



HAL
open science

In Search of the Banking Regulator amid U.S. Financial Reforms of the 1930s

Dominique Lacoue-Labarthe

► **To cite this version:**

Dominique Lacoue-Labarthe. In Search of the Banking Regulator amid U.S. Financial Reforms of the 1930s. 2014. hal-00937533v2

HAL Id: hal-00937533

<https://hal.science/hal-00937533v2>

Preprint submitted on 16 Dec 2014

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

In Search of the Banking Regulator amid U.S. Financial Reforms of the 1930s

Dominique Lacoue-Labarthe

LAREFI Working Paper N°2014-01

2014

<http://lare-efi.u-bordeaux4.fr>

LAREFI
Université de Bordeaux
Bâtiment Recherche Economie – 1^{er} étage
Avenue Léon Duguit – 33 608 Pessac

LAREFI – LABORATOIRE D’ANALYSE ET DE RECHERCHE EN ECONOMIE ET FINANCES INTERNATIONALES

AUTHORS

Dominique Lacoue-Labarthe, LAREFI, Université Montesquieu Bordeaux IV

NOTICES

LAREFI Working Papers contain preliminary material and research results. They have been peer reviewed. They are circulated in order to stimulate discussion and critical comment; any opinions expressed are only those of the author(s).

Copyright LAREFI. All rights reserved. Sections of this material may be reproduced for personal and not-for-profit use without the express written permission of but with acknowledgment to LAREFI. To reproduce the material contained herein for profit or commercial use requires express written permission. To obtain permission, contact LAREFI at cyril.mesmer@u-bordeaux4.fr.

Sommaire

1. Introduction.....	1
2. Banking panics and the collapse of credit.....	4
3. Emergency banks bailout.....	6
3.1 The National Credit Corporation	6
3.2 The Reconstruction Finance Corporation	7
3.3 The first Glass-Steagall Banking Act of 1932	10
3.4 The Bank Holiday	11
4. Deposit insurance.....	13
4.1 The origins of deposit insurance	14
4.2 The deposit insurance debate in 1933.....	16
4.3 The Federal Deposit Insurance Corporation	19
4.4 Safety net	21
4.5 The FDIC's resolution authority.....	22
5. Separation of commercial and investment banking.....	25
5.1 The commingling of commercial and investment banking.....	26
5.2 Conflicts of interest.....	29
5.3 The prohibition of commercial banks' securities operations	30
5.4 An aggressive banking duopoly.....	32
5.5 Loopholes in the boundaries of loan and security activities	33
6. The federal organization of nonbank financial institutions	35
6.1 Mortgage bailouts	35
6.2 A federal framework for property ownership and home loans	37
Conclusion.....	40
References.....	43

Abstract

Some bank reforms of the 1930s in the United States may have been overvalued. The Glass-Steagall Act of 1933 actually created new endogenous risks involving potential systemic effects. Deposit insurance failed to address the main cause of banking panics, and rather strengthened inefficient unit banks, while the prohibition of interstate bank branching continued to hinder banks to diversify idiosyncratic risks. The separation of commercial and investment banking put an end to certain conflicts of interest but it created an opportunity cost by preventing universal banking from developing effectively. Finally, an untimely intervention in a duopolistic conflict made the regulator a captive figure.

By contrast, major innovations covering bailout processes and prudential regulation appear to have been underestimated. The Reconstruction Finance Corporation of 1932 established the foundations of an investor of last resort, giving the Treasury the authority to recapitalize insolvent financial institutions deemed too big to fail. The newly established banking regulator, the Federal Deposit Insurance Corporation of 1933, was given a special bank-closure rule, separate from the usual bankruptcy proceedings, which opened a way towards orderly resolution of failing banks in order to protect the economy from the spread of systemic risk.

Keywords: bank reform, United States, Regulation, Economic history.

JEL classification: N12, N22, N42.

1. Introduction

Public perception of a major banking panic, when it occurred, did not always tally with that of reformers. Additionally, both could also be mistaken as to the underlying economic causes. In 1930, the general public was basically expecting measures to counter excess credit for stock market speculation and demanded insurance to compensate for depositor losses. By contrast, few people realized that the prohibition of bank branching and the attachment of banks to finance only commercial transactions were a major factor responsible for the bank runs and panics that were so specific to the American financial system.

