

FESSUD

FINANCIALISATION, ECONOMY, SOCIETY AND SUSTAINABLE
DEVELOPMENT

Working Paper Series

No 69

US Financial Regulation: The Dodd-Frank Wall Street Reform and Consumer Protection Act in Current and Historical Perspective

Jan Kregel

ISSN 2052-8035

US Financial Regulation: The Dodd-Frank Wall Street Reform and Consumer Protection Act in Current and Historical Perspective

Jan Kregel

Affiliations of authors: Tallinn University of Technology, Estonia

Abstract: This paper presents the major changes in financial regulation in the United States starting with the historical background and concluding with the most recent measures contained in, or mandated by, the 2010 Dodd-Frank Act.¹ It will present the most important changes in regulatory legislation proposed in the aftermath of the 2007-8 crisis intended to prevent a collapse of the financial system similar to the recent crisis.

Key words: financial regulation, Dodd-Frank regulations.

Date of publication as FESSUD Working Paper: October 2014

Journal of Economic Literature classification: G180, G280

Contact details: Jan A. Kregel, jankregel@yahoo.com Tallinn University of Technology, Ragnar Nurkse School of Innovation and Governance, Akadeemia tee 3, 12618 Tallinn.

Acknowledgments:

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 266800.

Website: www.fessud.eu

I. Introduction

¹ The formal name is "An Act To promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes." The short title is the "Dodd-Frank Wall Street Reform and Consumer Protection Act".

This paper presents the major changes in financial regulation in the United States starting with the historical background and concluding with the most recent measures contained in, or mandated by, the 2010 Dodd-Frank Act.² It will present the most important changes in regulatory legislation proposed in the aftermath of the 2007-8 crisis intended to prevent a collapse of the financial system similar to the recent crisis.

II. Background History of Prudential Regulation in the US

Reflecting the idiosyncratic nature of the evolution of the political system in the United States, the financial system and its regulation in the United States have always been unique. It has differed in major respects from European examples and other former European colonies. In particular, as a politically rebellious colony, rejection of British regulation and financial structure represented its attempt to gain independence and autonomy. There was no National Bank or Central Bank to govern the financial system or act as the financial agent of government until the beginning of the 20th century. Indeed, when something resembling a European style National or Central Bank was created it had a shared governance structure that combined federal government and private banks diversified across 12 geographically distinct regional Banks. It was originally designed as a mechanism to pool private bank reserves, rather than something resembling the Bank of England or any European National Bank acting on behalf of the government or as a major arbiter of monetary policy. In order to understand the recent regulatory legislation known as the Dodd-Frank Act, it is thus necessary to review briefly the history of regulation of the US financial system.

The US economic system has been driven by the preference of private enterprise over government activity and intervention in the economy. And when government intervention was accepted there has been a preference for intervention at the level of the individual State, rather than at the level of the Federal government. Thus while the Constitution reserves to the Federal government the right to coin money and emit debt, it makes no provision for the creation by charter or the control of financial institutions such as banks. As a result, private, state chartered, banks tended to dominate the issue of means of payment through unregulated issue of their own

² The formal name is "An Act To promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail", to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes." The short title is the "Dodd-Frank Wall Street Reform and Consumer Protection Act".

notes from the beginning of the Republic. This has also meant that regulation to this day is represented by a dual structure of State and Federal regulation.

Prudential regulation was thus initially concentrated on ensuring the full redemption value of private bankers' circulating promissory bank notes. With the support of Secretary of the Treasury Alexander Hamilton, the US had created a Bank of the United States under a limited twenty-year charter in 1791, but without giving it a monopoly of the note issue, or any formal regulatory functions. In 1816 it was granted another charter for twenty years as a private corporation with private shareholders but public duties to handle all fiscal transactions for the US Government, accountable to Congress and the US Treasury. Its efficiency and its action to improve the stability of the private State chartered banks³ led to a withdrawal of political support in 1832 and its charter was not renewed. This led in 1836 to the introduction by the Federal Government of the Independent Treasury System which dealt with all government receipts and payments in gold specie through Independent Treasury Offices throughout the US. But, more importantly, this meant that the Federal government had relinquished the provision and regulation of the means of payment to private sector financial institutions that could only be created under State charter and State regulation.

This ushered in a period of what was called "free banking" which lasted from the dissolution of the Second Bank of the United States to the issue of the first Federal circulating medium of exchange—the now famous "Greenback"—issued by the Union government to provide finance for the Civil War. This represented the first issue of currency by the Federal government and was challenged by private bankers. The Supreme Court "Legal Tender" decisions finally granted to the Federal government the right to issue bank notes as well as to "coin" money. When this limited issue of "greenbacks" proved insufficient for war financing needs the (Union) government approved the National Bank Acts of 1863 and 1864 that created a National Banking System accompanied by a regulatory agency, the Office of the Comptroller of the Currency (OCC) responsible for supervision of the Federally chartered National Banking Associations that issued National Bank Notes backed by the tender of US government securities with the US Treasury.

In the free banking period between 1836 and 1863, the means of payment was comprised of notes issued by private banks, in general backed by reserve holdings of the relevant state

³ The Bank accumulated private bank notes issued by State banks and then presented them for specie payment, which embarrassed fraudulent bankers and led to rising animosity against the Bank.

government securities or by specie. The system of National charter banks required reserve holding of Federal government debt for the issue of National bank notes. In order to ensure dominance of National bank notes, a tax was placed on the issue of notes by state banks. To defend their position, State chartered private banks replaced their bank note issue by offering checkable sight deposits. This extended the need for prudential regulation to bank deposits as well as National bank notes. Since these deposits were initially issued by state chartered banks they were subject to regulation by the regulators of the states in which they were chartered. This was the beginning of the US dual system of regulation with State regulators responsible for prudential regulation of deposit creation by state banks and the Comptroller of the Currency responsible for National banks' issue of National bank notes. In the period from the Civil War to the First World War Federal regulators made frequent attempts to limit the activities of National banks to what came to known as "commercial banking" by restricting their activities in real estate finance and securities operations. The financial system in the United States before the creation of the Federal Reserve was one in which both state and federal regulated banks operated in all types of financial activities. In the famous expression of Judge Brandeis "the four distinct functions of banks (commercial banking, trust and insurance, corporate underwriting, and brokering) each essential to business, and each exercised originally, by a distinct set of men, became united in the investment banker" (Brandeis, 1914, pp. 5–6).

It seemed obvious to Brandeis that such a system would not be conducive to competition: "Can there be real bargaining where the same man is on both sides of the trade? The investment banker, through his controlling influence on the Board of Directors, decides that the corporation shall issue and sell securities, decides the price at which it shall sell them, and decides that it shall sell the securities to himself" (Ibid, 1914, p.11). He also noted that the large profits that resulted from financial concentration "led to a revolutionary change in the conduct of our leading banking institutions," in which commercial banks sought to become investment banks, leading to their "departure from the legitimate sphere of the banking business, which is the making of temporary loans to business concerns" (Ibid, 1914, p. 26). However, the main criticism was that the control of bank deposits — what Brandeis called "other people's money"— was the source of this power of concentration and of the exorbitant profits of investment bankers.

The existence of a Congressional legal limit on the maximum issue of greenbacks, and subsequently of National bank notes, meant that the supply of currency was not directly linked to

the needs of trade, and there was no means of increasing the supply of notes to meet the frequent loss of confidence in deposits of state banks. In 1875, the limitation on the note issue was removed, but this still did not provide a sufficiently elastic supply of currency. The need for a more elastic currency led to the creation of the Federal Reserve System, composed of twelve District Federal Reserve Banks that could issue Federal Reserve notes. These notes had to be backed 40 percent in gold and 60 percent in discounts on private commercial loans.

The elasticity of the note issue was thus resolved by adopting a form of the “real bills” doctrine that restored the role of the commercial bank—as a deposit taker and lender of short-term funds for self-liquidating commercial purposes—as the central institution in the system. This finally made the means of payment by note issue unique and unified, but retained the diverse quality of deposits issued by individual State and National banks. As a result, the main task of prudential supervision became to ensure that private bank deposits were always fully convertible into Federal Reserve notes.

It was the 1927 Pepper-McFadden Act that finally clarified the range of banking and securities market activities permitted to National banks. As noted above, it was in this period that National banks were limited to commercial banking activities and as a result suffered from falling profitability. In addition, the expansion of free banking in many states led to widespread overbanking. At the same time, the 1920s stock market boom brought with it the possibility of National banks’ commercial clients satisfying their short-term financing needs through capital market issues thus reducing the demand for commercial National banks’ loans.

Even before the 1929 stock market crash, analysts were predicting the demise of the commercial banks as commercial loans extended by national banks went into continuous decline. Lauchlin Currie, an adviser to the Federal Reserve and the Treasury in the 1930s (Currie, 1931, pp. 701–2), notes that over the period 1922–8 there was a tendency for larger, successful firms to reduce their bank borrowing, due to “a realization of the dangers inherent in loans of any description and particularly bank loans” (Currie, 1931, p. 708). He anticipated that “If economic progress continues to be associated with the increasing importance of larger corporations having access to the stock and bond markets, there is a strong probability that the commercial loan will continue to decline in the future. The decline in the commercial loan, in other words, appears to be intimately related to the changing structure of business which is bringing about a change in the methods of financing of business” (Currie, 1934, p. 41). He suggests that banks will be left with

savings deposits as a source of funding individual lending, while other institutions should be expected to emerge to meet any lending demand beyond the ability of these banks (Currie, 1934, p. 152).

Whether Currie was right in identifying the cause of the decline in business lending or whether it was simply the fact that firms were encouraged by the banks directing them to their securities affiliates since the stock market boom made it much cheaper to raise equity funds since the Fed was putting pressure on bank interest rates, the end result was a decline in the quality and liquidity of "commercial" bank assets.

Brandeis' observation above concerning the impact on profitability of the move in the early 1900s to concentration of banking activities in large multi-function investment banks must be seen in the context of the fact that National Banks at that time were allowed to engage fully in capital market activities. However, after a challenge by the Comptroller of the Currency of the right of the large New York banks to operate in securities, in 1908 National banks were strictly limited to commercial banking activities. National banks thus faced an increasing competitive disadvantage relative to State chartered banks which in most States were allowed to operate without restriction in securities markets. This created pressure on the profitability of National banks who sought to charter security affiliates under State law which were outside the regulatory writ of the Comptroller. The first such affiliate was formed under a state charter by First National City Bank in 1911. The solution to the commercial banks' need for additional sources of revenue was formally provided by the McFadden Act, which allowed National banks to "buy and sell without recourse marketable obligations in the form of bonds, notes or debentures, commonly known as investment securities ... This did not include the power to buy and sell stocks" (Valentine, 1951, p. 400).

"Generally speaking it may be said that by 1929 in the field of long-term financing the commercial banks and their affiliates occupied a position comparable to that of private investment bankers from the standpoint of physical facilities, capital employed, and the volume of securities underwritten and distributed" (Valentine, 1951, p. 401). The combination of functions in a single institution, deplored by Brandeis, was thus reconstituted.

After the 1929 stock market collapse, conditions facing these multifunction commercial banks deteriorated rapidly. However, the bank holiday in 1933 and the depression produced a

strong regulatory response in the form of the Glass-Steagall Act. While the major objective of the Act may be seen as the prudential regulation of banks to ensure the value of public deposits in terms of Federal Reserve notes, it did this by restoring the separation of commercial and investment banking, limiting the activities of deposit-taking commercial banks to short-term commercial lending. It thus followed Brandeis' recommendation of establishing a direct correspondence between the definition of a regulated institution and its function in providing deposits, excluding investment banks from this activity.

The legislation clearly recognized that the difficulties had been caused by the declining profitability of commercial banks. Thus, effective regulation had to be compatible with a restoration of the profitability of commercial banks. At the time of the new regulations, roughly half of National bank earnings were generated by capital market activities. To substitute these now forbidden sources of earnings it provided a monopoly on deposits and limited over-banking through the Federal Deposit Insurance Corporation (FDIC) provision of deposit insurance against a subsidized, uniform insurance premium, and limiting the costs of deposit funds by setting Federal Reserve Act Regulation Q governing interest rates on deposits at zero.

The second objective of the New Deal legislation was to protect individuals from the fraud and malfeasance that had been identified with the activities of the state regulated securities affiliates of National banks. The regulation of the activities of firms in capital markets thus followed a similar logic to the Banking Act. Under the New Deal securities laws, all other financial firms, such as investment banks and securities firms, were defined as firms engaged in those activities that are excluded from commercial banks—namely securities. Indeed, these investment banks were included in Glass-Steagall 1933 only as an afterthought, because, although their primary activities were as underwriters and capital market intermediaries, they used little capital. However, they did hold substantial amounts of corporate client money on deposit, largely from the proceeds of underwriting for large commercial clients, rather than the general public. Thus, legislative consistency required that they should be treated just as other deposit takers. But this would have prevented them from operating their core business of underwriting and intermediation. Many investment banks thus chose to cease offering deposits to private household and corporate clients, limiting the financing of their activities to borrowing in private capital markets or using partner's capital.

In contrast to commercial banks, regulation of these “excluded” financial institutions was undertaken in an entirely different way, through the creation of the U. S. Securities and Exchange Commission (SEC). Rather than being based on the definition of the type of institution regulatory authority was based on the assets dealt in by the financial institution: i.e., as being engaged in the business of effecting transactions in securities for the account of others, or engaged in the business of buying and selling securities for their own benefit. Regulation was thus based on the definition of the product—the type of security, independently of the organization—or on the definition of the firm as a broker, or a dealer, underwriter or primary investor. All institutions undertaking such activities were classified by exclusion as investment banks. This is because the New Deal legislators were more concerned with protecting the individuals investing in securities than in regulating the activities of the firms that traded and sold securities. The major organizing principle of the SEC was thus “sunshine”—providing transparency, rather than providing prudential regulation through capital or loan-loss reserves.

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 production operations, leaving the long-term funding of business investments to uninsured financial institutions specializing in capital market activities. This was the famous separation of banking and finance that was the rule in US regulation from 1933 until the 1970s.

III .Changes to the regulatory structure before the 2007-8 Crisis

However, as the crisis of the 1930s faded from memory, economists began to view these protections as creating a monopoly for deposit-taking banks that 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 non-regulated 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).

This point of view became dominant in US political and regulatory circles in the 1980s and led to a sustained and extensive period of financial liberalisation supported by deregulation via softening of many of the original Glass-Steagall provisions separating commercial and investment banking. These measures allowed regulated commercial banks to gradually increase their securities market activities while it also allowed investment banks to offer similar transactions services without the regulations that applied when they were offered by commercial banks. These activities created the basis for the creation of what eventually came to be called "shadow banking". For example, Merrill Lynch offered its brokerage clients lending via margin accounts on their equity portfolio holdings as well as offering the possibility to transfer positive cash balances held in their brokerage accounts receiving positive interest via check. Many investment banks offered money market mutual funds which offered investors shares with a guarantee of a net asset value fixed at \$1.00 and paying an interest rate linked to the rate paid on commercial paper plus the ability to convert the shares to meet payment obligations. Both institutions thus offered the equivalent of a traditional regulated commercial bank checkable deposit, but without deposit insurance and thus without the regulation that limited market interest rates on the accounts.

The progressive elimination of the regulations granting monopoly provision of transactions accounts to commercial banks culminated in the 1999 Gramm-Leach-Bliley Act which eliminated Glass-Steagall separation and created the possibility of bank holding companies free to operate in any aspect of financial services. However, by the time the Act was passed, most of the 1933 restrictions and limitations had already been removed by administrative decisions of regulators or by appeal to the judicial process. Section 16 of the Act allows to regulated banks "all such incidental powers as shall be necessary to carry on the business of banking" (Krooss, *ibid.* 2755). Most of the exceptions that allowed commercial banks to meet the innovative competition from non-insured banks and led to the progressive erosion of Glass-Steagall came in interpretations of the phrase "incidental powers". Already in 1981 a Supreme Court decision affirmed that Sections 16 and 21 apply only to banks and not to bank holding companies. The FDIC thus decided that the prohibitions on securities trading of section 21 of the Glass-Steagall Act should not extend to subsidiaries of insured nonmember banks. But it was the OCC that was most active in extending

the operation of member banks to what had been presumed to be prohibited securities activities through liberal interpretation of “incidental powers” to cover activities that are not specifically mentioned as being compatible with the “business of banking” in Section 16. As a result of increased globalization, regulators were concerned not only with the safety and soundness of financial institutions but also with the ability of US banks to compete on a global scale. In the international regulatory environment, Glass-Steagall was an anomaly, and in many countries universal banking—allowing banks to engage in all types of financial services—was the norm. Thus, in conditions of rising US external account deficits, supporting global expansion of US banks became an additional objective of regulation.

Thus at the end of 1999 the Gramm-Leach-Bliley Act (GLB), as it’s commonly known, abolished the segregation of financial institutions by financial activity that had been imposed under Glass-Steagall and instead allowed for the creation of integrated financial holding companies that could provide any combination of financial services. This was the culmination of a long-term initiative orchestrated by the financial services industry to repeal the New Deal legislation. It was based on the argument that there were substantial economies to be achieved by cross-sales of financial services and the resulting possibility to increase the internal cross-hedging of risks within large multifunction financial conglomerates. It was claimed that the symbiosis across different financial services would increase incomes for financial service providers as well as decrease the risks borne by the larger institutions. Thus, the 1999 Act simply ratified changes that had already taken effect in the market place and the courts. This was the regulatory structure that was in operation at the outset of the crisis with large bank holding companies operating with very little regulation in all aspects of financial services.

