case in the development and use of securitization, as well as the development of asset-backed structures ranging from commercial paper to mortgages.

In order to allow commercial banks to compete, regulators, legislators, and the judicial branch engaged in actions that opened the way to member banks' provision of these new innovations by allowing them increasing capital market activities that had been precluded under Glass. The end result was the almost complete erosion of the New Deal protections long before they were formally replaced by the Financial Modernization Act; see, for example, Fisher (2001).

Recognizing this evolution of the activities of banks suggests that a return to a Glass-Steagall separation of commercial banking and investment finance with the former engaged in short-term commercial lending and the latter in capital market financing would be extremely difficult, if not impossible, since the former activities are now carried out with capital market instruments and activities.

The main areas of regulatory changes that have produced this result are:

- The 3a-7 exemption of structured asset securitizations—including asset-backed commercial paper held in money market funds—from registration and oversight by the SEC as investment companies. This was reinforced by Section 144, allowing private placement of the liabilities of securitized structures;
- Section 20 exemptions that allowed development of the over-the-counter securities repurchase market; and
- Expansion of “incidental powers” to include proprietary trading in securities and derivatives.

All have provided reductions in the costs of providing business lending and diminished the ability of banks to compete in offering their core activity of providing financing to business. All require capital market operations that were originally precluded by monopoly protection granted by Glass to ensure incomes sufficient to protect transactions deposits. Banks were eventually granted the ability to provide virtually all of them with support of discretionary permission granted by regulators. All of them create market liquidity through the financial structure, rather than through the ability of banks to issue liabilities that are a substitute for currency.

A return to Glass would require reversing these decisions or eliminating the capital market structures that have come to dominate financial markets and have eliminated the normal commercial bank financing of businesses through the creation of liquidity via deposit creation.

These structural changes have also changed the way liquidity is created from bank lending based on liquidity spreads to the creation of liquidity through “riskless” arbitrage. However, the later involves a much more fragile structure than the former. As recently confirmed by the Chairman of the SEC, “asset-backed securitization is a financing technique in which financial assets, in many cases themselves less liquid, are pooled and converted into instruments that may be offered and sold in the capital markets” (Schapiro 2009). The combination of the exemptions given to money market mutual funds and securitized special purpose entities has thus allowed the system to convert long-term illiquid assets into the short-term equivalent of bank deposits or into capital market assets that depend on financial institutions acting as dealers to provide liquidity.

## **X. REGULATORY CHANGES?**

An alternative to an attempted return to Glass-Steagall would involve regulations on the creation of liquidity through capital market structures. This would require, first of all, full regulation of structured products as investment companies and the treatment of their liabilities as registered securities. This would include the application of capital requirements, asset restrictions, and supervision similar to those applied to money market funds.

It also means that deposit-taking banks must be treated differently from deposit-making banks. Deposit takers should be precluded from proprietary trading, just as was originally intended by Glass-Steagall.

If the most cost effective and profitable means of providing financing to business in the current financial environment rely on capital market structures and activities, then a return to a Glass-Steagall separation of deposit banking and capital market investment banking appears to be impossible short of abolishing securitization and the regulatory changes that have occurred since the 1980s, most of which are now embodied in the Financial Modernization Act.

The second is that part of the problem was created by the confusion between “deposit taking” and “deposit making.” It is impossible to allow prudentially regulated and market-regulated institutions to coexist. Government provides currency, it should also provide transactions accounts. Banks originally got into this business because they could profit from it. They clearly no longer can.

The third is to recognize the difference between liquidity created by bank net margin spreads and that created by risk arbitrage. The latter needs to be controlled in the same way as the former. Chairman Schapiro has already called for comprehensive regulation of securitization. It is also important to recognize the different income incentives between net interest margin banking and risk arbitrage banking. While it is impossible to go back to the traditional model, this should not be conceived as attempting to restore separation, but rather an attempt to create income incentives that induce a return to credit evaluation as the business of banking.

Fourth, the exemption that excludes hedge funds from registration as investment companies or investment advisers should be ended. However, they should not be further regulated.

Fifth, there is a confusion between the size of banks (too big to fail) and the success of financial supermarkets. It seems clear that there are few synergies in joining different financial functions in a single institution. Institutions can be large, so they can compete globally, but they should also be focused. It is financial markets that need to be large to provide funding for large corporations. Large banks should be broken up and organized around related functions. Hedge funds seem to function at smaller sizes and now provide many of the functions of larger banks with greater stability. It is interesting that most all analysts accept that hedge funds contributed little to the current crisis, while it was the most highly regulated financial institutions that were the source of the problem.

Finally, the SEC exemptions on financial contracts, such as private placement, derivatives, etc., should be eliminated. They need not be regulated as to form, but they must be regulated and the markets in which they trade should conform to other exchanges.

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