In January 1932, at the collapse of the banking system and credit market, several provisions from the 18-point program from the Hoover administration endeavored, for the first time in American history, to devise a bank bailout system through an original combination of innovative instruments and proven resources: national deposit guarantee, a deposit insurance/prudential standards pairing, the recapitalization of banks, the orderly resolution of failures, the separation of credit banks and securities broker-dealers, the pegging of deposit interest rates and the organization of shadow nonbank financial institutions. Only a small number of these innovations were implemented by a hesitant president. In March 1933, the New Deal team seized on the emergency intervention plan from the previous presidency, including the bank holiday and the re-opening of banks after certification. The waves of panic stopped. The Roosevelt administration had the merit of swiftly transposing the Hoover innovations into wide-scale institutional reforms in order to build a new architecture for the financial system. All the same, the definition of new regulation, harder to devise and implement, began to take form, even if there was no evidence of a well-shaped and comprehensive program to restructure the banking industry.

The present study, in the institutional context and the spirit of the 1930s, sets out to look back at the reasons for these reforms. It is confined to the major changes introduced into the banking system

in the wider sense and addresses neither the reforms affecting the monetary regime, nor the exchange system (abandonment of the gold standard, exchange stabilization fund), the monetary policy reforms (the open market committee and the redistribution of powers between the Treasury department and the central bank), or the financial market. The major reforms of the banking system discussed here will include the scheme for the emergency bailout of banks, deposit insurance and the pegging of deposit interest rates, the separation of securities and banking activities, the home loan market distress and the organization of non-bank mortgage lending institutions.

The most popular reform, deposit insurance, missed the main cause of recurring banking panics, namely the prohibition of nationwide bank branching. The obsolete survival of small unit banks, on the other hand, emerged strengthened by deposit insurance. The inappropriate form of calculating premiums created a greater moral risk which, forty years later, was to undermine financial stability.

The second major popular reform, the separation of commercial and investment banks, certainly put an end to a number of conflicts of interest within banks, but it also created an opportunity cost by preventing universal banks to develop in an effective manner. Additionally, other conflicts of interest soon emerged at the very heart of the investment bank securities business. Finally, the legislator actively intervened in a private duopoly conflict between banks, becoming a captive regulator of the regulated. In contrast, it would have been wiser to apply a policy of free competition to the banking sector as well, in order to maintain fair conditions for all operators.

Other more technical and less controversial regulations shaped the financial framework in a useful way: for instance, new rules relative to mortgages and loans from finance companies and thrift institutions represented an initial and timely extension of supervision in the shadow banking sector.

The most innovative reform was the first tangible manifestation of the invention of the prudential regulator. The innovation emerged in the bailout plan from the Hoover administration, which gave the Reconstruction Finance Corporation (RFC) instruments for the resolution of failing banks. On

this basis, the Federal Deposit Insurance Corporation (FDIC), which took over regulatory powers from the RFC, became the direct administrator for the adjustment of banks. It invented a special administrative rule for the closure of banks, separate from common law commercial bankruptcy legislation, designed to prevent the propagation of systemic risk rather than protect the sole interests of the failing debtor. The FDIC became a full regulator only when, forty years on, it was given additional instruments to control prudential ratios and deposit insurance premiums adjusted to risk. Thus, when the likelihood of having to endure losses was sufficiently low for the deposit insurer, micro-prudential regulation would fill its role in a satisfactory way. That would leave the regulator to apply the rule of failure resolution, even to major banks.

This now left the ultimate recourse to last-resort investor. Only the Treasury can recapitalize an insolvent financial institution if it is considered to be too important to fail. Almost all the necessary instruments were in place in the US Treasury affiliates, the RFC of 1932, and the FDIC of 1933, the major innovations and bedrocks of today's prudential regulation and bailouts.

The banking reforms of the 1930s vary in their degree of importance. Generally speaking, the public saw them in a favorable light, as people felt that the changes brought a firmer response to their concerns, wants and needs than any other earlier government reform. Such a warm reception might be seen as a token of their effectiveness. Although these different reforms had various origins and motivations, they aimed to improve the financial regulatory structure and governance. They addressed two conflicting goals: mitigating threats to the financial system associated with bank failures and panics on the one hand, and minimizing moral hazard associated with government bailouts on the other hand. In doing so, it was understood that the government should be used to universalize and unify regulation, but also decentralized institutions should internalize the cost of their own failures.