The introduction of integrated multifunction financial service corporations had two important consequences. First, it implied that financial holdings companies would be much larger than either commercial deposit-taking banks or noninsured investment banks had been in the past, since expansion would not be limited to the provision of any particular service as had been the case under Glass-Steagall. In the case of investment banks, size had been constrained by the prohibition on raising core deposits and their partnership funding structure. The latter constraint was removed when investment banks converted to limited-liability public companies to raise capital in equity markets. Until the deregulation of capital markets in the 1970s, the NYSE forbade such listing; the move was initiated by the brokerage firm Donaldson, Lufkin & Jenrette, to be

followed in the 1980s by the larger investment banks, the last being Goldman Sachs, in preparation for the repeal of Glass-Steagall in 1998.

Second, the economies of scale and risk reduction that resulted from internal cross-hedging of positions meant that risk was more broadly spread across different activities, and thus increased the correlation of risks across different activities. However, as reported by the Senior Supervisors Group,⁴ even if this did occur, it appears that there was very little sharing of information concerning exposures in different functions of the conglomerate financial institutions — what has come to be called the “silo” mentality of financial management, in which information remains isolated in each separate activity of the financial institution. The result of cross-hedging and product integration was the creation of financial conglomerates that were both too big and too integrated to allow any of them to be resolved when they became insolvent. Indeed, rather than distributing risk to those most able to bear it, risk was distributed and redistributed until it became impossible to locate who was in fact the counterparty responsible for bearing the risk. In addition to reducing transparency, counterparty risk tended to concentrate in areas in which profits were high and regulation lax, as in the case of the activities of the Financial Products unit of AIG which was without formal regulation and carried the majority of risk insurance via credit default swaps on mortgage backed securities. Counterparty risk thus joined the more traditional funding/liquidity and interest rate risks facing financial institutions. It replaced what was initially the most important of bank risks: lending or credit risk.

With respect to the origin of the recent crisis in the supervision of mortgage lending, even before the 1999 Act, bank holding companies had opened mortgage affiliates, or purchased independent consumer finance companies originating subprime mortgages. The Federal Reserve was granted responsibility for the supervision of bank holding companies, but it decided that these mortgage affiliates would not be supervised for compliance federal laws protecting borrowers since they had not been previously subject to regulation. In January 1998 the Board of Governors unanimously decided to formalize a long-standing practice, “to not conduct consumer compliance examinations of, nor to investigate consumer complaints regarding, nonbank subsidiaries of bank

⁴ Senior Supervisors Group was formed to assess how weaknesses in risk management and internal controls contributed to industry distress during the financial crisis, and comprised senior supervisors from seven financial agencies: the French Banking Commission, German Federal Financial Supervisory Authority, Swiss Federal Banking Commission, UK Financial Services Authority, and, in the United States, the Office of the Comptroller of the Currency, the Securities and Exchange Commission, and the Federal Reserve. For their joint review, see SSG 2008.

holding companies." This decision was then applied to any nonbank that became the affiliate of a bank holding company. A 1999 report by the General Accounting Office warned that the Fed's decision created "a lack of regulatory oversight," because the Fed alone was in a position to supervise the affiliates. Its role as regulator of bank holding companies was strengthened in the GLB Act, but was only exercised for mortgages originated through the deposit-taking banking affiliate of the holding company.

Thus just as banks were moving their risk-weighted capital exposure to mortgage lending off balance sheet through the creation of special purpose entities, they moved these activities outside the purview of regulators by creating and acquiring mortgage affiliates that were technically regulated but had been declared outside the purview of Fed supervision. As a result, around 13 percent of the national total of subprime loans made between 2004 and 2007 by bank affiliates were de facto unregulated even though the Federal Reserve had de jure power to do so. (Housing and Urban Development, p. 29) A 2000 joint report on predatory lending by the Treasury Department and the Department of Housing and Urban Development had noted the failure of the Fed to use its authority to investigate evidence of abusive lending practices, and urged a policy of targeted examinations, long before the current abuses commenced.

IV. Background to the Crisis: Multiple Causes

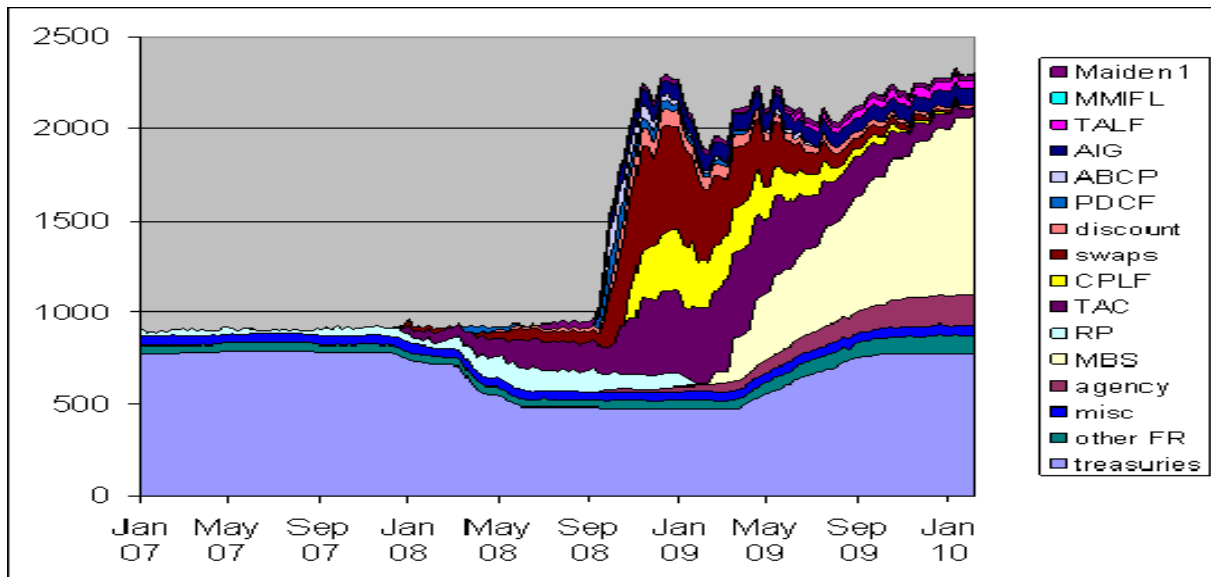
It is not the objective of this report to explain the advent and development of the recent financial crisis (see WPX.XX). However, the interpretation by regulators of the causes of the crisis is important to an understanding of the subsequent regulatory response is the range of emergency support measures that were introduced as the crisis evolved and which provide the context for the subsequent Congressional legislative actions. It is widely believed that the recent crisis in the US financial system was caused by difficulties that originated in the sub-prime mortgage market. Lax and/or fraudulent lending standards by mortgage originators, high liquidity levels due to lax Fed monetary policy, underestimates of risk due to conflicts of interest in the credit ratings agencies, lack of due diligence due to inappropriate incentives in financial institutions, ineffective application and gaps in existing regulations and bipartisan political support for generalized home ownership all combined to create an avalanche of mortgage assets whose value depended on continually increasing incomes of mortgage holders and continual increases in the prices of the houses that provided the underlying collateral. The former was never a realistic assumption, and when house

prices started to fall, it soon became obvious that the securities collateralized with these mortgages were massively overvalued, if not valueless. The success of the market was thus a "Ponzi" scheme or a "house of cards". The collapse in the values of housing collateral thus brought a capital loss to both households who had mortgage debt that was greater than the market value of the house it financed, and the value of the securities held by financial institutions who had originated the securities and held then on their books was less than the funds that had been borrowed to purchase them. The result was insolvency for millions of US households as well as for financial institutions. The failure to meet mortgage servicing and widespread default and repossessions of collateral accelerated the decline in housing prices and the value of the mortgage securities, leading to a process of debt deflation that soon brought a collapse of demand and a liquidity crisis that brought a collapse of lending by banks to each other and to the private business sector that combined to produce a sharp decline in real sector activity and rising unemployment. The result was the deepest US recession and financial crisis since the 1930s.

V. Urgent Temporary Measures in Response to the Crisis

The initial response to the crisis has been based on the idea that it was unforeseeable, due to the equivalent of a 500 year flood, to a highly improbable "perfect storm" of factors unlikely to be repeated; once the damage has been brought under control by eliminating the "toxic" mortgage backed assets, the financial system would be restored to health. The idea was to use urgent measures to restore liquidity and restore bank lending to normal. This was the logic behind the initial 'troubled asset relief program' (TARP) passed by the US Congress in 2008 to remove the toxic assets from the banks' balance sheets and provide new capital, and in the actions of the Federal Reserve to extend access to lender of last resort support at its discount window to all financial, and some non-financial institutions, as well as to engage in a 'zero interest rate policy' (ZIRP) and 'quantitative easing' (QE) to reduce interest rates on medium term government securities. It doubled its balance sheet to over 2 trillion, nearly half of which was mortgage securities. The FDIC also provided lending guarantees amounting to \$300 billion to large banks and the Government Sponsored Enterprises Fannie Mae and Freddie Mac purchased over \$100 billion of securitized mortgage obligations. In addition, the Internal Revenue Service provided tax exemptions to banks assuming the assets of failed banks. Estimates of total support including implied guarantees reach \$14 trillion (See Prins, 2010).

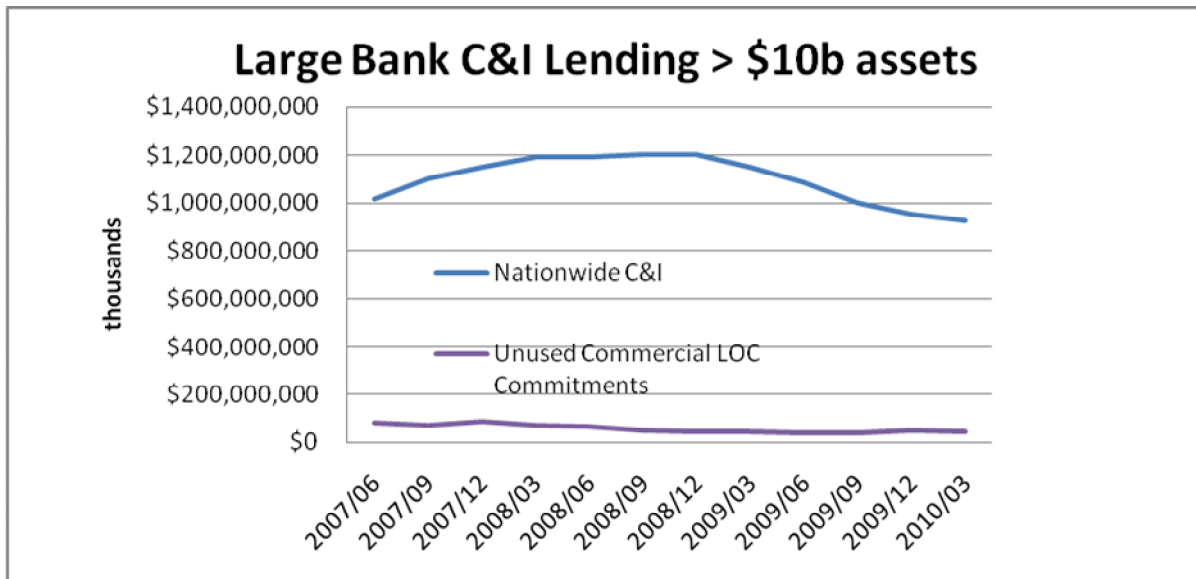
Composition of Federal Reserve Balance sheet



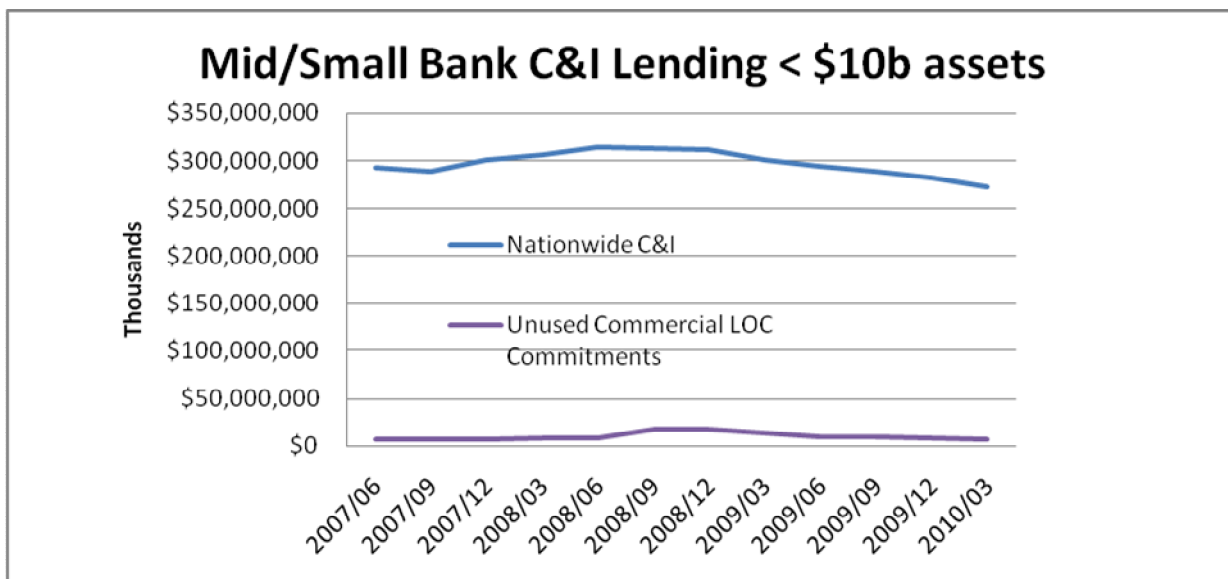
Source: Data from Federal Reserve System Statistical Release H.4.1

Impact of Urgent Temporary Measures

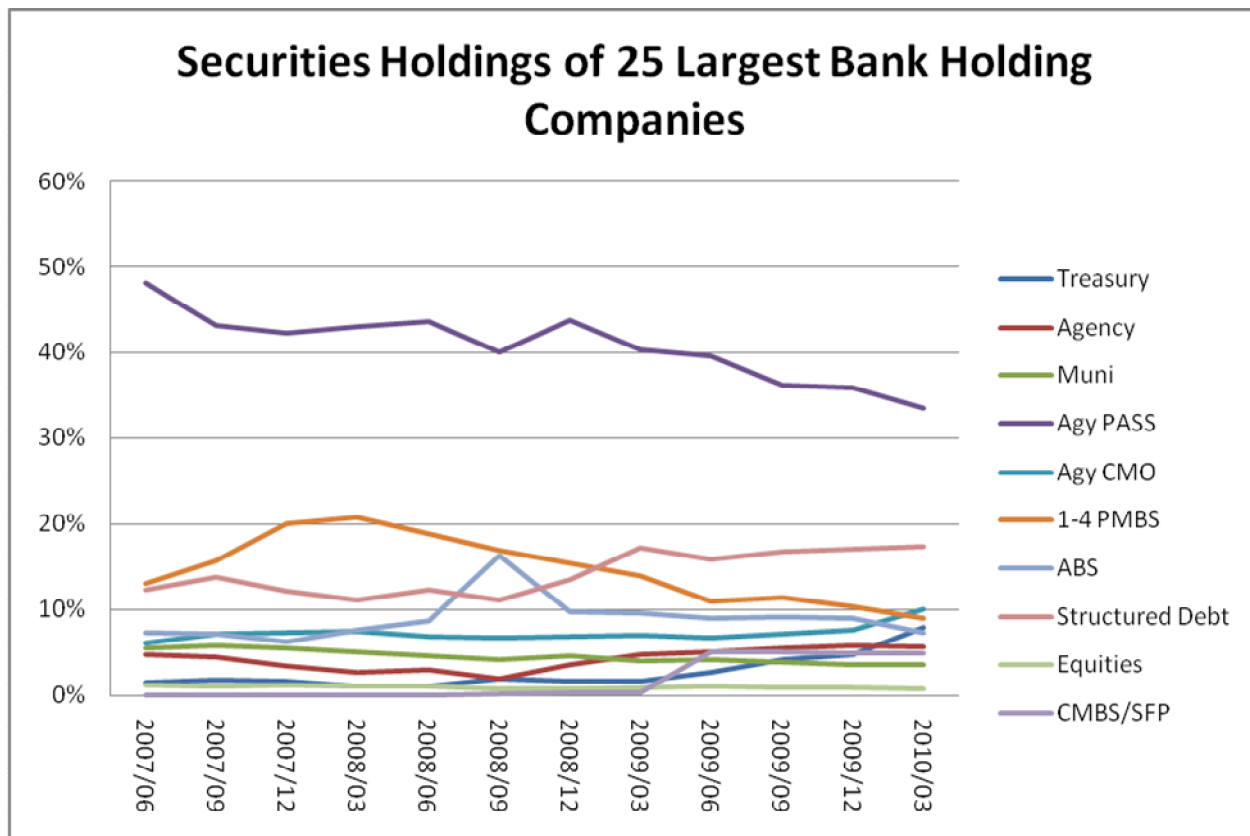
However, as can be seen from the accompanying charts, there is been no increase in bank lending, rather the reverse has been the case. Thus, the urgent measures have succeeded in preventing further insolvency in large financial institutions, but they have done little to return financial markets to normal.



Institutional Risk Analytics



Institutional Risk Analytics



Institutional Risk Analytics

Treasury = US Treasury Securities

Agency = U.S. Government Agency Obligations Excluding MBS;

1-4 Family PMBS = Residential 1-4 Private Mortgage Backed Securities;

Structured Debt = Structured Debt Instruments, Domestic and Foreign

Equities = Mutual Funds and Equity Instruments

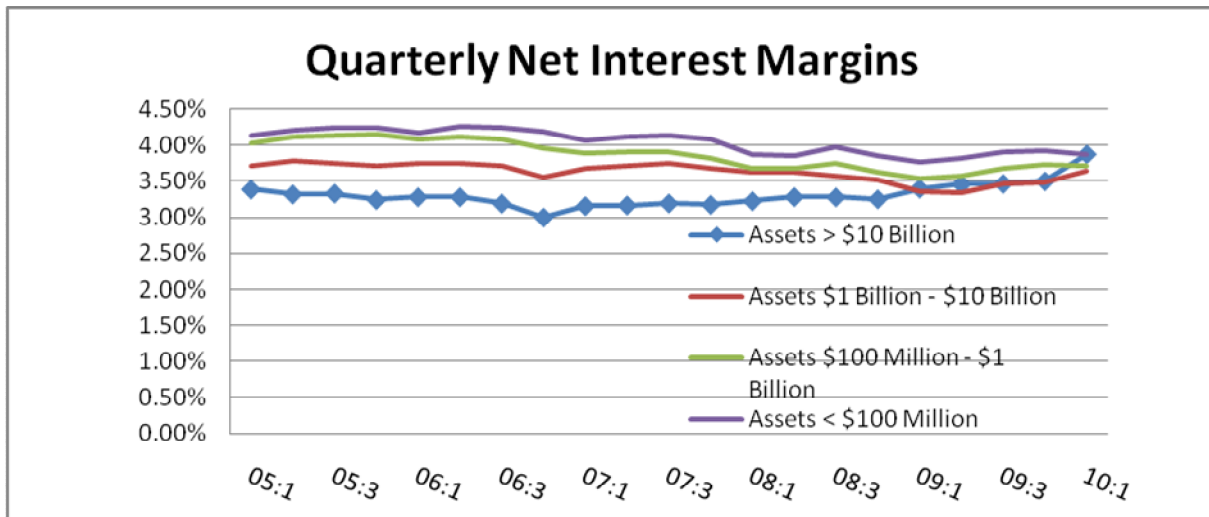
CMBS = Commercial Mortgage Backed Securities including Pass-Thru's

SFP = Structured Finance Products

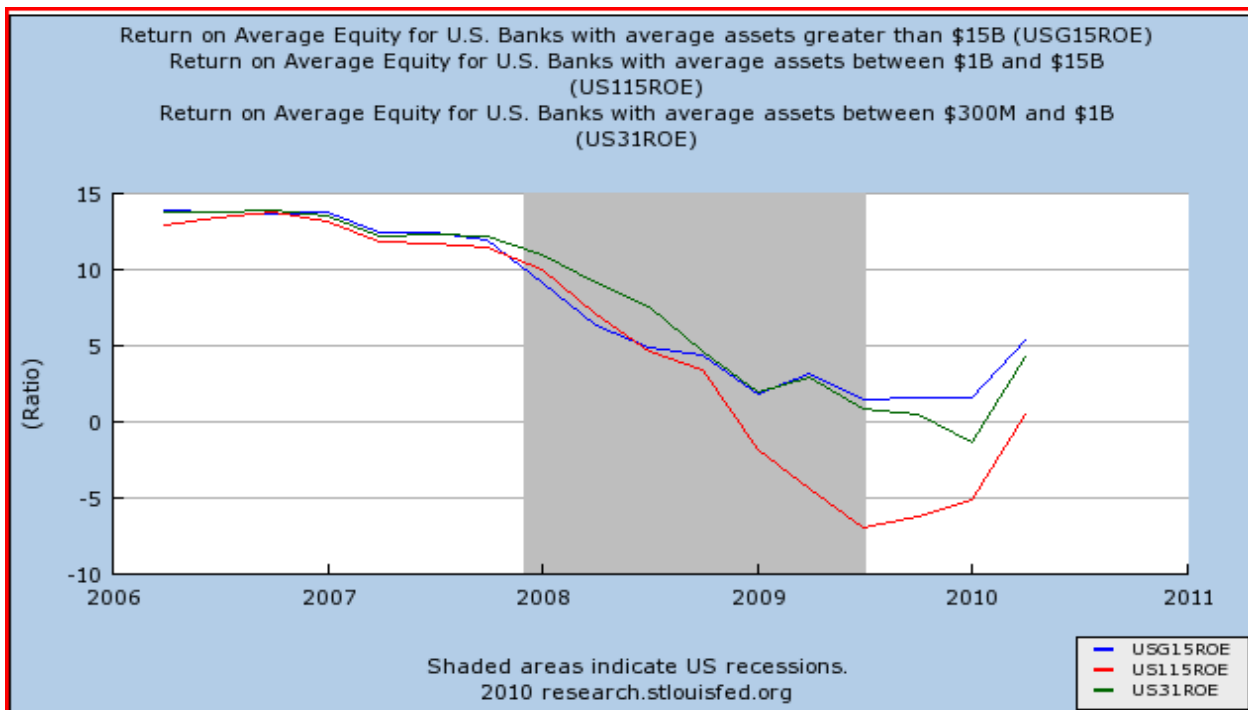
VI. Recovery of Large Bank Holding Companies: Business as Usual?

The graph of the securities holding of the 25 largest bank holding companies shows that while there was no increase in lending to finance construction and industrial activities, these banks did increase their holdings of structured debt and structured finance products. In addition, the largest bank holding companies reported sharp increases in earnings, mainly due to their proprietary

trading activities in fixed income, currencies and commodities and underwriting. Aside from the increase in spreads due to increased concentration in investment banking, this increase was largely due to the ability to access funds at an average of less than 1 per cent. Indeed, one bank reported that it was able to do repo funding at -0.5 per cent.



FDIC Quarterly Banking Profile, Ratios by Asset Size Group.



VII. Congress Proposes Regulatory Reforms: Protect the Taxpayer

As a result of this recovery in bank performance for large bank holding companies the urgency for radical reform that was present in the Autumn of 2008 largely dissipated. The basic objective behind the reform shifted from restructuring the financial system to ensuring constituent taxpayers that Congress had taken radical steps to ensure that in future financial institutions will be responsible for the costs of failure. Protection of the taxpayer from having to finance financial sector bailouts thus replaced the stability of the financial system as the major objective of the reform process. Since the FDIC has an efficient process for resolving insolvent insured banks of small and medium size, but is thought to be unable to apply this process to large bank holding companies or non-bank financial companies (the referent is AIG) whose bankruptcy may cause systemic disruption, this has meant that the major emphasis has been on the problem of dealing with banks that are too big or too interconnected to fail. Indeed the FDIC has closed over 300 small and medium sized banks since the beginning of 2008 without any loss in insured deposits or creating any market disruption. However, this process has not been used for the largest insured banks that have received direct financial support from the Treasury TARP program and from the Federal Reserve, the FDIC and the GSEs, as outlined above in the discussion on the recovery in earnings of these banks. However, since the application of FDIC resolution only applies to insured institutions it was believed that a similar process would not be applied to financial institutions that are not part of the insurance system, such as Bear Stearns, Lehman, American International Group (AIG). In response to this perceived constraint on orderly resolution of these types of institution a centre piece of the legislation is a procedure for liquidating failed institutions that applies to all types of financial institution that are considered as systemically relevant – jargon for too big to fail.

Aside from the major life support measures (TARP, the stimulus bill, ZIRP, and QE), the major response has been that we cannot let “It”—another Great Depression—happen again. Many recognize that radical changes are required in the regulations governing the financial system to make sure that such widespread support measures will never again be necessary to prevent the collapse of the financial system. Congress thus moved rapidly to write and approve a major overhaul of financial market regulations, with the rallying cry that the American taxpayer will never again be required to finance the bailout of Wall Street and Wall Street will never again bring about the collapse of Main Street.

VIII. Reform in the aftermath of the crisis: The Dodd-Frank Wall Street Reform and Consumer Protection Act

The basic objective behind both the House and Senate financial sector reform bills has been to ensure constituent taxpayers that Congress has taken steps to shield the taxpayer from the costs of the failure of financial institutions. Protection of the taxpayer from having to finance financial sector bailouts has thus replaced the stability of the financial system at the centre of the reform process. This has meant that the major emphasis has been on the problem of dealing with banks that are too big or too interconnected to fail. In addition, the belief that much of the damage from the sale and securitisation of sub-prime mortgage was due to predatory and/or fraudulent practices of financial institutions has led to the proposal for protection of the taxpayer from predatory business practices in the form of a financial products safety commission. The two major components of the reform are thus the resolution of large banks and the safety commission. The presumption is that the business models and practices of the post-1999 financial system are basically sound if these prophylactic measures are introduced.

The current approach to regulation embodied in the Dodd-Frank legislation continues to be based on the mainstream theoretical framework that sees stability in complete markets and synergy in the provision and hedging of financial services.⁵ It thus accepts that US banks will continue to be large and integrated. Indeed, Treasury Secretary Geithner has supported the view that the current size of US banks, which has increased substantially as a result of the resolutions undertaken during the crisis, is desired and even necessary if they are to compete in global markets. According to a *New Republic* interviewer, Geithner “told me he subscribes to the view that the world is on the cusp of a major ‘financial deepening’: As developing economies in the most populous countries mature, they will demand more and increasingly sophisticated financial services, the same way they demand cars for their growing middle classes and information technology for their corporations. If that’s true, then we should want US banks positioned to compete abroad. . . . ‘I don’t have any enthusiasm for . . . trying to shrink the relative importance of

⁵ Reuters notes that “cross-selling between Bank of America and Merrill Lynch, something that many thought would be difficult” after the former acquired the latter during the height of the financial crisis, had improved by 2010; “the wealth management division, mainly Merrill Lynch and US Trust, took in more than 5,300 referrals from other divisions at Bank of America, more than three times the referrals in 2009. The wealth management unit also referred more than 8,000 clients to the commercial and banking and markets divisions, a 71 percent increase over 2009.” Note that this refers primarily to marketing rather than cost efficiency in provision of services or in risk management of the merged institution.

the financial system in our economy as a test of reform, because we have to think about the fact that we operate in the broader world,' he said" (Scheiber 2011). Geithner went on: "Now financial firms are different because of the risk, but you can contain that through regulation." This was the purpose of the recent financial reform, he said.

Thus, the basic theoretical argument that large, integrated financial institutions create synergy in providing a broad range of financial services and reduce risk by pooling is maintained by those who are most influential in "reform," while the difficulties these institutions caused in the financial crisis will be managed by better regulation and provisions to ensure that if they do collapse, they will be allowed to fail without requiring support from public funds and without causing major damage to the real economy. The two major pillars of the reform package are regulations to better manage the risks undertaken by large, "systemically significant" financial institutions, and the means to force them into bankruptcy liquidation without the need for anything but temporary public assistance. The problems faced in the last crisis are not seen to result from the size of multifunction institutions but from the failure to allow them to fail without public assistance. This is seen as the result of the absence of a formal mechanism for bankruptcy that applies to all bank and nonbank financial institutions. Thus, the insured bank subsidiaries operating within bank holding companies will be allowed to function more or less as before the crisis, with the exception of the Volcker controls on proprietary trading and clear rules on their rapid resolution or dissolution in the case of insolvency under the FDIC. Finally, the approach to reform continues to support the idea that markets provide efficient price discovery. This is the case not only for the pricing of financial assets but also for compensation. While many economists have noted the distorted incentive structure determining compensation for traders as well as management, the response has been proposals to limit compensation. It has not generally been recognized that these are structural difficulties linked to the shift in the business model for financial institutions. The shift in the generation of bank profits from net interest income generated by originating loans and ensuring that they do not default, to the generation of profits from fees, commissions, and trading incomes by originating loans and selling them as rapidly as possible (or taking position and unloading it at a profit as rapidly as possible), produces an incentive to take on higher risk exposures but reduces the risk of loss for the institution, and eliminates it for management.

This is more than the idea of the private appropriation of profit and the socialization of losses. As long as position taking is financed with external funding there will be a compensation structure with zero risk of loss and only the possibility of profit. In the leveraged buyout period in the 1980s, corporate raiders earned incomes irrespective of losses, which would be the responsibility of the bond or equity holders. Michael Milken also provided a system in which losses were not the responsibility of the junk bond issuers but rather shifted to capital markets. The current expansion of what is now called "shadow banking" functions on the same principle: the originator earns the fees and any short-term profits while capital market investors take the losses. It is the structure of financial transactions that generates the distorted incentives and simple limits, caps, or temporal structures will have little impact on the support this system gives to increased risk taking and financial fragility. This sort of activity is what has been identified as "money manager" capitalism (Minsky, 19__) in which the manager of institutional funds earns a return irrespective of results but has an incentive to take higher risks because he does not participate in any losses. Since the ,current approach to reform leaves the basic business model of financial institutions intact, it also leaves the distortions on incentives intact. Indeed, the imposition of the Volcker rule and the enhanced capital and liquidity requirements proposed in Basle III and controls on compensation create additional incentives to move these more risky activities into the shadow banking sector which remains unregulated.

IX. Progress on Dodd-Frank Act Implementation

While the Dodd-Frank legislation was negotiated into law relatively quickly, it created two problems of implementation. First, it was incredibly detailed, running some 800 pages of the Federal Register covering virtually every aspect of the financial system considered to have contributed to the crisis, as well as a number that are generally agreed not to have been involved in any way. Second, it contained mandates to all the regulatory agencies to formulate implementing legislation through the promulgation of over 400 new regulations and background study reports on the financial system. This created an excessive burden on these agencies in a period in which Congress was systematically cutting back on their budget allocations and the slow progress in providing the new regulatory structure created substantial regulatory uncertainty for the financial and non-financial institutions that would eventually have to comply with the new regulations. As example, as of April 1, 2014, a total of 280 of the rulemaking deadlines had passed, representing

70.4% of the 398 total rules required, and all of the 280 rulemaking requirements with specified deadlines. Of these 280 passed deadlines, 128 (45.7%) have been missed and 152 (54.3%) have been met with finalized rules. Regulators have not yet released proposals for 44 of the 128 missed rules. Of the 398 total rulemaking requirements, 206 (51.8%) have been met with finalized rules and rules have been proposed that would meet 94 (23.6%) more. Rules have not yet been proposed to meet 98 (24.6%) rulemaking requirements. It is thus not surprising that a large number of the missed deadlines have led to postponement of implementation on the part of regulated institutions.

IX.1 The Financial Stability Oversight Council and the Office of Financial Research

The centerpiece of the Dodd-Frank legislation is the creation of the Financial Stability Oversight Council (FSOC). It has the objective of providing collective accountability for identifying risks and responding to emerging threats to financial stability. The Council has the mandate and authority to identify all systemically important institutions, both financial and nonfinancial, that contribute excessive risk to the operation of the financial system and to avoid the regulatory gaps that existed before the recent crisis, to help minimize the risk of a nonbank financial firm threatening the stability of the financial system. It has the ability to apply additional regulations to them in addition to those stipulated by their applicable regulatory agency. This means that virtually any financial or nonfinancial institution may be designated systemically important allowing the Council to impose conditions to eliminate any threat to financial instability. The FSOC is also mandated to identify emerging risks to financial stability via direction to, and requests for, data and analyses from the Office of Financial Research, which was also created by the Act.

Despite this charge, the initial head of the FSOC at its inception, former Treasury Secretary Geithner has stated that in his view it is not possible to create effective, objective criteria for evaluating the risk a financial firm poses to the system. "It depends too much on the state of the world at the time. You won't be able to make a judgment about what's systemic and what's not until you know the nature of the shock." This would make the identification of systemically important financial and nonfinancial firms difficult and make the identification of emergent risks nearly impossible. Geithner added that lenders would simply "migrate around" whatever objective criteria of emergent risks or significant institutions that policymakers developed in advance. With reference to the requirement that resolution of insolvent firms should be undertaken without

government bailouts or taxpayer support for shareholders or management, Geithner takes the contrary view that “In the future, we may have to do exceptional things again if we face a shock that large. . . . You just don’t know what’s systemic and what’s not until you know the nature of the shock” (SIGTARP 2011).

While the classification and enhanced regulation of systemically important institutions is intended to reduce the moral hazard, it is more likely that this may reinforce the existing perception that they are indeed “too big to fail” and allow for excessive risk-taking on the part of those institutions or their creditors. The idea of identifying specific institutions as systemically significant also seems to miss Hyman Minsky’s interpretation of the endogenous creation of systemic risk that it is not specific to institutions, but rather the result of how the system evolves over time and changes structure in response to regulation and innovation. One of the failures of the BCBS regulatory proposals to prevent crisis is that they function on the principle that if each individual bank can be made to follow commonly accepted standards and codes then none can contaminate any other in the system. The decision on which and how many institutions will be classified as systemically significant is still a matter of debate, but may be significant in generating moral hazard if it creates the perception that the additional regulation and oversight applied to designated institutions provides some sort of increased guarantee of solvency. The real problem is to identify the endogenous accretion of fragile financing structures, and to recognize their potential impact on systemic stability.

The FSOC and OFC were among the first measures in the Dodd-Frank bill to be implemented and both are functioning and have issued annual reports as required in the legislation.

IX.2 Final Version of the “Volcker Rule” rule limiting Proprietary Trading

Most of the regulatory actions in the Dodd-Frank Act call for measures to correct difficulties that have emerged from the multifunction banking that was permitted by the 1999 Gramm-Leach-Bliley Modernization of Financial Services Act. The FSOC is responsible for implementing the most important of these measures, the so-called “Volcker rule” provisions set out in section 619 of the Dodd-Frank Act that calls for limitations on the use of proprietary funds for financial speculation by banking entities that benefit from federal insurance, or any explicit or implicit government guarantees. The separation of the use of depositors’ funds for bank business-lending operations

and the use of deposits for any operations in securities markets except those provided as a complement to client services was the fulcrum of the Glass-Steagall regulations. The intention was to prevent banks from using retail deposit funds, guaranteed by the newly created government insurance fund, for speculative trading to earn profits on movements in the price of securities. Such activity was to be limited to noninsured investment banks whose partners used their own capital resources to generate income by underwriting and trading in securities. In the 1980s, most investment banks were transformed into limited-liability corporations issuing equity to fund their operations, rather than relying on the capital of their general partners. During the crisis many of these disappeared through bankruptcy or were granted bank holding company status, finally eliminating any separation between institutions engaged solely in investment activity and those engaged in insured deposit taking.