These objectives were met to a certain extent only, partly due to the difficulties associated with a persistent depression, but the new regulatory structure remained incomplete and lacked of

consistency. In the long term the new rules, poorly put together or incomplete, endogenously created new risks with systemic impact. We set out to evidence the ambiguities these reforms brought with them and attempt to single out the difficulties that they were unable to identify and control. But, in reviewing after 75 years this imperfect and unfinished reform, we can realize how it was not as simple as it seems for the legislators to solve in emergency such a financial turmoil. Even more difficult was trying to design a regulatory structure capable of avoiding the return in the future of so complex and interlinked problems of liquidity and solvency of ailing financial institutions. Obviously some lessons should be drawn from this historical experience, particularly as regards one of its most important legacy, the banking regulator: how could the Treasury avoid to bailout ailing banks in last resort by using taxpayer money when all other solutions have failed. The recent financial crisis demonstrates clearly how the optimal bail in resolution process is hard to define and implement.

2. Banking panics and the collapse of credit

Before the Great Depression, the financial history of the United States was marked by a series of crises and banking panics, in 1819, 1837, 1857, 1873, 1884, 1893 and 1907. Banks had no solution but to suspend payments, i.e. convert into legal tender deposits and the notes they issued. In the absence of a central bank acting as a lender of the last resort, there was no monetary regulator capable of lending sufficient liquid funds to solvent banks in order to stop these panics. Neither was there a banking authority capable of regulating the prudential framework of deposit institutions in order to exercise preventive supervision and to safeguard the continuity of the payments system and the maintaining of financial stability.

Up until 1920, prudential regulation was confined to the issuance to establishments of charters drawn up by various authorities. But once the charter was issued, the authority was required to step in again only if the institution defaulted and had to be closed. Clearinghouse Associations sometimes created provisional resources to offset the shortage of bank liquidity, as, for example, with the issuance

of loan certificates during the panic of 1884. But the Treasury Department never conceived of bailing out banks through direct recapitalization or by underwriting impaired assets. The biggest banking panics led to subsequent institutional reforms, which generally were limited to the creation of a new type of banking charter and a new issuance authority. After the panic of 1857, it was the Office of the Comptroller of the Currency and national banks in 1863. After the major panic of 1907, it was the Federal Reserve System and member banks in 1913. The new body, although relatively independent from the Administration, was not forasmuch invested with full regulating authority encompassing powers of regulation, surveillance and control. The reforms were incomplete.

In reality, these institutional reforms were often opportunistic: crises presented an opportunity to promote the ideas and plans of great reformers (e.g. Nelson Aldrich, Carter Glass for the creation of the Federal Reserve) rather than the chance to seriously address the actual causes of financial crises. While the new institutions were useful in their way, their existence and their role did not always succeed in promoting the hoped-for financial stability. As they piled up, they produced an inextricable tangle of authorities and an overlap of assignments that continued to complicate the financial system.

During the banking panics before the Great Depression, depositor losses never exceeded 0.1% of GDP in any of the crisis years. From 1921 to 1929, financial instability rose and became endemic with the closing of 5,712 essentially rural banks, leading to the loss of 3.1% of the period's total deposits, i.e. 0.6% of the average annual GDP (Calomiris & Masson, 2003).

The international recession, which began in 1928, hit the United States the following summer. Loan defaults piled up in pace with company failures, leading in particular to losses and the collapse of banks' equity capital. The Federal Reserve, in a bid to check excess supply of credit which, in its view, was responsible for over speculation on Wall Street, raised interest rates. This rise contributed to trigger the Stock Market crash from October 24 to 29, 1929, and a fall in market prices that reached 40% in 1930. The slump was also instrumental in the drop in the net assets of banks. The financial crisis

assumed exceptional proportions with the deflation caused by the collapse of farm prices. Bank failures then followed in rapid succession and the credit market collapsed.