Since it is no longer possible under the 1999 Act to separate the use of deposit funds from the proprietary trading financed by bank capital, such trading can produce losses that jeopardize the bank's ability to repay depositors, thus creating a liability for the Federal Deposit Insurance Corporation (FDIC) to meet the losses entailed in risks that were undertaken and should be borne by the bank's owners and managers. The Volcker amendment thus seeks to provide formal regulation that would preclude the use of the capital of the financial institution for the purposes of proprietary trading—that is, trading in which the bank acts as principal—if the bank qualifies for any government support for losses to its depositors.

The intention of the rule is to prevent banks from using any of its deposits or capital funds to take leveraged risks on positions whose value is determined by changes in the price of financial assets, and, in particular, to limit the use of leverage that has been a traditional part of such activities. In general, the leverage that is associated with speculative and arbitrage activities is in noninsured areas such as repo markets and other commercial borrowing, so the rule implicitly seeks to limit the leverage that can be generated by funding proprietary trading in repo markets or in under margined or non-margined over-the-counter derivatives structures.

Since the rule would exclude bank activities that provide services to clients, there is also difficulty in determining when such precluded activities are required for supporting client requests for services and when they are simply for the bank's own activities. For example, a bank providing foreign exchange or interest rate hedging services may find it necessary to warehouse such contracts in order to provide the best execution for clients, and it would be difficult to differentiate

such activities from pure proprietary speculation. As noted above, all these difficulties were avoided under Glass-Steagall's simple proscription on securities trading by insured deposit-taking banks. The difficulties in the interpretation of the Volcker rule would thus seem to stem from an attempt to reintroduce Glass-Steagall separation of activities within the Gramm-Leach-Bliley Act in which they are permitted.

On December 10, 2013, after some two years of consultations, the federal banking agencies, the Securities and Exchange Commission and the Commodity Futures Trading Commission issued the final regulations for the "Volcker Rule", called for in Section 13 of the Bank Holding Company Act.

The original intention of the Volcker Rule was to eliminate "proprietary trading" by federally insured financial institutions. The rules provided specificity to that initial intention. The rule thus specifies that it applies to "banking entities" which are defined to cover any insured depository institution, or holding company that controls an insured institution, as well as any institution that benefits from the 1978 International Banking Act that created offshore entities as well as any affiliated institution or affiliated subsidiary of a banking entity.

The rule prohibits a banking entity from proprietary trading any "financial instruments" with proprietary defined as trading as "principal" for its "trading account." defined as an account used by a banking entity for short-term trading, trading in market-risk capital rule covered positions and trading positions and trading as a dealer, swap dealer or security-based swap dealer. A short-term transaction is defined as less than 60 days, although an institution may seek exception to particular positions with a shorter maturity. In this simple form the rule would prohibit a substantial amount of trading activity that banks consider essential to their basic banking activities and the comment period produced substantial comment from financial institutions. The result is a long series of exclusions to the simple application of the rule as stated above, adding a supplementary interpretative document of some 900 pages to the 70 pages of text of the actual rule as finally approved.

Thus, the definition of "proprietary trading" excludes a series of transactions linked to market making and liquidity provisions normally carried out by financial institutions. Indeed, it is virtually impossible to distinguish such transactions from a bank's transactions on its own account, leading to the extreme complexity of the exemptions and monitoring.

In general the exemptions include transactions such as direct and reverse repurchase agreements, securities lending, liquidity management, derivatives clearing, covering short sales, acting solely as agent, broker, or custodian (including on behalf of affiliates), managing debts previously contracted and deferred compensation and similar plans. However trading in foreign exchange derivatives is not exempted. In providing market making transactions institutions will not be required to provide "trade-by-trade" justification for application of the relevant exemptions, but institutions will be required to maintain and monitor overall "financial exposure" and "market-maker inventory" held by each trading desk and a detailed ex ante proposal of how each market-maker trading desk trades and hedges its risk. These include the presumption that the trading desk "routinely stand ready" to trade, is "willing and available" to quote and otherwise enter into trades "throughout market cycles," and that market-maker inventory not be designed to exceed near-term demands based on, among other things, "demonstrable analysis" of historical customer demand. In operating risk reducing hedging for these activities the rule requires that hedging demonstrably reduce or otherwise significantly mitigate one or more specific, identifiable risks. Hedging activity cannot give rise, at the inception of the hedge, to any significant new or additional risk that is not itself hedged contemporaneously. Hedging is permitted across affiliates, and dynamic and anticipatory hedging is permitted. The hedging exemption applies to underwriting as well as distributions of smaller-sized offerings, inclusion of selling-group members and the ability to engage in stabilization and retain unsold allotments.

While the Glass-Steagall regime covering US government securities survives, the rule does not permit trading of derivatives on U.S. government and agency obligations except for market-making and hedging. The rule also permits trading in Municipal government obligations

Another contested area of application is how the rule applies to foreign banking organizations who have been generally exempt from US regulations on their trading solely outside the US (SOTUS). The rule exempts proprietary trading by a foreign banking entity that is not organized, or controlled by a banking entity that is organized, under U.S. law if the entity and personnel that arrange, negotiate or execute a transaction are not located or organized in the United States, the trading decision is made outside of the United States, the trade and any related hedges are not accounted for by any U.S. branch or affiliate and financing is not provided by a U.S. branch or affiliate. In addition, the foreign banking entity can trade only with or through a U.S. entity if the trade is with the foreign operations of an unaffiliated U.S. entity and no personnel of

the U.S. entity that are located in the United States are involved in arranging, negotiating, or executing the trade. In addition, the exemption covers trades with a U.S. entity that is an unaffiliated market intermediary if the trade is cleared or is anonymously conducted on an exchange and is cleared.

The final rule also includes exemptions for foreign entities trading for securities issued by their home governments, but derivatives on foreign government obligations are not included in the exemption. Likewise a foreign bank or broker-dealer owned or controlled by a U.S. banking entity is permitted to engage in proprietary trading in the obligations of the foreign sovereign under whose laws the foreign entity is organized, again with derivatives on foreign sovereign obligations not included in the exemption.

As was true of Glass-Steagall banking entities trading in a fiduciary capacity for clients and certain riskless principal trading are also exempt. Trading by insurance companies is also exempt.

The second most debated aspect of the Volcker Rule is the regulation of participation of off-balance sheet investment funds by a banking entity. The rule prohibits sponsoring or acquiring or retaining, as principal, directly or indirectly, any ownership interest in a "covered fund."

A covered fund is defined an issuer of liabilities that would be an investment company, as defined in the Investment Company Act, except for exemptions provided in for section 3(c)(1) or 3(c)(7) of that Act; certain commodity pools; and with respect to U.S. banking entities only certain non-U.S. (off shore) funds that would be required to rely on section 3(c)(1) or 3(c)(7) of the Investment Company Act if offered to residents of the United States.⁶

The exclusions from the definition of covered funds wholly-owned subsidiaries, joint ventures and acquisition vehicles, U.S. registered investment companies (e.g., mutual funds), business development companies and issuers that rely on exclusions other than Section 3(c)(1) and 3(c)(7) of the Investment Company Act, foreign public funds and foreign pension funds, small

⁶ The requirements for exemption under Rule 3a-7 are: (1) issued debt must be rated no lower than BBB-/Baa3 by each rating agency rating such issuer's debt, unless all investors are either (a) institutional accredited investors under Section 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act of 1933, as amended (the "Securities Act"), or (b) qualified institutional buyers under Rule 144A under the Securities Act (who are also permitted to buy non-fixed income securities under Rule 3a-7); and (2) the issuer may not dispose of assets "for the primary purpose of recognizing gains or decreasing losses resulting from market value changes." A section 3(c)(1) fund may not be beneficially owned by more than 100 shareholders. A section 3(c)(7) fund must be owned by "qualified purchasers." Section 3(c)(7) funds may have more than 100 but less than 500 investors to avoid SEC registration. Rule 3c-5 allows Knowledgeable Employees of a private fund, or an affiliated person that manages the investment activities of a private fund to acquire fund securities without being counted for purposes of the 100-person limit in Section 3(c)(1) or being a "qualified purchaser" for purposes of Section 3(c)(7).

business investment companies and public welfare funds, certain insurance company separate accounts and separate accounts for bank-owned life insurance; and certain loan securitization vehicles, asset-backed commercial paper conduits and asset pools that cover the payment obligations of covered bonds. The rule expressly provides that the covered fund prohibition does not apply to the acquisition or retention by an insurance company or an affiliate therefore of any ownership interest in, or sponsorship of, a covered fund if the insurance company or affiliate acquires and retains the ownership interest solely for the general account or one or more separate accounts of the insurance company in compliance with and subject to insurance law and regulation.

Again, the Glass-Steagall type exemption for client services allows the acquisition or ownership interest or sponsorship of a covered fund in connection with organizing and offering bona fide trust, fiduciary, investment advisory or commodity trading advisory services. Banking entities meet a 3% limit on investments in each customer fund, and total investment across all customer funds is capped at 3% of a bank's Tier 1 capital.

Foreign institutions retain exemption for covered funds that are offered and operated "solely outside the United States" (a SOTUS exemption).

To demonstrate compliance with the rule regulated entities that meet the trading asset and liability thresholds (entities that have trading assets and liabilities the average gross sum of which equal or exceed \$50 billion on a worldwide consolidated basis over the previous four calendar quarters (excluding trading assets and liabilities involving obligations of or guaranteed by the United States or any agency of the United States) are required to record and report seven quantitative metrics, a reduced number compared to the proposed rule: (i) risk and position limits and usage; (ii) risk factor sensitivities; (iii) value-at-risk and stressed value-at-risk; (iv) comprehensive profit and loss attribution; (v) inventory turnover; (vi) inventory aging; and (vii) customer-facing trade ratio.

IX. 3 Management Responsibility for Contingency Risk Analysis

Similar to the provisions of the Sarbanes-Oxley legislation, the rule requires the CEO of the banking entity to attest annually to the relevant agency in writing that it has processes to establish, maintain, enforce, review, test and modify its compliance program to achieve compliance with the Volcker Rule. Some of the difficulties raised by the Volcker rule are dealt with

in another of the major areas of regulation in the bill: the ability of banks to operate and act as dealers in derivative contracts, and the formal transfer of derivatives clearing and trading to regulated market institutions. The former deals with the so-called "Lincoln amendment" that sought to prohibit banks active in the swaps markets from receiving various forms of "federal assistance," including federal deposit insurance and access to the Fed discount window or any Fed credit facility. However, the amendment also created difficulties due to the retention of existing Gramm-Leach-Bliley legislation and emerged with a push-out provision that allowed insured entities to continue their derivatives activities under certain conditions.

The central portion of the regulation forbids federal assistance for a generic category, "swaps entities," that is defined as "any swap dealer, security-based swap dealer, major swap participant, [or] major security-based swap participant." In turn, swap dealers and security-based swap dealers are persons or entities that hold themselves out as swap dealers, make markets in swaps, regularly enter into swaps with counterparties as an ordinary course of business for their own accounts, or engage in any activity causing them to be commonly known in the industry as swap dealers or market makers. However, even if an entity is not classified as a "swaps dealer," it may nonetheless be classified as a "major swap participant" or "major security-based swap participant" subject to the regulation if it maintains "substantial positions" in swaps, or if it possesses outstanding swaps that create substantial counterparty exposure that could have serious adverse effects on the financial stability of the US banking system or financial markets.

Since this provision, which was to come into effect in July 2012, would create substantial difficulties for banks in providing derivatives-based client services, or in using such instruments to hedge their own risks via the use of derivative contracts, the "push out" provision would allow banks to retain Federal insurance and support if their swap activities are carried out through an affiliate. The insured entities could then directly engage in their own and certain client-based hedging activities without being classified as swap dealers. The affiliates may be created by any depository institution that is part of either a bank holding company or savings-and-loan holding company, on condition that the affiliate complies with sections 23A and 23B of the Federal Reserve Act and any other requirements that the Commodity Futures Trading Commission (CFTC), Securities and Exchange Commission (SEC), and Fed may determine necessary. In effect, this is the equivalent of the section 20 exemption under Glass-Steagall that permitted commercial banks limited securities-market activities.

The activities that can be engaged in by the insured entity itself include acting as principal in swaps with customers in connection with originating loans for those customers; engaging in “de minimis” swaps dealing; entering swap agreements for the purposes of “hedging and other similar risk mitigating activities directly related to the insured depository institution’s activities”; and acting as swaps entities for activities involving rates or reference assets that are permissible for investment by a national bank. Again, these mirror exemptions that had already been approved under Glass-Steagall and did much to undermine its application. Regulations specifying the formal content of these limits and definition are to be formulated by the SEC and CFTC as appropriate.

The Swaps Pushout Rule which became effective in July 2013 has been one of the most controversial provisions of the Dodd-Frank Act. It was opposed by the heads of all three federal banking agencies as well as Paul Volcker. Both Federal Reserve Chairman Ben Bernanke and former FDIC Chairman Sheila Bair said it would increase systemic risk, rather than reduce it. The Swaps Pushout Rule has not improved with age. Indeed, one of the key lessons from the preparation of resolution plans under Title I of the Dodd-Frank Act, and recent simulations of the resolution of a systemically important financial institution under Title II of the Dodd-Frank Act, is that pushing swaps out of insured banks into non-bank affiliates creates an impediment to the orderly resolution of banking groups.

When swaps are held within an insured bank, their value can be preserved for the benefit of the bank’s creditors (including the FDIC’s Deposit Insurance Fund) and the stability of the financial system because the FDIC has the statutory power and incentive to transfer the swaps to a creditworthy third party or bridge bank within one business day after the original bank’s failure, overriding any otherwise applicable rights of counterparties to terminate the swaps. In contrast, counterparties have the right to immediately terminate swaps held within a non-bank affiliate under the Bankruptcy Code, and bankruptcy courts have no power or incentive to override those rights by transferring the contracts to a creditworthy third party or bridge company. Selective termination of swaps by a bankrupt entity’s counterparties typically results in the sort of value destruction and severe market disruption that occurred in the Lehman bankruptcy. As a result, there have been numerous efforts since the enactment of the Swaps Pushout Rule in July 2010 to repeal or significantly modify it.

It was only in December 2013 that the Federal Reserve approved the regulations applying to the uninsured U.S. branches and agencies of foreign banks under the push-out provision. The

provision, which became effective in July 2013, generally prohibits certain types of federal assistance, such as discount window lending and deposit insurance, to swap entities such as swap dealers and major swap participants. Insured depository institutions that are swap entities may avail themselves of certain statutory exceptions and are eligible for a transition period of up to two years to comply with the provision. Under the final rule, uninsured U.S. branches and agencies of foreign banks are treated as insured depository institutions for the purposes of section 716 and therefore qualify for the same statutory exceptions as insured depository institutions and are eligible to apply for the same transition period relief. The final rule also establishes a process for state member banks and uninsured state branches or agencies of foreign banks to apply to the Federal Reserve for the transition period relief.

IX.4 Swaps: options and futures regulation

These exemptions do not, however, apply to credit default swaps (CDSs) unless they are cleared through derivatives-clearing regulations that are called for under the Act. The financial industry fought hard to limit reforms on the trading of CDSs to the requirement that they be cleared, arguing that this would be sufficient to ensure safety. However, Greenberger (2010) has argued that, while clearing regulations would help to ensure capital adequacy of trading partners, this alone is not sufficient protection. For example, Greenberger states that the following regulations are necessary as well: transparency of pricing and of the trading party identities, prudential and competency regulation of intermediaries, adequate self-regulation by the industry to help regulators, complete record keeping, prohibitions on fraud and manipulation, full disclosure to regulators and counterparties, and competent private enforcement. This would create a structure similar to stock market rules, regulations, and operating procedures. Exchange trading, strict antifraud requirements that are enforced by state and federal governments, and bans on "abusive" CDSs that are designed to cause economic injury (through bankruptcy) were seen to be needed to prevent a repeat of the problems that led up to the crisis.

It is interesting that a new market in synthetic collateralized debt obligations is rapidly developing, based on the sharp increase in junk bond issuances that has been stimulated by the low interest rates and spreads in the corporate bond market. The instruments enable investors to take a position on the junk bond market without holding a long position in the underlying instruments. They are created through derivatives on junk bond indices and resemble the

instruments that created such difficulty in the mortgage market, while providing exposure similar to a credit default swap. It is not clear that the new regulations will be able to prevent a like collapse in the event of a rapid increase in policy rates, spreads, or junk bond default rates.

The full implementation of the Volcker and Lincoln amendments requires provisions to shift over-the-counter (OTC) trading in derivatives onto federally mandated clearing mechanisms and regulated markets. The Act thus calls for the creation of a comprehensive framework for the regulation, clearing, and exchange trading of OTC derivatives. Now defined as “swap” contracts, federal legislation has always excluded them from similar formal regulations that originated in the initial regulation of futures contracts in 1922. This is due in part to the fact that futures contracts were initially developed in the agricultural sector and thus were subject to commodity futures trading regulation monitored by the CFTC, while other derivatives contracts were primarily financial and therefore under the regulatory rubric of the SEC. Thus, although futures contracts, whether of a financial or commodity nature, could not be legally traded outside of a formally regulated market without a specific exemption, other derivatives were always fully exempt and thus developed in the OTC market. The current regulation thus seeks to apply the exchange and clearing regulations of futures to virtually all standardized swap contracts.

While swaps and futures represent similar “time” contracts, swaps, unlike futures, were customized to the specific commercial hedging needs of businesses and financial institutions; and, as noted, financial institutions initially acted as intermediaries bringing together swap counterparties in private bilateral negotiations. Since most of these contracts were negotiated without exchange of principal, risk exposure was limited to marginal changes in the market price of the contracts and prescriptive regulation was not considered necessary. As banks began to take on principal positions as counterparties to client requests, they also accepted risk on the nonperformance of counterparties, but this was also considered minimal. The most popular swaps contracts were interest rate and Forex swaps, which were generated by the breakdown of the Bretton Woods system of fixed exchange rates and have since become an integral part of the hedging in the flexible interest and exchange rates in the international financial system. As they increased in volume, the International Swaps and Derivatives Association provided standardized terms and documentation, reducing the need for specific conditions and bilateral negotiation.

The definition of swaps in the Act covers most commonly traded OTC derivatives, including options on interest rates, currencies, commodities, securities, indices, and various other financial

or economic interests or property; contracts in which payments and deliveries are dependent on the occurrence or nonoccurrence of certain contingencies (e.g., a credit default swap); and swaps on rates and currencies, total return swaps, and various other common swap transactions.

Due to the parallel development of commodity-based and financial-based contracts, the Act defines and provides for a common approach to "security-based swaps," which are generally swap transactions involving a single security or loan or a narrow-based security index. In broad terms, these will be regulated by the SEC while "commodity swaps" will be regulated by the CFTC, preserving the historical division of labor between the two agencies.

Another high-volume area of the market that might be considered a prime example of contracts that might benefit from regulated market trading are foreign exchange swaps and forward contracts. These contracts are primarily the domain of banks and are currently exempt from regulatory oversight. They will be subject to regulation under the Act; however, given the major participation of banks in providing client services and the traditional absence of regulation since the breakdown of the Bretton Woods system, the Act provides the Treasury secretary with the power to exclude them from regulation if the contracts negotiated have not been structured to evade the reach of the legislation. This exemption is expected in the near future.

Banks, dealers, and other financial institutions active in the derivatives markets may be classified as "(security) swap dealers"—that is, any person who holds himself out as a dealer in swaps, makes a market in swaps, regularly enters into swaps with counterparties as an ordinary course of business for his own account, or engages in any activity causing him to be commonly known in the trade as a dealer or market maker in swaps—and will become subject to registration and record-keeping requirements.

Given the prominent role in providing client services, a number of institutions will be exempt from classification as (security) swap dealers: an insured depository institution, to the extent it offers to enter into a swap with a customer in connection with originating a loan with that customer; an entity that buys or sells swaps for such person's own account, either individually or in a fiduciary capacity, and not as "part of a regular business"; and an entity that engages in a "de minimis quantity" of swap dealing in connection with transactions with or on behalf of its customers.

The major obligation of swap dealers will be the application of minimum capital standards and initial and variation margin requirements for swaps that are not cleared as required by the appropriate prudential regulatory agency or commission.

On January 16, 2014 and January 22, 2014, the first two swap “made available-to-trade” determinations (“MAT Determinations”) became effective. As a result, specific categories of interest rate swaps will become subject to mandatory trading execution on a swap execution facility (“SEF”) or designated contract market (“DCM”) beginning either February 15, 2014 or February 21, 2014, depending on the type of interest rate swap (i.e., transactions in such swaps will become “Required Transactions”). On these dates, bilateral over-the-counter trading in the covered swaps — absent an applicable exemption or exception — will become unlawful, and market participants wishing to trade covered swaps will need to have access to one or more SEFs or DCMs. This is a significant milestone in the migration of standardized swaps to platform trading, as mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act (“Dodd-Frank”) and represents yet another step toward the Commodity Futures Trading Commission’s (“CFTC”) implementation of Title VII of Dodd- Frank.

On October 18, 2013 and October 22, 2013, respectively, Javelin SEF LLC (“Javelin”) and trueEX LLC (“trueEX”) issued MAT Determinations with respect to certain categories of interest rate swaps. Both MAT Determinations were submitted to the CFTC under a procedure that allows a SEF or DCM to “self-certify” that its rules comply with the Commodity Exchange Act (“CEA”) and CFTC regulations. Because these MAT Determinations presented “novel [and] complex issues that require[d] additional time to analyze,” the CFTC immediately issued stays for both of them. The CFTC allowed these stays to expire on January 16, 2014 and January 20, 2014, respectively, and therefore both MAT Determinations now are deemed certified and have become effective. Pursuant to CFTC rules, thirty days after a MAT Determination becomes effective, bilateral over-the-counter trading in the covered swaps becomes unlawful and all transactions involving such swaps must be competitively executed on a SEF or DCM (the “Trade Execution Requirement”). Notwithstanding the Trade Execution Requirement, certain exemptions and exclusions, including the End User Exception, may be available to market participants.

Javelin’s MAT Determination, which was amended several times following its initial publication, covers three types of fixed-to-floating interest rate swaps, with different available tenors:

1. USD/LIBOR interest rate swaps with a "spot starting" trade start type;
2. USD/LIBOR interest rate swaps with an "IMM start date" trade start type; and
3. EUR/EURIBOR interest rate swaps with a "spot starting" trade start type.

trueEX's MAT Determination covers two types of interest rate swap products, with different available tenors:

1. USD/LIBOR fixed-to-floating par coupon interest rate swap contracts; and
2. USD/LIBOR standard coupon and standard maturity interest rate swap contracts.

Dodd-Frank fundamentally transforms the way many swaps are traded through two separate, but overlapping, mandates: (1) the clearing mandate and (2) the Trade Execution Requirement. Pursuant to section 2(h)(1) of the CEA, the CFTC, through rulemaking, has already directed that certain interest rate swaps and index credit default swaps must be cleared through a derivatives clearing organization, subject to certain exceptions and exclusions. Pursuant to section 2(h)(8) of the CEA, a swap only becomes subject to the Trade Execution Requirement if (1) it is subject to mandatory clearing and (2) a MAT Determination has been made with respect to the particular type of swap. Swaps subject to the Trade Execution Requirement are also known as "Required Transactions."

Required Transactions may satisfy the Trade Execution Requirement through two methods of execution: (1) on a SEF or DCM's central "order book"; or (2) through a SEF's request for quote ("RFQ") system. Both SEFs and DCMs are required to maintain an "order book," which is defined as an electronic trading facility, a trading facility, or a trading system or platform in which all participants have the ability to enter multiple bids or offers, observe or receive bids and offers entered by other market participants, and transact on such bids and offers. Brokers or dealers with discretion to execute against a customer's order or to execute two customers against each other are subject to a time delay of a minimum of 15 seconds for all Required Transactions executed through an order book. This mandatory delay is designed so that one side of the potential transaction is disclosed and made available to other market participants before the second side of the transaction is submitted for execution. SEFs, but not DCMs, may also execute Required Transactions through an RFQ system, which allows each market participant to request a quote from at least three other market participants, to which all such market participants may respond. The market participants to whom the RFQ is sent may not be affiliates of, or controlled by, the requestor or each other, and the SEF must also report to the RFQ requestor all resting orders in the

order book for the same swap. Required Transactions may be communicated to the SEF or DCM by “any means of interstate commerce,” including telephone, so long as the order book or RFQ system requirement is met. The Trade Execution Requirement for Required Transactions does not apply to certain non-competitively executed transactions like block trades and exchange-for-physical transactions.

IX.5 Too Big To Fail: Dealing with insolvent institutions

As noted, the major sections of the Act do little to reverse the trend toward larger and larger multifunction bank conglomerates. Indeed, it does not create any limits on their size, interconnectedness, or leverage. Nor does it seek to reverse the increase in the largest financial firms that has occurred as a result of the urgent measures to deal with the crisis. The ratio of assets to GDP controlled by JPMorgan Chase, Bank of America, Citigroup, Wells Fargo, Goldman Sachs, and Morgan Stanley has risen three fold between 1995 and 2010 to over 60 percent of our nation's GDP. The share of total deposits controlled by the five largest banks has risen over four fold to over 45 percent.

The Act attempts to deal with the increased risks presented by the continued growth of such institutions by creating a system for the dissolution of such institutions when they become insolvent. Indeed, the overarching theme of the Act is not so much to prevent crises as to preclude the possibility of using public funds in meeting losses or rescuing insolvent institutions. This is understandable considering the criticism of the use of the TARP program to sustain and recapitalize insolvent financial institutions while insolvent households were forced into foreclosure. Congress clearly wanted to wash its hands of any responsibility for the use of public funds in support of financial institutions.

The absence of a common legal framework for dealing with insolvent institutions was one of the main difficulties noted by regulators in responding to the recent crisis. For example, the Federal Reserve has argued that it had no mandate to act in the case of Lehman Brothers, while the Treasury had no mandate to impose bankruptcy on AIG. In the absence of clear FDIC authority to resolve noninsured, nonbank financial institutions, direct government support appeared to be the sole alternative. Title II of the Dodd-Frank Act is meant to meet this difficulty through the creation of an “orderly liquidation authority” (OLA) that gives the FDIC power to seize control of such institutions on the determination by the Treasury secretary that they threaten the financial

stability of the United States. It mandates the FDIC to liquidate such designated institutions so as to maximize the value received from the disposition of the company's assets, minimize any loss, mitigate the potential for serious adverse effects to the financial system, ensure timely and adequate competition and fair and consistent treatment of bidders on assets and deposits, and prohibit discrimination.

According to the Act, implementing orderly liquidation requires that the FDIC determine that such action is necessary for purposes of the financial stability of the United States, and not for the purpose of preserving the covered financial company; ensure that the shareholders of a covered financial company do not receive payment until after all other claims and the Deposit Insurance Fund are fully paid; ensure that unsecured creditors bear losses in accordance with the priority of claims; ensure that the management and board of directors responsible for the failed condition of the covered financial company are removed (if still present at the time at which the FDIC is appointed receiver); and not take an equity interest in or become a shareholder of any covered financial company or any covered subsidiary.

Another reason for the use of direct government intervention in the recent crisis was the need for rapid action in order to prevent further deterioration of the financial condition of the institutions in difficulty and the risk of contagion. However, under OLA, the determination by the Treasury secretary has to be made on recommendation of certain designated federal regulatory authorities (such as the FSOC) and with an evaluation of why the institution should not be dealt with under the Bankruptcy Code, and after consultation with the president. The Act also requires that before the Treasury secretary can make the determination that the FDIC should be appointed receiver, he must first make a requisite series of specific underlying findings, including that the company is in default or is in danger of default; that should the company so default, the resolution of the company under the otherwise applicable federal or state law would have serious adverse consequences for the financial stability of the United States; that there are no private sector alternatives available that would avoid such adverse consequences; that there are no inappropriate potential effects on the claims or interests of creditors, counterparties, or shareholders that would result from such appointment; and that the seizure of such company under an OLA will prevent or otherwise limit damage to the financial stability of the United States (analysis must consider the effectiveness of such seizure in mitigating the potential adverse effects on the financial system, the cost of such resolution to the general fund of the Treasury, and the potential of such seizure

and resolution for increasing excessive risk taking going forward). The provision also mandates that the financial industry pay (after the fact) for the costs of any such dissolution activity undertaken by the FDIC

The powers granted to the FDIC as the liquidator are thus very similar to those currently in use for insured institutions, including, where necessary, the ability to continue the operations of a designated institution by means of an unencumbered bridge bank. The Act empowers the FDIC to establish such rules and regulations as it deems necessary or appropriate for implementing an OLA. This is one area in which its operations concerning insured and noninsured designated institutions will differ. In its resolution of normally insured depositary institutions, the FDIC has considered the assets transferred by the institutions to an arm's-length Special Purpose Vehicle via structured financing securitization, as claimable by secured creditors. However, the FDIC has indicated that it does not intend to apply this procedure in implementing the new OLA, thus protecting assets transferred to a special entity from the liquidation.

One of the difficulties faced by the FDIC in dealing with the resolution of large banks is the limited size of the deposit insurance funds. (Just like the Federal Savings and Loan Insurance Corporation in the 1980s!) While the ultimate source of funds is the federal government, and thus the Federal Reserve, the idea is that it should be self-financing, based on insurance premia charged to the insured institutions. Given the leitmotif of the Act to eliminate the use of public funds to rescue the financial system, Dodd-Frank mandates measures to increase the size of the insurance fund, as well as measures to adapt the premia to the differential risk that larger institutions introduce into the system. In addition, the costs to the insurance fund should it be required to finance the resolution or dissolution of an institution will be replenished by an assessment on the members of the system. This system of making the financial institutions pay for the profligate behavior of others raises interesting issues of moral hazard, as well as the possibility that the bailout of non-insured institutions will be covered by an assessment on insured institutions.

The Act in Section 334 thus raises the minimum designated reserve ratio of fund assets to insured deposits (DRR), which the FDIC must set each year, to 1.35 percent (from the former minimum of 1.15 percent), and removed the upper limit on the DRR (which was formerly capped at 1.5 percent) and therefore on the size of the fund; required that the fund reserve ratio reach 1.35 percent by September 30, 2020 (rather than 1.15 percent by the end of 2016, as formerly stipulated); required that, in setting assessments, the FDIC offset the effect of [requiring that the

reserve ratio reach 1.35 percent by September 30, 2020 rather than 1.15 percent by the end of 2016] on insured depository institutions with total consolidated assets of less than \$10,000,000,000; eliminated the requirement that the FDIC provide dividends from the fund when the reserve ratio is between 1.35 percent and 1.5 percent; and maintained the FDIC's authority to declare dividends when the reserve ratio at the end of a calendar year is at least 1.5 percent, in addition to granting the FDIC sole discretion in determining whether to suspend or limit the declaration or payment of dividends. The FDIC has acted to exceed the requirements of the Act, raising the DRR to 2 percent in 2011.

The Act also requires that the FDIC amend its regulations to redefine the assessment base used for calculating deposit insurance assessments. Under Dodd-Frank, the assessment base must, with some possible exceptions, equal average consolidated total assets minus average tangible equity. The FDIC has proposed eliminating risk categories and the use of long-term debt issuer ratings for large institutions, using a scorecard method to calculate assessment rates for large and highly complex institutions, and retaining the ability to make a limited adjustment after considering information not included in the scorecard. The final rule will define a large institution as an insured depository institution that had assets of \$10 billion or more as of December 31, 2006 (unless, by reporting assets of less than \$10 billion for four consecutive quarters since then, it has become a small institution); or that had assets of less than \$10 billion as of December 31, 2006, but has since held \$10 billion or more in total assets for at least four consecutive quarters, whether or not the institution is new. In almost all cases, an insured depository institution that has held \$10 billion or more in total assets for four consecutive quarters will have a CAMELS⁷ rating; however, in the rare event that such an institution has not yet received a CAMELS rating, it will be given a weighted average CAMELS rating of 2 for assessment purposes until actual CAMELS ratings are assigned. An insured branch of a foreign bank is excluded from the definition of a large institution.

On the insurance provided by the Depositors Insurance Fund, the Act calls in the FDIC to fully insure the net amount that any member or depositor at an insured credit union maintains in a noninterest-bearing transaction account. Such amount shall not be taken into account when

⁷ US Regulators use a rating scale of 1 to 5 based on a series of indicators to assess the soundness of a bank. They include (C) Capital adequacy, (A) Asset quality, (M) Management, (E) Earnings, (L) Liquidity, (S) Sensitivity to market risk.

computing the net amount due to such member or depositor. The normal insurance level remains at \$250,000 for each separate, normal interest-bearing account.

Many commentators have suggested that while the FDIC was unwilling to intervene to resolve “too big to fail” institutions, it was certainly able to do so. This position has been made very forcefully by Thomas Hoenig (Hoenig, 2009), president of the Federal Reserve District Bank of Kansas City, on the basis of his experience in dealing with the resolution of Continental Illinois Bank. To facilitate the ability of the FDIC to deal with these very large financial institutions (which, as already noted, Dodd-Frank considers a fact of life), the Act mandates the formulation of so-called “living wills” in the form of the preparation of resolution plans and credit exposure reports. The position has also been supported by Dallas Federal Reserve President Richard Fisher.

Rosner on the other hand notes that “it was neither the failure of Lehman Brothers nor any supposed mortal deficiency of the Bankruptcy Code that necessitated bailouts. Rather ... it was a panicked reaction of regulators who rushed to pay out the creditors of AIG, frightened markets, and exacerbated the crisis. After all, within days of its failure, much of Lehman was sold to Barclays and a relatively orderly bankruptcy process ensued.” He notes that already in April 1999 in the aftermath of the collapse of Long Term Capital Management, “the President’s Working Group on Financial Markets recognized that the derivatives termination rules in the Bankruptcy Code work well to facilitate the continued functioning of derivatives markets when a financial firm fails, but that in very rare instances, where the failing firm has concentrated a great deal of risk, the rules may not be adequate in mitigating market volatility. The Working Group stressed the need for new bankruptcy rules but it did not, however, recommend an entirely new and overreaching resolution regime.” Yet this is precisely what is proposed in Dodd-Frank.

Rosner considers the fact that Dodd-Frank creates two different regimes under which a large financial firm can be wound up: traditional bankruptcy and the OLA as a fundamental flaw in Dodd-Frank’s approach to too big to fail. He notes that “The value of a firm in its ‘going concern’ state is dependent on the resolution process employed when it fails. All non-financial firms and most financial institutions use the Bankruptcy Code; commercial banks use the FDIC; broker-dealers use Securities Investor Protection Corporation. There may be different systems for different types of firms, but there are not, and there should not be, multiple processes for the same firm. In sum, the absolute worst thing that regulators can do is exactly what they’re doing now: signaling to the public and the markets, ex ante, which firms will cause systemic instability and

then providing a U.S. Treasury–funded bailout scheme through the Orderly Liquidation Authority. Where investors have great certainty and clarity about the workings of the U.S. bankruptcy process, the Orderly Liquidation Authority's dangerous subjectivity, increased opacity, preference for short-term creditors, and ambiguity in how it will treat similarly situated creditors will only increase the uncertainty among creditors of a failing institution and cause necessary risk capital to pause at precisely the time their capital is most needed.