Between 1929 and 1933, there were at least four waves of panic affecting banks¹ and in all, 39% of banking institutions suspended business. According to figures published by the Federal Reserve Board in 1943², the number of banks plummeted from 24,633 in December 1929 to 15,015 in December 1933. Most of the 9,096 banks that went out of business were small local establishments. Their deposits represented only 14% of total average bank deposits between 1930 and 1933. The losses sustained by depositors came to 2.7% of the average sum of deposits and to 2% of average annual GDP over the same period.

3. Emergency banks bailout

Several highly original bailout attempts emerged in the move to help distressed banks and stop the panic. Whereas the National Credit Corporation (NCC) was unable to substitute to the central bank as a private provider of liquidity to ailing banks, the Reconstruction Finance Corporation was more innovative in defining and implementing new principles and instruments, such as direct recapitalization, guaranty of impaired assets and incentivizing banks to assume some of their losses. In the meantime, an emergency solution to put an end to panics and bank holidays was found in the assessment of bank solvency by federal auditors and inspectors.

3.1 The National Credit Corporation

Faced with the run on banks, President Hoover was convinced that the solution should come from the private sector itself. Thus, in 1907 and at the instigation of banker J.P. Morgan, bankers successfully had organized market-place solidarity and granted loans to solvent illiquid banks. In October

¹ November-December 1930; January 1931; June 1932; January-March 1933.

² Federal Reserve Board, *Banking and monetary statistics, 1914-1941*, Washington DC, 1943

1931, Hoover and the Treasury Secretary Andrew Mellon³ prompted New York's biggest banks to form the National Credit Corporation in order to lend to solvent banks experiencing difficulties in refinancing. NCC loans were to help banks that did not dispose of Fed-eligible commercial bills in their discount operations. To offset this breach in its assignments, the Fed obtained a less narrow definition of eligible assets at the discount counter and a slackening of quality criteria for securities demanded as collateral. The NCC began to operate in November 1931, but while it received a warm welcome at the outset, it soon became apparent that it was too much in favor of major banks and was unable to exercise a role of last-resort lender for the rest of banks and nonbank financial institutions. After a brief respite, the number of banks failing began to rise again.

3.2 The Reconstruction Finance Corporation

One major innovation consisted in the definition of instruments allowing the recapitalization of banks and a guarantee for impaired assets. This was the first experiment of its kind ever seen, although the premises may be traced back to the War Finance Corporation of 1918 which was a genuine forerunner in financial stability policy. For the Treasury Department, recapitalization was the solvency counterpart to the central bank last-resort liquidity loan. It certainly was a last-resort investor invention, decisive for the financial stability policy.

This new idea was the work of bankers and experts close to President Hoover, who proved to be much more open to innovations than the history books would have us believe. Eugene Meyer, Governor of the Federal Reserve, was the principal instigator responsible⁴ for the Treasury Department's intervention in bailouts. He convinced the then Treasury Secretary and President Hoover of the necessity of direct intervention from the Federal government, whereas the central bank enjoyed only

³ Andrew W. Mellon remained in office from 1921 to February 1932 under Presidents Harding, Coolidge and Hoover. Ogden L. Mills succeeded him through the end of Hoover's term on March 3rd, 1933.

⁴ Eugene Meyer was the director of the first federal credit agency, the War Finance Corporation, created in 1918. He was governor of the Federal Reserve Board from September 1930 to May 1933. For the thinking and influence of E. Meyer, see Butkiewicz, 2011.

limited authority and resources. The Treasury won Congress approval for the creation of the Reconstruction Finance Corporation on January 22, 1932. The role of the RFC was to lend to banks (like the NCC) and to railroad companies and territorial communities (states, counties, municipalities). Additionally, the law relaxed the conditions of eligibility for the guaranty usually demanded by the Federal Reserve for its discount loans⁵. Jesse Jones, the Texas banker and RFC board member under Hoover who became the powerful RFC board chairman under Roosevelt, wrote: "It became increasingly evident to us [on the RFC board during late 1932 and early 1933] that loans were not an adequate medicine to fight the epidemic. What the ailing banks required was a stronger capital structure" (Jones 1951, p.20). During the gathering banking crisis in the winter of 1933, Jones and other RFC staff met with representatives from the Federal Reserve and Treasury to draft legislation that would permit the RFC to invest directly in bank capital (Kroszner, 1994).