IX.6 Resolution Plans: The Living Dead

The Act calls upon the Board of Governors of the Fed to require nonbank financial companies and bank holding companies that it supervises to periodically report the plan of such company for rapid and orderly resolution in the event of material financial distress or failure, which shall include: information regarding the manner and extent to which any insured depository institution affiliated with the company is adequately protected from risks arising from the activities of any nonbank subsidiaries of the company; full descriptions of the ownership structure, assets, liabilities, and contractual obligations of the company; identification of the cross-guarantees tied to different securities; identification of major counterparties; and a process for determining to whom the collateral of the company is pledged.

In addition, the Act calls for credit exposure reports covering the nature and extent to which the company has credit exposure to other significant nonbank financial companies and significant bank holding companies, and the nature and extent to which other significant nonbank financial companies and significant bank holding companies have credit exposure to that company.

The Fed and the FDIC will review these reports, and if, based on their review, the resolution plan of a nonbank financial company supervised by the Board of Governors or a bank holding company is not credible or would not facilitate an orderly resolution of the company, shall notify the company of the deficiencies in the resolution plan; the company shall resubmit the resolution plan within a timeframe determined by the Fed and the FDIC with revisions demonstrating that the plan is credible and would result in an orderly resolution, including any proposed changes in business operations and corporate structure to facilitate implementation of the plan.

The "living will" is thus designed to show ex ante that some firms are too big to fail, and will clearly put the major burden on large multifunction banks with complex global operations, such as

Citigroup, Bank of America, JPMorgan Chase, Goldman Sachs, and Morgan Stanley. The head of the FDIC has recently suggested that the inability of a big bank to provide a credible resolution plan would be a condition for requiring that it be broken up by the transformation of its foreign operations into foreign subsidiaries subject to foreign regulators, in order to realign its legal structure and, if necessary, make it easier for regulators to liquidate the bank. "If they can't show they can be resolved in a bankruptcy-like process . . . then they should be downsized now," said FDIC Chairman Sheila C. Bair. The aim of orderly liquidation is to avoid a repeat of 2008, when the Bush administration bailed out AIG and other firms but not Lehman Brothers. Lehman's bankruptcy virtually froze capital markets.

In compliance with the Dodd-Frank Act requirement that bank holding companies (and foreign companies treated as bank holding companies) with total consolidated assets of \$50 billion or more and nonbank financial companies designated for enhanced prudential supervision by the Financial Stability Oversight Council periodically submit resolution plans to the Federal Reserve Board and the FDIC. Each plan must describe the company's strategy for rapid and orderly resolution in the event of material financial distress or failure of the company, and include both a public and confidential section.

Companies subject to the resolution plan requirement filed their initial resolution plans on a staggered schedule. The 116 companies whose initial resolution plans were due by December 31, 2013, are those that generally have less than \$100 billion in qualifying nonbank assets.

Two groups of institutions have already filed resolution plans. The first group, generally those bank holding companies with \$250 billion or more in qualifying nonbank assets, submitted initial plans in July 2012 and their second annual plans in October 2013. The second group, generally those with \$100 billion or more, but less than \$250 billion, in qualifying nonbank assets, submitted their initial plans in July 2013.

IX.7 Provision of Liquidity

The main instrument of Federal Reserve support during the crisis was its authority to open the discount window in urgent and exigent circumstances, as stipulated in section 13(3) of the Federal Reserve Act, to virtually any financial or nonfinancial institution against virtually any type of collateral. As a result of the express desire of Congress to ensure that no support be given to failing financial institutions, the Dodd-Frank Act seeks to ensure that the Fed's discretion to provide

emergency support to insolvent institutions does not circumvent an OLA. The Act thus calls on the Board of Governors, "in consultation with the Secretary of the Treasury, to establish the policies and procedures to ensure that any emergency lending program or facility is for the purpose of providing liquidity to the financial system, and not to aid a failing financial company, and that the security for emergency loans is sufficient to protect taxpayers from losses and that any such program is terminated in a timely and orderly fashion. The policies and procedures established by the Board shall require that a Federal reserve bank assign, consistent with sound risk management practices and to ensure protection for the taxpayer, a lendable value to all collateral for a loan executed by a Federal reserve bank." (Section 1101)

In addition, the Act requires the Fed to establish procedures to prohibit borrowing from programs and facilities by insolvent borrowers. Further, it limits the ability of the Board to establish any emergency facility without the prior approval of the Treasury secretary, and, if approval is obtained, to report within seven days to the Senate Committee on Banking, Housing, and Urban Affairs and the House Committee on Financial Services, providing the justification for the assistance; the identity of the recipients; the date, amount, and form in which the assistance was provided; and complete particulars of the assistance. The particulars include duration; collateral pledged and the value thereof; all interest, fees, and other revenue or items of value to be received in exchange for the assistance; any requirements imposed on the recipient with respect to employee compensation, distribution of dividends, or any other corporate decision in exchange for the assistance; the expected costs to the taxpayers of such assistance; and similar information be reported every subsequent 30 days, with respect to any outstanding loan or other financial assistance.

And if such reporting were not sufficient, the Act gives the comptroller general of the United States the power to conduct audits, including onsite examinations, of the Board of Governors, a Federal Reserve Bank, or a credit facility, if the comptroller determines that such audits are appropriate, solely for the purpose of assessing, with respect to a credit facility or a covered transaction, the operational integrity, accounting, financial reporting, and internal controls governing the credit facility or covered transaction; the effectiveness of the security and collateral policies established for the facility or covered transaction in mitigating risk to the relevant Federal Reserve Bank and taxpayers; whether the credit facility or the conduct of a covered transaction inappropriately favors one or more specific participants over other institutions

eligible to utilize the facility; and the policies governing the use, selection, or payment of third-party contractors by or for any credit facility or to conduct any covered transaction.

IX.8 The future of securitization: Risk retention

For many, abuse of securitization was at the root of the financial crisis. It was certainly a crucial part of the shift to the originate-and-distribute business model adopted by most large financial institutions and the rise of off balance sheet entities and shadow banks. It also was a source of significant fraudulent activity. It is therefore not surprising that Dodd-Frank Act should propose regulation of these structures. However, the new regulations are not extensive and are limited to the imposition of requirements for credit risk retention requirements of not less than 5 percent for securitizers and, in certain circumstances, originators of asset-backed securities. Issuers of a Qualified Residential Mortgage (the characteristics of which have yet to be defined by regulators) or the originator of the asset that meets minimum underwriting standards to be determined by the appropriate regulatory agencies will be exempt from the risk retention requirement. This is based on the presumption that if banks had retained some risk, they would have been more diligent in monitoring the quality of the mortgages that they securitized. Yet, in actual fact, one of the causes of the large losses experienced by institutions engaged in securitization was that they had voluntarily retained a substantial amount of investment grade tranches of subprime securitizations. Indeed, in this case, having skin in the game did not lead to greater concern for asset quality, but was a cause of increased instability.

In a study prepared under the mandate in Dodd-Frank, the FSOC (2011) offers several principles and recommendations that should inform the design of a risk-retention framework, so as to strengthen the securitization process and facilitate economic growth by allowing market participants to price credit risk more accurately and allocate capital more efficiently.

The study argues that a risk-retention framework should seek to meet the following objectives: align incentives without changing the basic structure and objectives of securitization transactions; provide for greater certainty and confidence among market participants; promote efficiency of capital allocation; preserve flexibility as markets and circumstances evolve; and allow a broad range of participants to continue to engage in lending activities, while doing so in a safe and sound manner.

A risk-retention framework can be structured in a number of ways to meet these objectives. The form of risk retention, allocation of risk retention to various participants in the securitization chain, amount of risk retention, allowances for risk management, and exemptions from risk retention—all are important variables in the design of any such framework. Although a risk retention framework can help align incentives and improve underwriting standards, the macroeconomic implications of risk retention are complex. A risk-retention framework can incent better lending decisions and consequently help strengthen the quality of assets underlying a securitization. It may also help mitigate some of the procyclical effects that asset-backed securitization can have on the economy. However, if overly restrictive, risk retention could constrain the formation of credit, which could adversely impact economic growth. The challenge is to design a risk-retention framework that maximizes benefits while minimizing its costs.

It is interesting that the accounting conditions that determine whether or not securitizations can be considered off-balance-sheet nonrecourse sales of assets make no reference to “risk retention,” leading to the possibility that the framework will not necessarily make these structures more transparent or better monitored. According to the Federal Reserve’s report to Congress on risk retention (Board of Governors 2010), a recourse agreement requiring the originator or holder of assets to absorb a percentage of the credit loss for the assets after sale would not appear to negate any of the conditions required for consolidation on the issuer’s balance sheet. However, it goes on to note that if the risk retention requirements increase the instances of consolidation of the assets and liabilities of an asset-backed security (ABS) entity, the agencies should consider the incentives that such an outcome would create.

This raises a number of issues. First, regulatory capital requirements for banking institutions generally state that consolidated assets must be risk weighted in the same way as assets on the balance sheet that have not been securitized. In addition, if balance-sheet assets are subject to either impairment analysis on a periodic basis or fair-value measurement, this would then apply to securitized assets that do not qualify for exclusion. If these assets require an allowance for credit losses, including loans and leases, this will affect earnings and regulatory capital. Assets measured at fair value, including many securities, also will affect earnings and regulatory capital. The impact on earnings and capital may continue to encourage institutions to engage in deal structuring for the purpose of achieving off-balance-sheet treatment. This may lead to the same arbitrage of activities that plagued Basle I, creating a wedge between economic risk

and regulatory risk of the bank portfolio. Under Basle I risk weights, financial institutions were encouraged to retain the riskiest assets in each category. Instead of solely economic factors determining an appropriate level of credit and liquidity protection necessary for asset-backed security (ABS) issuances, institutions might desire to retain only the minimum level of risk required by regulation, if the minimum level enabled the institution to avoid consolidation. Similarly, companies may be encouraged as a result of those earnings and capital effects to avoid consolidating assets and liabilities by ceding power over special entities when it is not feasible to limit benefits to an amount that meets regulatory requirements. For example, institutions may cede power over ABS issuance entities—which in some cases results from their ability to manage assets held by the issuance entities—by selling servicing rights or distancing themselves from their customers in order to avoid consolidating the assets and liabilities of the issuance entities. As a result, it is not clear that the *de minimis* 5 per cent “skin in the game” thresholds included in Dodd-Frank will inhibit the difficulties caused by off-balance-sheet entities in the recent crisis. It is also doubtful that these structures will, in fact, isolate the institutions from the impact of the performance of these assets. Indeed, in the recent crisis, virtually all of the risk of variable-interest entities and other off-balance-sheet activities were eventually subject to recourse and returned to bank balance sheets, further aggravating the crisis. For example, if the fees and trading profits earned by securitizing risky assets is believed by banks to more than offset the risk to capital of retaining a 5 percent share of “skin in the game,” then the rules will not change behavior. And there is the additional danger that, due to off-balance-sheet commitments, the true share could be much higher. Reforms should not be based on the presumption that banks want to avoid risks. Further, perceived risk depends on the operating environment—the “great moderation” lowered perceived risk across the spectrum of assets. That also changed behavior, because the reward for risk fell. This was probably a big impetus to bank activities that appeared to shift risk but in fact did not.

Finally, it should be noted that the SEC had instigated changes in the regulation of securitization before the passage of the Dodd-Frank Act and has continued the process of consultation prior to final rule making in this area. Securitization has been practiced since the 1970s without incident until the recent crisis. The objective should be to preserve the principle by producing regulation that prevents instability.

In addition, as noted above, the implementation of the Volcker rule has provided a carve out for most bank-originated securitizations, with the exception of certain mixed asset and loan only securitizations when they involved dynamic replacement of assets. While CLOs are generally considered as covered by the Volcker rule, the rules covering the “skin in the game” requirements for arrangers and organizers have yet to be finalized.

IX. 9 Capital and leverage ratios

Some commentators have suggested that the shift towards the banking business model of originate and distribute, based on the ability to move assets off balance sheet through securitization was driven by the introduction of risk weighted capital ratios in the Basle requirements which increased the funding costs of certain types of investments. There are other experts who argue that the new Basle III requirements have become too detailed and too onerous and should be replaced by simpler traditional gross leverage ratios and liquidity ratios. In response Dodd-Frank maintains extremely detailed regulations, but also mandates the appropriate Federal banking agencies to establish minimum leverage and risk based capital requirements on a consolidated basis for insured depository institutions, depository institution holding companies, and nonbank financial companies supervised by the Board of Governors. The minimum leverage capital requirements proposed should not be quantitatively lower than the generally applicable leverage capital requirements that were in effect for insured depository institutions as of the date of enactment of this Act. In addition Section 165 mandates the Federal banking agencies to develop enhanced prudential standards including capital requirements applicable to insured depository institutions, depository institution holding companies, and nonbank financial companies supervised by the Board of Governors that address the risks that the activities of such institutions pose, not only to the institution engaging in the activity, but to other public and private stakeholders in the event of adverse performance, disruption, or failure of the institution or the activity. These enhanced standards were also to incorporate the then forthcoming decisions of the Basle Committee under Basle III.

With effect from January 1, 2015, the Fed responded with enhanced prudential standards for US bank holding companies with total consolidated assets of \$50 billion or more and in addition extended them to foreign banking organizations (FBOs) by requiring FBOs with \$50 billion or more in U.S. non-branch/agency assets, to charter a U.S. intermediate holding company

that would then be subject to the enhanced risk-based and leverage capital requirements, liquidity requirements, risk management requirements, and stress-testing requirements.

The enhanced prudential regulations include liquidity requirements for bank holding companies with total consolidated assets of \$50 billion or more including minimum liquidity risk management standards, internal liquidity stress tests, and a 30-day buffer of highly liquid assets. Liquidity risk management strategies, policies, and procedures must be established by the bank holding company's senior management and approved by its board of directors and must also be subject to annual independent review. Covered banks will also be required to establish an enterprise wide risk committee chaired by an independent director and to have at least one member with experience in identifying, assessing, and managing risk exposures of large, complex financial firms. It must also appoint a chief risk officer. Publicly traded bank holding companies with total consolidated assets of \$10 billion or more but less than \$50 billion are also required to establish a risk committee chaired by an independent director that includes at least one member having experience in identifying, assessing, and managing risk exposures of large, complex firms.

Section 165 provides the Financial Stability Oversight Council with the obligation to identify institutions with 50 billion or more in consolidated assets that pose a grave threat to U.S. financial stability and to impose a maximum leverage of 15 to 1. In addition, this section has been the basis of the majority of what may be called "macro prudential" regulation introduced by the Fed. In addition to enhanced contingency risk management and planning in the context of stress testing discussed above it has included special norms and standards for liquidity for large systemically significant financial institutions. While these liquidity regulations are in some aspects stronger than the Basle III requirements, in their recently proposed regulatory rule, the Federal Reserve has noted that these liquidity proposals should be interpreted as complementary to the enhanced prudential supervision mandated under Section 165 and noted that proposals on longer-term net stable funding ratio (the Basle III "NSFR") would be forthcoming once finalized by BCBS. In addition, the Federal Reserve has indicated that part of this ongoing process will include regulations governing short-term wholesale funding and securities financing transactions.

IX.10 Enhanced Liquidity positions and the Advanced Approach to regulation for large financial institutions.

Two recent measures have been proposed to the Feds enhance supervision of large, internationally active banking organizations--generally those with at least \$250 billion in total consolidated assets or at least \$10 billion in total on-balance sheet foreign exposure under Section 165 of Dodd-Frank. The first provides for the implementation of an "Advanced Approaches" capital framework, implementing Basle III standards to meet specific risk measurement and management criteria when calculating risk-based capital requirements. Eight bank holding companies, eight national banks, and four state member banks have completed their trial parallel for at least four consecutive calendar quarters using risk-measurement and risk-management systems that adhere to the Advanced Approaches framework. : The Bank of New York Mellon Corporation, the Bank of New York Mellon, and BNY Mellon National Association; Citigroup Inc. and Citibank, NA; The Goldman Sachs Group, Inc. and Goldman Sachs Bank USA; JPMorgan Chase & Co., JPMorgan Chase Bank, NA, Chase Bank USA National Association, and JPMorgan Bank and Trust Company, National Association; Morgan Stanley, Morgan Stanley Bank, NA, and Morgan Stanley Private Bank, NA; Northern Trust Corporation and The Northern Trust Company; State Street Corporation and State Street Bank and Trust Company; and U.S. Bancorp and U.S. Bank National Association. These firms will use the Advanced Approaches framework to calculate and publicly disclose their risk-based capital ratios beginning with the second quarter of 2014. Under the capital rules finalized by U.S. regulators in July 2013, these firms must meet the minimum risk-based capital ratios under both the Advanced Approaches and the generally applicable risk-based capital frameworks.

In addition, as part of its enhanced regulations under Section 165 the Federal Reserve has for the first time proposed standardized minimum liquidity requirement for large over \$250 billion in consolidated assets or \$10 billion in foreign exposure) and internationally active banking organizations and systemically important, non-bank financial companies designated by the Financial Stability Oversight Council. These institutions would be required to hold minimum amounts of high-quality, liquid assets such as central bank reserves and government and corporate debt that can be converted easily and quickly into cash. Each institution would be required to hold liquidity in an amount equal to or greater than its projected cash outflows minus its projected cash inflows during a short-term stress period. The ratio of the firm's liquid assets to its projected net cash outflow is its "liquidity coverage ratio," or LCR.

The proposal also would apply a less stringent, modified LCR to bank holding companies and savings and loan holding companies that are not internationally active, but have more than \$50 billion in total assets. It also defines various categories of high quality, liquid assets (HQLA) and also specifies how a firm's projected net cash outflows over the stress period would be calculated using common, standardized assumptions about the outflows and inflows associated with specific liabilities, assets, and off-balance-sheet obligations.

The Fed proposed rule is based on Basle III, but is more stringent in several areas, which are defined as "super-equivalence" and applied to institutions qualifying for "Advanced Approaches" for calculation of risk-based capital rules. The Fed proposal would separately apply the LCR framework to these organizations' depository institution subsidiaries with more than \$10 billion in consolidated assets. Banking organizations would be more limited in their ability to include corporate debt securities as part of their stocks of HQLA. Corporate debt securities are subject to a 50% haircut – as opposed to a 15% haircut under the Basle III LCR. In addition, the Proposal excludes covered bonds and securities issued by any state, local authority or other government subdivision below the national level (including U.S. states and municipalities) from the stock of HQLA. Finally, under the Proposal, Level 2B liquid assets would not include residential mortgage-backed securities in any amount, whereas the Basle III LCR generally permits their inclusion in Level 2B liquid assets subject to a 25% haircut. Whereas the Basle III LCR requires HQLA to be at least equal to net cash outflows at the *end* of the 30 day stress period, the Proposal would require a large banking organization's HQLA to be at least equal to net cash outflows on *every day* of the 30 day stress period. This is intended to guard against maturity mismatches within the 30 day stress period.

Finally, the Proposal makes various other changes to the LCR calculations, many of which represent incrementally more conservative (that is, more pessimistic) assumptions about the liquidity of assets and cash outflows during a period of liquidity stress. Among other things, where the Basle III LCR measures cash outflows for purposes of the LCR's denominator only with reference to deposits and other claims that are payable upon demand or come due within 30 days of the calculation date, the Proposal measures outflows (and, accordingly, applies "*run-off factors*") to certain instruments and claims irrespective of their maturities, including all retail deposits (for example, retail certificates of deposit maturing more than 30 days after the calculation date) and certain brokered deposits.

The Proposal also would introduce a modified LCR standard for bank holding companies and savings and loan holding companies with at least \$50 billion in total consolidated assets that are not advanced approaches banking organizations. This modified LCR would implement a 21 calendar day (rather than 30 calendar day) stress scenario for modified LCR companies. In addition, unlike under the LCR applicable to advanced approaches banking organizations, total cash outflow for the modified LCR would not be based on the highest cumulative outflow day during the stress period but instead would be calculated as total cash outflows over a 21 calendar day stress period. In addition, the modified LCR would use inflow and outflow rate assumptions generally equal to 70% of those used for purposes of the LCR for advanced approaches banking organizations. The modified LCR would not separately apply to the depository institution or other subsidiaries of non-advanced approaches covered banking organizations.

IX.11 Reform of credit rating agencies

Credit rating agencies and, in particular, nationally recognized statistical rating organizations (NRSROs) have been thought by many to be at the center of much of what went on in the market crisis, especially in the area of structured products. The agencies have come under significant criticism for their methodologies, lack of procedures, and conflicts of interest. Attempts to reform the role of credit rating agencies have been ongoing, reinforced with each financial crisis that breaks out without any prior indication of credit weakness appearing in the ratings issued. These regulatory changes have sought to provide an avenue for an increase in the number of NRSROs and to remove their role in regulation, but regulations have not been provided for the NRSROs themselves. For example, on September 17, 2009, the SEC moved to eliminate references to NRSROs in the "References in Rules and Forms" under the Securities Exchange Act of 1934, the Investment Company Act of 1940, the Exchange Act, the Securities Act, the Investment Company Act, and the Investment Advisers Act.

Title IX of the Dodd-Frank Act breaks with the hands-off treatment and calls for the creation of an Office of Credit Rating with the authority to fine credit rating agencies, to administer the rules of the SEC regarding the practices of NRSROs. The Office will examine all NRSROs at least annually, with each examination to review the following: the NRSROs' established procedures for assigning ratings, whether conflicts of interest are effectively managed, the NRSROs' ethics policy, NRSRO corporate governance procedures; and the processing of

complaints. The Office of Credit Rating will publish annual reports summarizing the findings of the examinations of the NRSROs.

All NRSROs will be required to establish, maintain, enforce, and document an effective internal control structure for determining credit ratings. They must submit annual internal controls reports, attested to by the CEO, to the SEC that describe management's responsibility to establish and maintain effective internal controls for determining credit ratings. NRSRO compliance officers must prepare certified annual reports and submit those reports to management and the SEC. All NRSROs must disclose information on each initial credit rating assigned and on any subsequent changes to a credit rating. This information must be prepared to allow users of the credit rating to evaluate the accuracy of ratings and to compare the performance ratings of NRSROs. Further, NRSROs will have to disclose their use of third parties for due diligence efforts, and if an NRSRO is made aware of credible and significant information from other sources, it must consider that information in assigning a rating.

The Act also requires the removal of all references to credit ratings in various other statutory schemes—among them, the Federal Deposit Insurance Act, the Federal Housing Enterprises Financial Safety and Soundness Act, the Investment Company Act, and the Exchange Act—in order to eliminate overreliance on credit ratings. All Federal agencies must substitute references in regulations to credit ratings with other standards of creditworthiness.

In addition, the SEC must commission a study regarding the feasibility or desirability of standardizing credit ratings for all NRSROs, standardizing stress testing, requiring a quantitative correspondence between credit ratings and a range of default probabilities, and standardizing credit rating terminology; and the Government Accountability Office must conduct a study to evaluate different methods for compensating NRSROs in order to create more incentives for providing accurate ratings, as well as a study on the feasibility and desirability of creating an independent professional organization for rating NRSRO analysts. Thus, major reform of the operation and role of NRSROs remains to be determined after the completion of the mandated studies.

A key part of the new provisions deals with the structure of the rating agencies. Each NRSRO is required to have a board of directors, at least half of whom are independent. The board is charged with overseeing the implementation of internal controls regarding policies and procedures for determining ratings, as well as compensation and promotions within the

organization. It is also responsible for overseeing the management of conflicts of interest through the implementation of appropriate policies and procedures.

The organization is required under the Act to maintain a documented, effective system of internal controls for determining ratings. The Commission is charged with requiring that each NRSRO prepare an annual report regarding its controls. The report must include an attestation by the CEO that describes the responsibility of management for establishing and maintaining the system. Each NRSRO is also required to designate a compliance officer. That officer cannot perform credit ratings or participate in marketing or sales activities. Likewise, the compensation of the officer cannot be tied to the financial performance of the organization. Rather, it must be arranged to assure independence.

The compliance office is charged with preparing an annual report addressing changes in the internal compliance procedures and code of ethics of the organization. The report must also examine compliance with the securities laws and the organization's policies and procedures. The SEC is required to review the code of ethics and conflict of interest policy of the organization annually, and whenever there are material changes.

The Act also addresses the "revolving door" issue between NRSROs and their clients. In this regard, Dodd-Frank requires that each NRSRO report to the SEC employment of certain senior officers associated with the rating agency in the prior five years where the agency has issued a rating for an instrument during the 12-month period prior to the employment of that person.

Several sections of the Act address the potential liability or litigation defenses of NRSROs. These include the application of expert liability. NRSROs will now be liable under section 11 of the Securities Act. Dodd-Frank overrides Rule 436, which exempted these organizations from being considered part of a registration statement. Accordingly, to include a report in a registration statement, consent from the NRSRO will have to be obtained. The Commission is required to remove the exemption for public dissemination of information received by credit rating agencies in the ratings process currently granted under SEC Regulation FD. The Act also requires all federal agencies to review and modify regulations to remove references or reliance on credit ratings, and to substitute an alternative standard of creditworthiness. The Act specifies that statements made by credit rating agencies are subject to liability in the same manner as those of accounting firms and securities analysts under the federal securities laws.

Finally, Dodd-Frank requires the preparation of studies and reports that may impact the future regulation of credit rating agencies. These include a report to Congress on the credit rating process for these products within 24 months of conclusion. It must include a study regarding the feasibility of establishing an independent organization to assign NRSROs to determine credit rating agencies, a report on the independence of NRSROs and how this impacts ratings, a study on the feasibility and desirability of standardizing credit rating terminology across credit rating agencies and asset classes, and a study of alternative means for compensating NRSROs to create incentives for more accurate ratings.

The SEC had already made some regulatory references to assigning ratings on a voluntary basis in 2009, but the Act now makes this obligatory. The SEC has indicated that it will resuscitate a plan it proposed in 2008, whereby rating references will be removed from the simplified registration form designed to expedite the process for a primary offering of public securities. Companies can qualify for this process if the debt is given an investment grade rating, so an alternative will need to be proposed—for example, a history of issue of more than \$1 billion in nonconvertible debt securities over a three-year period. An alternative will also need to be provided for the qualification of securities held by money market mutual funds.

The difficulties surrounding the removal of ratings from formal regulations and the suspension of the liability exemption for NRSROs is visible in the fact that SEC regulations requiring credit ratings for public securitization issues remain to be eliminated at a future date, while the removal of the legal liability for ratings they issue went into effect upon passage of the Act. As a result, the rating agencies announced that they would no longer allow their ratings to appear in registration documents for new securitizations. Immediately after the passage of the Act, the SEC was forced to announce a six-month ratings exemption in registration statements for securitizations other than those issued as private placements under Rule 144a.

Progress has been made in meeting the Dodd-Frank Section 939A mandate of eliminating the use of private credit ratings in Federal regulations. Two of the most important, the definition of investment grade and the net capital requirement for broker dealers, have been met.

The Office of the Comptroller of the Currency amended the regulatory definition of “investment grade”. The final rules do not require banks to consider external credit ratings to make an “investment grade” determination. Therefore, banks may rely on other sources of information, including their own internal systems or analytics provided by third parties, when conducting due

diligence and determining whether a particular security is a permissible and appropriate investment defined as the probability of default by the obligor is low and the full and timely repayment of principal and interest is expected. To comply with the new standard, banks may not rely exclusively on external credit ratings, but they may continue to use such ratings as part of their determinations.

The SEC introduced amendments to replace a reference to required NRSRO credit ratings in Rule 15c3-1 that prescribes a net liquid assets test that is designed to require a broker-dealer to maintain sufficient liquid assets to meet all obligations to customers and counterparties and have adequate additional resources to wind down its business in an orderly manner without the need for a formal proceeding if the firm fails financially. The Amendments replace references to NRSRO credit ratings in the provisions establishing lower haircuts for commercial paper, nonconvertible debt, and preferred stock (each, a "security") with an alternative standard for establishing that the securities involve a minimal amount of credit risk. When a broker-dealer applies haircuts for a security that has a ready market for purposes of its net capital computation, it will have the option of: (1) using the firm's own written policies and procedures to determine whether the security has only a minimal amount credit risk and, if so, applying the appropriate lower haircut if it meets the other conditions prescribed in Rule 15c3-1 or (2) applying the greater deduction applicable to the position, such as the 15% haircut under the catchall provision of Rule 15c3-1(c)(vi)(J). Thus, the Amendments provide that a broker-dealer may apply the lower haircuts applicable to commercial paper (i.e., between 0% and 1/2 of 1%), nonconvertible debt (i.e., between 2% and 9%), and preferred stock (i.e., 10%) if the security has only a minimal amount of credit risk. A security without a ready market, however, will continue to be subject to a 100% haircut.

IX.12 The role of hedge funds and the reforms

While hedge funds suffered substantial losses of both asset value and clients as a result of the crisis, it is generally believed that they played little role in the genesis of the crisis and those that were negatively impacted have been closed through normal processes of asset redemption—although with significant restrictions on the timing of payouts. Thus, the Dodd-Frank legislation does not create substantial new regulations for hedge funds. The two basic provisions are the possibility that the FSOC may classify a large fund as systemically important, and thus subject to

additional regulations similar to those applied to other regulated institutions; or as a major swaps participant or swaps dealer, and thus subject to the swaps regulation discussed above.

The other basic change is the requirement on registration and record keeping. For funds in the managed-asset range of \$25 million to \$100 million, registration is required in the state of residence, unless the state does not have an exam requirement; if funds operate in more than 15 states that require registration, then SEC registration substitutes. For funds with managed assets exceeding \$100 million, SEC registration is required unless the assets are under \$150 million and deal only with private funds. As noted above, the Volcker rule prohibits banks from owning more than a certain share of hedge funds. This regulation is meant to ensure that a bank might use a hedge fund in the same way it uses a securities affiliate.

As noted, there are exemptions that depend on the sophistication and net wealth of the investor in the case of private sales of assets by certain financial institutions. The value of the investor's house that has been included in the calculation of investor net wealth will now be excluded, although this may seem a case of acting after the horse has bolted.

On the other hand, given the restrictions placed on banks' proprietary and speculative activities, it is likely that hedge funds will continue to grow in size and number. Indeed, many banks have shut down their proprietary trading desks or have shifted personnel into client asset management units or seen their best traders leave to form stand-alone hedge funds—often with the backing of the bank they are leaving.

IX.13 Multiple and overlapping regulatory authorities

One of the criticisms that have traditionally been made of US financial regulation is the existence of multiple regulatory agencies, often with overlapping mandates. This is in part due to the federal structure of the United States, which leaves jurisdiction over certain activities to the individual states. For example, while the Constitution forbids the issue of currency by the states, it does not prevent them from chartering banks, with the result that there is an overlap between state and federal regulations. When the federal government attempted to regain its monopoly on the issue of bank notes in order to provide a uniform, national currency, it created the Office of the Comptroller of the Currency to oversee the national banks that issued the notes. Thrift institutions had their own state and federal regulatory structure, and when the Federal Reserve was created, it, too, took on regulatory powers, overseeing the issue of Federal Reserve notes. The introduction of

deposit insurance under the New Deal led to the creation of the FDIC to operate that system, as well as the creation of the SEC. The CFTC was created to oversee agricultural futures. The current reform legislation does not resolve this problem, and only eliminates one regulatory agency, the Office of Thrift Supervision (OTS). There are few thrifts still in existence, and the OTS had a reputation for lax oversight, which led to agency shopping; this was the regulatory agency that was responsible for AIG, and Countrywide made acquisitions designed to bring it under the authority of the OTS.

On the other hand, the Federal Reserve's regulatory responsibilities were sharply increased, and it is now charged with overseeing all systemically important institutions as well as those classified as such by the FSOC. As a result, the potential conflict between the Fed's role in designing and implementing price and output stabilization policy and undertaking the responsibility for financial stability assigned it by the Act have substantially increased. It was for this reason that Minsky argued in favor of a greater role for the central bank in promoting financial stability, given its position as unconstrained lender to the rest of the system; in exchange, it would leave economic policy to the fiscal decisions of the Treasury. Despite the fact that many of its critics have suggested that the Fed has usurped the fiscal policy role of the Treasury, it has nonetheless seen its power over economic policy increased as its role in maintaining financial stability has grown. Indeed, many argue that the next financial crisis may be generated by the withdrawal of quantitative easing to counter inflation, with the rise in interest rates causing collapsing bond prices and losses for financial institutions and households on their holdings of what they considered to be safe assets.

Rather than using variations in the Fed funds rate and open market purchases and sales to attempt to influence the decision of financial institutions to fund the spending decisions of the private sector, more direct influence over bank lending could be insured if financial institutions were always short reserves; that is, that the normal state of affairs would be for financial institutions to borrow from the Fed at the discount window. By providing most reserves through lending (rather than through open market purchases), the Fed could influence lending by choosing assets it would accept for discounting. In this manner, it would refuse to discount assets that resulted from what it perceived to be imprudent lending (e.g., subprime mortgages in a real estate bubble). It would also provide the Fed with more immediate information on the lending activities, and the associated innovations, of financial institutions. As a lender to financial institutions, the

Fed would have access to their portfolios—and could issue warnings and “cease and desist” orders as necessary. This is a system that has been practiced with success in Germany, where financial institutions were normally “in the bank”—that is, using Bundesbank credit on a normal basis.

In addition, the belief that much of the damage from the sale and securitisation of sub-prime mortgage was due to predatory and/or fraudulent practices of financial institutions has led to the proposal for protection of the taxpayer from predatory business practices in the form of a Financial Products Safety Commission. The major questions at issue here is whether the Commission would be independent or an appendage of the Federal Reserve and which institutions would be exempt from its mandate. Proposals for exemptions have been made that would cover some 80% of the financial system.

Title X, Subtitle A, Section 1011 provides for the establishment in the Federal Reserve System of an independent bureau to be known as the “Bureau of Consumer Financial Protection”, which shall regulate the offering and provision of consumer financial products or services under the Federal consumer financial laws. It will be responsible for implementing the Federal consumer financial laws through rules, orders, guidance, interpretations, statements of policy, examinations, and enforcement actions; and performing such other functions as may be authorized or required by law.

There was a great deal of pressure from industry to suppress this agency, and many believed that it should be independent on a basis similar to the Food and Drug Agency. In the end it was housed in the Federal Reserve, but with a substantial number of guarantees to insure that it was not controlled or influenced by the Fed.

In the same way as the FSOC, it will have a research unit that will research, analyze, and report on developments in markets for consumer financial products or services, including market areas of alternative consumer financial products or services with high growth rates and areas of risk to consumers; access to fair and affordable credit for traditionally underserved communities; consumer awareness, understanding, and use of disclosures and communications regarding consumer financial products or services; consumer awareness and understanding of costs, risks, and benefits of consumer financial products or services; consumer behavior with respect to consumer financial products or services, including performance on mortgage loans; and experiences of traditionally underserved consumers, including un-banked and under-banked consumers.

It will also have a unit whose functions shall include providing information, guidance, and technical assistance regarding the offering and provision of consumer financial products or services to traditionally underserved consumers and communities, as well as an Office of Fair Lending and Equal Opportunity to provide oversight and enforcement of Federal laws intended to ensure the fair, equitable, and nondiscriminatory access to credit for both individuals and communities that are enforced by the Bureau, including the Equal Credit Opportunity Act and the Home Mortgage Disclosure Act. The hope is that it should prevent the deceptive practices of mortgage brokers seen in the recent crisis. It will also establish an Office of Financial Education to support financial education and financial literacy, again with the intention to make consumers more aware of deceptive practices and fraud in the provision of financial services.