For the first time, these provisions dented the sacrosanct real-bills doctrine on which credit policy had been based since the beginnings of banking in the United States and which had been constantly reaffirmed by the OCC in 1864 and the Federal Reserve in 1914. According to real-bills dogma, the central bank should discount only top grade short-term bills of exchange representing self-liquidating real commercial transactions between professional dealers, secured by a collateral that made for certain payment. Consequently, the central bank had to refrain from advancing funds to any investment or project where risk was involved and which were only partly covered by collateral of uncertain value. Neither the central bank nor commercial banks were to take risks. Risks were the business of companies themselves, with the help of investment banks, in the securities market. They were not for commercial banks, which could rely on no help from the central bank or federal government in the event of failures.

⁵ During the financial crisis of 2008, the creation of an institution comparable to the RFC, going by the name of *Agg(regate) Bank*, was considered for a time by Treasury Secretary Henry Paulson. This solution was discarded for the benefit of the Troubled Assets Relief Program, run directly by the Treasury.

After the election of President Roosevelt⁶, the powers of the RFC were increased (Todd, 1992). It was authorized by the Emergency Relief Banking Act of March 1933 to invest in the capital of commercial banks by purchasing preferred stocks, without voting rights but with a guaranteed dividend. Between 1933 and 1935, the RFC purchased a billion securities in banks⁷, which came down to recapitalizing banks rather than granting them temporary liquidity loans. It also purchased debentures issued by banks. After 1935, banks began to buy back preferred stocks from the Treasury and in the long term they fully reimbursed these capital shareholdings and their debts. Once its operations were finished, the RFC was closed in 1957.

The role of the RFC was changing. Placed at the heart of the New Deal's banking reform, the RFC was assigned with a capital funding mission, while its lending capacity was further widened through the relaxation of collateral requirements. Increasingly, the RFC was transformed into a federal agency charged with monitoring the credit market in place of the Federal Reserve, which remained paralyzed by legal constraints and indecision.

In addition, the RFC was invested with powers of resolution for bank failures. It invented a settlement method which was extremely modern in style⁸ and based on four principles: (1) revalue bad or impaired assets by deducing from their nominal value a haircut compatible with market prices; (2) assess the competency and results of managers, ousting or replacing them if necessary; (3) inject capital by purchasing preferred stocks, but only after a write-down of assets; (4) collect dividends and potentially sell back stocks at par when banks got back into profit so that banks were once again 100% their own shareholders.

⁶ The implementation of these measures regarding federal intervention in banks bailouts was essentially carried out by Treasury Sub-Secretary Dean Acheson, who replaced *de facto* the Treasury Secretary appointed by President Roosevelt William H. Woodin on account of the latter's failing health (March 4-December 31, 1933).

⁷ At the time, the total sum of all commercial bank equity capital came to \$3.6 billion.

⁸ To resolve the crisis that hit thrift institutions in the 1980s, the Resolution Trust Corporation (1989) was directly inspired by the RFC experience. The same principles also inspired the orderly resolution model of SIFIs (*Systemically Important Financial Institutions*) that the G20 endeavored to implement in 2011.

The RFC refrained from meddling with the management and administration of banks. Quite the reverse, as RFC chairman Jesse Jones constantly expounded his preference for leaving full responsibility for adjustment with the competent executives while offering temporary assistance in terms of capital and liquidity.

3.3 The first Glass-Steagall Banking Act of 1932

This Act, approved by Congress on February 27, 1932, enabled the Federal Reserve to lend to nonbank financial institutions. Amongst the many provisions, the Act added a section 13(3) to the Federal Reserve Act of 1913, providing for a significant broadening of its authority and means of intervention "*under unusual and exigent circumstances*", totally comparable to the exceptional assignment given to the Reconstruction Finance Corporation. Federal Reserve district banks were authorized to lend to member banks upon the presentation of a larger number of assets as guaranty, the same as those accepted by the RFC. A surcharge of at least 1% on the Federal Reserve's discount rate had to be applied to loans granted on this new collateral. Similar loans could also be distributed to private persons and commercial or industrial companies, who could show that they were unable to obtain funds from commercial banks. In these provisions, we find a direct application of the classic Bagehot rule relative to the lender of last resort: "*lend freely at a higher rate on good collateral*". These channels of access to greater liquidity seemed to be rather infrequently used by banks and companies in trouble, possibly through fear of stigmatization. In fact, the Federal Reserve remained relatively passive, failing to fully grasp the new authority given to it. The fact that it erred as banking regulator and lender of last resort should be emphasized, because even though it was given the instruments with which to carry out this function during times of liquidity crisis, it used them only in part and with much procrastination.

3.4 The Bank Holiday

During the first days of March 1933, with people rushing to withdraw their bank deposits or convert these deposits into gold, several states closed their banks⁹ and shut down the credit market. President Hoover, since Roosevelt's election in November 1932, balked at calls from Treasury Secretary Ogden Mills, the Federal Reserve Board chairman Eugene Meyer and the Governor of the New York Federal Reserve Bank George Harrison for a general shut-down of banks. The legal gold reserves held by the New York Federal Reserve fell below the legal minimum¹⁰.

When he came into office on March 4, 1933, President Roosevelt was confronted with a critical financial situation that led to a whole range of emergency measures taken to stop the banking panic and the collapse of the credit market¹¹. On Sunday, March 5, Roosevelt issued an order suspending all bank transactions and the application of the bank holiday, prepared by the Hoover administration several months earlier. On the 9th, Congress voted the Emergency Banking Relief Act with two objectives: to put an end to ebbing public confidence in banks and to implement a mechanism to re-open banks. To do so, the Act gave the President war-time regulatory powers¹² with, most notably, the authority to close, re-open or liquidate any financial institution on US territory. The private possession of gold was forbidden. The issuance Federal Reserve notes could be covered by federal debt securities. For any bank deemed

⁹ In Louisiana, for example, the populist Governor Huey Long gave the most ostensible resonance to the closing of state banks out of defiance to the government, accusing the Washington administration of inertia in the face of financial distress. The governor of Michigan chose St Valentine's Day to do the same. At the end of February 1933, the governors of Indiana, Maryland, Arkansas and Ohio had all ordered the closing of banks. No-one explained when and how they would re-open. On March 3rd, 1933, Governor Lehman in New York pressed the federal administration to adopt a national moratorium and closed banks across the nation. The governors of Illinois, Massachusetts, New Jersey and Pennsylvania followed suit. On March 4th, banks were closed in 37 states, as were the 12 Federal Reserve district banks.

¹⁰ Legal tender issued by Federal Reserve banks (*federal notes*) was at the time covered by gold to the extent of 40%.

¹¹ The *brain trust* of the president's close advisors was composed of professors from Columbia University in New York, notably Raymond Moley, professor at law, Rexford Tugwell, a specialist in farm economics and Adolf Berle, an institutionalist economist and expert in finance and credit market analysis, all convinced of the need for federal intervention in financial crises.

¹² These exceptional powers are defined by the Trading With the Enemy Act, voted by Congress during World War One.

incapable of doing business in a normal manner, the Comptroller of the Currency was empowered to take over the establishment, appoint a temporary administrator authorized to freeze deposits, organize a restructuring process and authorize the issuance of preferred stocks for the benefit of the Reconstruction Finance Corporation. The extensions of federal credit granted by the Glass-Steagall Act of 1932 were confirmed.

The suspension of dealings at all commercial banks nationwide (March 6 to 13) and the Emergency Relief Banking Act showed the reactivity and the determination of the presidential cabinet to stop the panic. On March 12, in his first fireside chat radio interview, President Roosevelt briefly explained, in simple terms that were intelligible to all, *even to bankers*, the certification mechanism for banks under the Treasury seal, and the re-opening of sound institutions only. The next day, Federal Reserve Banks re-opened for business; one half of banks, which controlled 90% of deposits, re-opened. New deposits widely exceeded withdrawals. There was now a reverse run, with the public rushing to banks to re-deposit their assets and gain access to means of payment.

Several provisions proved effective (Silber, 2009). Ordering the closure of all the country's banks retroactively validated similar decisions taken by the governors of states, avoiding any conflict between them and the federal administration. Additionally, it was clearly specified that only those institutions whose solvency would be verified by the Office of the Comptroller of the Currency and Treasury Inspectors would be authorized to re-open at the end of the period of compulsory closure. Even though only some 5,000 banks were controlled before March 13, public confidence was restored because solvency was certified by controllers. Many banks understood that if they were inspected, they would not pass the examination and so spontaneously preferred to merge or to close down their business for good. At all events, the RFC was there and helped a large number of banks to restructure or carry out orderly liquidation. The process was steered entirely by the executive and the Treasury. The Federal

Reserve stayed out of the decision process. The recapitalization of banks was in no way its responsibility, rather that of the RFC with its newly allocated powers.