Impact of US Pre and Post-Crisis Regulation on European Regulation

I. Introduction

As noted in the introductory paragraphs, the US system was unique among developed country financial systems in its strict regulatory separation between deposit-taking banks and investment banks, as well as in its unit structure which was the result of the dual state-Federal separation of prudential regulation which allowed most states to prohibit branch banking. The push to deregulation and liberalization of the financial system in the US was thus primarily directed at idiosyncrasies of the US regulatory system. This included a gradual and progressive weakening of the Glass-Steagall boundaries between commercial and investment banks, the expansion of Federal Reserve regulation over state as well as Federal chartered banks, the elimination of special treatment for savings banks and the elimination of restrictions on branch banking. Until this process of liberalization US banks, with a few noted exceptions such as Citibank, were not a global presence, and the expansion of US banks into global markets commenced with their increased activities in the London Eurodollar market to escape monetary policy controls in the run-up to the collapse of the Bretton Woods System in the early 1970s and then to take advantage of trading in currencies after the end of the Smithsonian Agreements.

II. Experience before the recent Financial Crisis

Thus although a number of other European systems were subject to regulatory controls, primarily directed towards and motivated by the needs to channel financial resources to specific areas of

post-war reconstruction, they were not directly impacted by the changes in US regulations until the early 1980s which is also the period in which EU regulations started to have an impact in the drive to the Single Market outlined in the Single European Act. For example German bankers often expressed amusement at the idea that US regulatory liberalization would have an impact by pointing out that German had always allowed universal banks to operate in deposit taking and securities activities and thus no response was needed.

The decision to model the integrated European financial system on the German universal bank was thus as important a determinant of the evolution of European regulation as the changes taking place in the US regulatory landscape. Of greater importance was the rapid expansion of global banks from Japan and the US in driving European banks to adjust their operations, producing a series of bank consolidation via domestic mergers and cross border acquisitions by the major players in the larger European financial markets. For example, larger German banks such as Deutsche acquired British merchant and investment banks and opened operations in the US, Swiss banks acquired US specialized commodities, in order to gain expertise in trading and investment via the rapidly expanding activities in financial innovations involving derivatives trading that accompanied the liberalization of the US financial system and the breakdown of the fixed exchange rate system.

The introduction, under pressure from the US and UK banking authorities, for the imposition of global capital ratios, and the impetus to the imposition of best practice standards produced by the cross-border bankruptcy of Banco Ambrosiano and the Herstatt crisis also provided a source of convergence in regulatory standards between the US and Europe in the form of the Accords and Standards emitted by the Basle Committee on Banking Supervision. Originally intended for imposition on the activities of large global banks with cross-border operations these were eventually considered as necessary for all banks and were soon introduced into national regulatory systems in developed and developing countries around the globe under pressure from the International Monetary Fund.

Thus it could reasonably be said that the evolution of EU financial systems was influenced by three separate factors, the trend in political and economic circles towards reduction in government controls and regulations in the economy, led by the US and the UK, the trend towards greater globalization of finance and integration of global capital markets that accompanied the

introduction of floating exchange rates, and the move towards greater European integration and harmonization of financial markets in the preparation for the introduction of the single currency.

III. Experience After the Crisis

However, the fact that the recent financial crisis was initiated in the US, and was initially believed to be linked to the peculiar nature of the securitization of sub-prime mortgages in the US residential real estate market created the initial belief that European countries would be largely immune from the impact of the crisis and thus the need for regulatory reform. This view tended to prevail even in the presence of the run on a UK mortgage bank, Northern Rock, and the suspension of redemptions of two investment funds of a French bank and the difficulties of a well-known German Landbank. Even the difficulties in Greece in rolling over its outstanding sovereign debt were considered as idiosyncratic, rather than as expressions of a systemic lacuna in EU regulatory regimes. It was only when a number of additional EU member states in the Eurozone started to experience difficulty in meeting their outstanding sovereign obligations that the crisis had a noticeable impact on the discussion of EU regulatory systems. This meant that the US, which had moved quickly to introduce measures, first to deal with the problems in the mortgage markets, and then the system wide insolvency in the financial system, became the first-movers in imposing regulatory changes and many of the US proposals have been replicated first in the proposals of the G-20 and the Financial Stability Board, which provided the frame for the discussion of EU regulations.

For example, both the EU and the UK have introduced bodies similar to the FSOC to focus on issues of financial stability. Indeed the EU has introduced a tripartite body the ESRB supported by the ESFS encompassing the EBA and EIOPA, ESMA while the UK the Financial Services Act restored micro and macro prudential regulation to the Bank of England and created a Financial Policy Committee, a Prudential Regulatory Authority and a Financial Conduct Authority.

Both have also introduced measures similar to the US to increase and enhance the responsibility for "or have also introduced regulation and provided unilateral instruments of action to central banks. Measures to provide for enhanced and extended regulation over financial institutions in addition to banks, as well as the necessity to provide living wills and uniform resolution authorities have been adopted. The use of stress tests, first used in the US under its TARP program and now part of statutory regulation to gauge financial resilience and

recapitalization requirements have been employed in Europe. The extension and revamping of deposit insurance, as well as providing for amended insurance premia, including additional ex post charges to fund the costs of a bank rescue have become standard in European proposals. Measures similar to the US on the trading of derivatives as well as the introduction of prohibitions on bank proprietary trading similar to the Volker rule have been proposed as extensions of the Liikanen Report in the EU and the Vickers Report in the UK to provide for the “ring-fencing” of depositary institutions and retail banking. In terms of their objectives, the proposals for “ring-fencing” at the centre of the two Reports serve are similar to the limitations on proprietary trading proposed in the Volker rule. In addition Europe has moved to create the equivalent of the CFSB to protect the rights of the consumers of financial services.

The major differences in approach arise from the fact that the US proposals retained, with the exception of the abolition of the regulatory authority for savings institutions, the multiple regulatory responsibility across the Federal Reserve, the OCC, the FDIC, the CFTC and the SEC. The EU seems to be emulating this fragmentation, long seen as a drawback of the US system, for while the Banking Union and the Single European rule book is overseen by the ECB, it does not apply to all EU member states. While the ECB will enforce the single rulebook for all banks for countries participating in the banking union, its implementation will be overseen by national regulators in non-banking union member countries

IV. Extension of US Regulations outside the US

That the financial crisis occurred while most banks were operating under some form of compliance with the BCBS Basle I.5 regulations brought their efficacy into question and investigation. However, the time and difficulty, as well as the continued unrolling of the crisis in Europe, has meant that many of the changes that have been proposed in Basle regulations provoked by the crisis, now known as Basle III, have lagged behind the pace of regulatory changes in both the US and Europe. Indeed, as in the past, US regulators have either refused to introduce, or have amended a number of the newly proposed Basle regulations. Examples are in the interpretation of home-host country regulatory responsibility for foreign banking operations and regulation of exchange trading of swaps contracts, in the application of private agency credit ratings in the setting risk based capital requirements and most recently in calling into question the utility of IRB models in evaluating risk-based capital requirements.

As noted above, Dodd-Frank required all US regulations to expunge the use of credit rating agency ratings in US federal regulations, while they still retain a role in the Basle risk-weighted approach to capital adequacy even after their revision in Basle III.

Since foreign banking operation may be chartered by either federal or state regulators, the Federal Reserve is responsible for coordinating the supervision of the U.S. operations of foreign banking organizations with the other regulatory agencies as well as having responsibility under the *Bank Holding Company Act* and the *International Banking Act* for approving, reviewing, and monitoring the U.S. nonbanking activities of foreign banking organizations that have a branch, agency, commercial lending company, or subsidiary bank in the United States. In this role, the Fed has recently introduced enhanced prudential standards for what are defined as foreign banking operations (FBOs) that are virtually equivalent to regulations that apply to US charter banks. FBOs with nonbranch/agency assets over \$50 billion will be required to establish separately capitalized "intermediate holding companies" (IHC) as well as continuing to meet consolidated capital adequacy standards established by the home country supervisor that must be consistent with the Basle Capital Framework. The IHC as well as its US branches and agencies will be required to meet liquidity risk management standards and conduct internal liquidity stress tests, and maintain a liquidity buffer in the United States for the first 14 days of a 30-day liquidity stress test, although not required to perform a separate stress test for its U.S. operations; it may instead report the results of an internal liquidity stress test (either on a consolidated basis or for its combined U.S. operations) to the Federal Reserve on an annual basis.

The FBO must also establish a U.S. risk committee that oversees the risk management function for its combined U.S. operations (branch/agency and non-branch/agency activities), appoint a U.S. chief risk officer in the United States.

Further, the Commodity Futures Trading Commission (CFTC) has sought to extend the recently formulated provisions of the Dodd-Frank Act to require exchange trade swaps transactions to non-US institutions negotiating contracts outside the US. This would in effect have imposed US regulations on trading in the EU. After extensive negotiations the CFTC and the EU have agreed to allow US firms to trade over European platforms, rather than forcing them to register as or be traded through US swap execution facilities, or SEFs. The agreement rests on what is called Substituted Compliance which requires non-US SEFs to be subject to national regulatory standards considered comparable to those imposed by the CFTC and be classified as a

Qualified Multilateral Trading Facilities (MTF). To become a Qualifying MTF, an applicant must demonstrate compliance with the conditions set out in the Qualifying MTF Letter as determined by the agreement struck in July 2013 between the CFTC and the European Commission, known as the "Path Forward" (CFTC, 2013). In the Path Forward agreement the CFTC commits to providing regulatory relief to European trading platforms "that are subject to requirements that achieve regulatory outcomes that are comparable to those achieved by the requirements for SEFs". Australia, Canada, European Union, Hong Kong, Japan, and Switzerland have applied to be recognized as compliant MTFs and the Division of Market Oversight (DMO) of CFTC issued a series of no-action letters stating that it would not recommend enforcement action against: (1) a multilateral trading facility (MTF) overseen by its European Union Member State competent authority for failure to meet the CFTC requirement to register as with the CFTC as an SEF; or (2) any swap market counterparty, including "US persons" and "guaranteed affiliates", for failure to execute trading on a registered SEF. Negotiations are still underway to provide definitive compliance and recognition of EU Qualifying MTFs.

Most recently, the member of the Federal Reserve responsible for prudential regulation had proposed the Internal Ratings Based calculations at the centre of the Basle risk based capital standards be replaced by the use of US type Stress tests. In a speech calling in question the unitary application of prudential requirements to all types of financial institutions in countries with different financial structures, similar to the remarks in the conclusions to the Summary of the seven country studies (D4.05 and D.4.07) "But even with the higher capital ratios required by Basle III, the IRB approach is problematic. The combined complexity and opacity of risk weights generated by each banking organization for purposes of its regulatory capital requirement create manifold risks of gaming, mistake, and monitoring difficulty. The IRB approach contributes little to market understanding of large banks' balance sheets, and thus fails to strengthen market discipline. And the relatively short, backward-looking basis for generating risk weights makes the resulting capital standards likely to be excessively pro-cyclical and insufficiently sensitive to tail risk. That is, the IRB approach--for all its complexity and expense--does not do a very good job of advancing the financial stability and macro prudential aims of prudential regulation. Yet a capital measure that incorporates these aims is precisely what is needed to complement the traditional micro prudential elements of our capital standards. The supervisory stress tests developed by the

Federal Reserve over the past five years provide a much better risk-sensitive basis for setting minimum capital requirements.” (Tarullo, 2014)

REFERENCES

Brandeis, Lewis. 1914. (1933) *Other People's Money*. 1914. (1933) National Home Library Foundation.

Board of Governors of the Federal Reserve System. 2010. “Report to the Congress on Risk Retention.” Washington, D.C.: FRB. October.

CFTC (2013) Cross-Border Regulation of Swaps/Derivatives Discussions between the Commodity Futures Trading Commission and the European Union – A Path Forward, July 11:
www.cftc.gov/PressRoom/PressReleases/pr6640-13.

CFTC (2014) Divisions of Market Oversight and Swap Dealer and Intermediary Oversight Provide Conditional No-Action Relief with Respect to Swaps Trading on Multilateral Trading Facilities Overseen by Authorities Designated by European Union Member States, CFTC RELEASE: pr6910-14 April 9, 2014

Currie, Lauchlin. 1931. “The Decline of the Commercial Loan,” *Quarterly Journal of Economics*, vol. 45, no. 4 (Aug.), pp. 698-709.

_____. 1934. *The Supply and Control of Money in the United States*. Cambridge: Harvard University Press.

Financial Stability Oversight Commission (FSOC). 2011. “Macroeconomic Effects of Risk Retention Requirements. Washington, D.C.: FSOC. January.

Greenberger, M. 2010. “Out of the Black Hole: Regulatory Reform of the Over-the-Counter Derivatives Market.” in R. Johnson and E. Payne, eds. *Make Markets Be Markets: Project on Global Finance, Step 1: Restoring the Integrity of the US Financial System*, 96–116. New York: Roosevelt Institute.

Housing and Urban Development. 2000. "Curbing Predatory Home Mortgage Lending,"
<http://www.huduser.org/portal/publications/hsgfin/curbing.html>

Hoenig, T. M. 2009. Statement of Thomas M. Hoenig, President, Federal Reserve Bank of Kansas City, to the Joint Economic Committee (JEC), United States Congress, April 21. Washington, D.C.: JEC.

Kaufman, G.G. 1988. "Securities activities of commercial banks: Recent changes in the economic and legal environments," in *Journal of Financial Services Research*, 1, 183 – 199.

Krooss, H.E. (ed.) 1969. *Documentary History of Banking and Currency in the United States*, Volume II and IV, New York: Chelsea house.

Minsky, H. P. 1964. "Financial Crisis, Financial Systems, and the Performance of the Economy." In Commission on Money and Credit, ed. *Private Capital Markets*, 173–380. Englewood Cliffs, N.J.: Prentice-Hall.

_____. 1972. "Financial Instability Revisited: The Economics of Disaster." In Board of Governors of the Federal Reserve System, ed. *Reappraisal of the Federal Reserve Discount Mechanism*. Vol. 3, 95–136. Washington, D.C.: Board of Governors of the Federal Reserve System.

_____, (1989). "Money Manager Capitalism" (1989). *Hyman P. Minsky Archive*. Paper 13.
http://digitalcommons.bard.edu/hm_archive/13Prins. Nomi. 2010 Supplement to *It Takes a Pillage*,
<http://nomiprins.squarespace.com/storage/bailouttallyoct2010.pdf>

Reuters. 2011 "UPDATE 1-Krawcheck says brokerage to grow revenue, margins," Tue Mar 8,
<http://uk.reuters.com/article/2011/03/08/bankofamerica-krawcheck-idUKNo816544120110308>

Rosner, J. 2011. "Has Dodd-Frank Ended Too Big to Fail?" Written testimony for a March 30 panel for the House Oversight Committee, to be published in the Congressional Record.

Scheiber, N. 2011. "The Escape Artist: How Timothy Geithner Survived." *The New Republic*, February 10.

Senior Supervisors Group (SSG). 2008. "Observations on Risk Management Practices during the Recent Market Turbulence." March 6.

Special Inspector General for the Troubled Asset Relief Program, Office of (SIGTARP). 2011. Statement of Neil Barofsky, Special Inspector General, Troubled Asset Relief Program, before the Committee on Oversight and Government Reform, Subcommittee on TARP, Financial Services, and Bailouts of Public and Private Programs, March 30. Washington, D.C.: SIGTARP.

Tarullo, D. K. 2014. "Rethinking the Aims of Prudential Regulation." Speech to the Federal Reserve Bank of Chicago Bank Structure Conference, Chicago, Illinois, May 8. Available at <http://www.federalreserve.gov/newsevents/speech/tarullo20140508a.htm>

Valentine, Roger W. 1951. "Investment Banking: History and Regulation," in Herbert V. Prochnow, ed., *American Financial Institutions*. New York: Prentice Hall.

Financialisation, Economy, Society and Sustainable Development (FESSUD) is a 10 million euro project largely funded by a near 8 million euro grant from the European Commission under Framework Programme 7 (contract number : 266800). The University of Leeds is the lead co-ordinator for the research project with a budget of over 2 million euros.

THE ABSTRACT OF THE PROJECT IS:

The research programme will integrate diverse levels, methods and disciplinary traditions with the aim of developing a comprehensive policy agenda for changing the role of the financial system to help achieve a future which is sustainable in environmental, social and economic terms. The programme involves an integrated and balanced consortium involving partners from 14 countries that has unsurpassed experience of deploying diverse perspectives both within economics and across disciplines inclusive of economics. The programme is distinctively pluralistic, and aims to forge alliances across the social sciences, so as to understand how finance can better serve economic, social and environmental needs. The central issues addressed are the ways in which the growth and performance of economies in the last 30 years have been dependent on the characteristics of the processes of financialisation; how has financialisation impacted on the achievement of specific economic, social, and environmental objectives?; the nature of the relationship between financialisation and the sustainability of the financial system, economic development and the environment?; the lessons to be drawn from the crisis about the nature and impacts of financialisation? ; what are the requisites of a financial system able to support a process of sustainable development, broadly conceived?'

THE PARTNERS IN THE CONSORTIUM ARE:

Participant Number	Participant organisation name	Country
1 (Coordinator)	University of Leeds	UK
2	University of Siena	Italy
3	School of Oriental and African Studies	UK
4	Fondation Nationale des Sciences Politiques	France
5	Pour la Solidarite, Brussels	Belgium
6	Poznan University of Economics	Poland
7	Tallin University of Technology	Estonia
8	Berlin School of Economics and Law	Germany
9	Centre for Social Studies, University of Coimbra	Portugal
10	University of Pannonia, Veszprem	Hungary
11	National and Kapodistrian University of Athens	Greece
12	Middle East Technical University, Ankara	Turkey
13	Lund University	Sweden
14	University of Witwatersrand	South Africa
15	University of the Basque Country, Bilbao	Spain

The views expressed during the execution of the FESSUD project, in whatever form and or by whatever medium, are the sole responsibility of the authors. The European Union is not liable for any use that may be made of the information contained therein.

Published in Leeds, U.K. on behalf of the FESSUD project.