With hindsight, we might wonder why it was once again necessary to resort to the archaic method of suspending bank payments to stop the panic. In the 19th century, suspension was the usual response to a bank run, waiting for the panic to die down and for surviving banks to get back to business as usual. Was not the Federal Reserve created precisely to safeguard the system of payments under all circumstances, i.e. specifically to avoid suspension? (Wickers,1996). In ordering the bank holiday, President Roosevelt revealed the inadequacy of the Federal Reserve and its inability to get to grips with one of its key prerogatives, even when armed with additional instruments of intervention like those attributed by the new section 13(3) of its articles.

4. Deposit insurance

The belief has long persisted that the 1933 legislation to produce a nation-wide insurance of bank deposits was a novel measure prompted by the bank crisis and devised by the Roosevelt administration in order to protect small depositors from losses due to bank failures. In fact, deposit insurance was not a novel idea. It had been unsuccessfully experienced several times since the first experiment implemented by Governor Martin van Buren in the State of New York in 1829.

In 1932-33, movements of opinion were cleverly orchestrated by popular leaders, who focused attention on one of the public's major concerns, namely depositors' losses due to bank failures caused by panics. Public opinion, infuriated by bank closures, demanded the introduction of a national deposit guarantee system, vigorously supported by staunch advocates such as Alabama congressman Henry Steagall, and the governor of Louisiana Huey Long.

Deposit insurance was purely a creature of the Congress (Golembe, 1960). It is defined in the Banking Act of June 16, 1933, better known as the Glass Steagall Act¹³. It contains a large number of provisions, as implied by its full name: *“an Act that establishes the safer and more effective use of bank assets, organizes controls between banks, forestalls the unjustified diversion of funds in speculative operations and addresses other issues.”* The Banking Act of 1933 resulted from the fusion between, on the one side, proposition S.1631 sponsored by Senator Carter Glass, aimed essentially at separating banking and securities trading, and on the other the draft bill HR5661, supported by Congressman Henry Steagall, the main body of which was the federal insurance of bank deposits.

The deposit insurance legislation was passed because it attracted support from two groups which decided to converge in order to end destruction of circulating currencies due to bank failures, and to preserve the existing unit banking structure.

4.1 The origins of deposit insurance

The former experiments of deposit insurance offered a variety of mechanisms trying to mitigate moral hazard by giving the insurance provider the authority to supervise by prudential ratios the banks attitude towards risk. However, there was no agreement on the choice of a unique measure of prudential ratio.

The first bank to fail in the United States was back in 1809, with the closure of the Farmers Bank of Gloucester in Rhode Island. In 1829, the State of New York was the first¹⁴ to provide its banks with debt insurance, known at the time as a *bank obligation*, i.e. a guarantee for paper money in circulation issued by the bank and for collected deposits. The Forman plan had three sections: a guarantee fund into which all banks paid a contribution; a board of commissioners invested with powers to inspect

¹³ This second Glass-Steagall Act should not be limited to the sections 16, 20, 21, 26 and 32 of the 1933 Banking Act which refer to the separation of securities and banking activities, discussed below. It should not be confused either with the first Glass-Steagall Banking Act of 1932, discussed above.

¹⁴ Regulations required that traders holding a special charter allowing them to do business with foreigners should jointly and severally share respective debts.

banks; and a list of financial instruments constituting the bank's capital. All deposit insurance systems were to define the appropriate forms of organization for these three components. Between 1831 and 1858, five other states¹⁵ adopted a deposit insurance system inspired by that of New York and which lasted until 1863, when paper notes issued by national banks were guaranteed by the Office of the Comptroller of the Currency.

Between 1907 and 1917, eight states¹⁶ set up new deposit insurance systems. As previously, these were mutual deposit guarantee systems organized by banks and not by state governments. Unfortunately, these deposit guarantee experiments, introduced at the behest of small local banks, ended disastrously when the systems failed one after the other. In the 1920s, the systems were undermined by excessive risk-taking and numerous episodes of fraud, encouraged by the apparent security brought by deposit insurance, and moral hazard.

However, not everything was bad with these systems. In particular, they endeavored systematically to combine depositor protection with the supervision of banks, understood at the time as an obligation by banks to respect minimum standards of certain prudential ratios. Various types of prudential controls were devised. For instance, in some cases they elected to control the bank's capital/deposit ratio, i.e. its own funds to debt ratio indeed. In other states, the deposit insurance administrator controlled the ratio of loans to deposits, a form of measurement of the assets/liabilities transformation. In the system introduced in Texas, in 1907, the relevant prudential ratio was that of bank assets to equity capital, a forerunner to the leverage ratio which was to be introduced and generalized throughout the United States in the early 1980s.

At the time, failures of state deposit insurance schemes would create uproar and give rise to heated debate (White, 1992; Calomiris, 1992), particularly within the American Bankers Association. The idea of introducing a federal deposit insurance scheme was at its lowest ebb and fell away completely

¹⁵ Vermont, Indiana, Michigan, Ohio, Iowa.

¹⁶ Oklahoma, Kansas, Nebraska, Texas, Mississippi, South Dakota, North Dakota, Washington.

amidst the morass of individual interests defended in Congress. Additionally, at that time, the idea of promoting a regional bank branching set-up and the consolidation of the smallest banks began to emerge as an alternative route to ensure financial stability. But the vote in favor of the McFadden Act in 1927 was a serious set-back to interstate branching.

4.2 The deposit insurance debate in 1933

Since the 1880s, 150 draft bills aimed at introducing nationwide deposit insurance had been unsuccessfully presented to Congress. During the presidential election of 1896, it was even one of the preferred themes promoted by the populist democrat candidate William Jennings Bryan, a defender of the silver standard, an upholder of rural community unit banks and a staunch opponent of the major Wall Street banks. Carter Golembe (1960, pp.181-2) clearly emphasizes that deposit insurance was not a new idea in 1933: at the beginning of the 20th century, deposit guarantee systems existed in eight federal states, yet they all failed before the end of the 1920s.

Deposit insurance stands out as one of the most prominent achievements of the legislative program during the first 100 days of the New Deal, but without the new administration ever proposing or supporting it. In reality, according to Calomiris & White (1994), without the Great Depression and bank panics, the United States would doubtless never have introduced deposit insurance. But formidable obstacles stood in the way of adopting this popular reform even if there were sounder ways of assuring the stability of the banking system.

In the front line of adversaries opposed to deposit insurance, there stood President Roosevelt, his administration - most notably Treasury Secretary Woodin - and the president of the Senate Banking Commission. For Roosevelt, *"the idea underlying the expression 'bank deposit guarantee' is one of guaranteeing both bad banks and good ones. The moment the administration goes down that road, government is exposing itself to a likely loss... We do not wish to render the government responsible for the faults and errors of individual banks, nor inflict upon it an additional future charge on poorly-run*

banks." (Public Papers, 1939, 37). His rationale was partly correct, certainly, but it overlooked external effects: panics ruin depositors with safe and sound banks as much as they do those with insolvent banks.

Federal agencies for banking control were also opposed to deposit insurance. For instance, circulation controller John Pole, an unflinching advocate in favor of liberalizing interstate branching, was strongly opposed to deposit insurance. The example of Canada (Bordo, Redish & Rockoff, 2011) where runs on banks never occurred, shows that financial stability can be maintained without deposit insurance (even without a central bank). The National Monetary Commission, which investigated the financial crisis of 1907, underlined in length the contribution to financial stability of banks that were free to set up branch networks in different regions. The Federal Reserve did not give an opinion and stayed neutral throughout the debate. Senator Carter Glass, one of the founders of the Federal Reserve System and sponsor of the draft bill containing provisions for deposit insurance, did not support the project of deposit insurance; neither did the American Bankers Association or the Association of Reserve City Bankers.

The banks themselves were mostly opposed to joining the deposit insurance system because it would lead to an audit by the Federal Reserve, something they really did not want. The most efficiently managed banks were attached to competition and market discipline. They feared that a general system of deposit insurance would be excessively costly and that financially sound banks would be called upon to unjustly subsidize poorly managed high-risk banks. The fear of an increase in moral hazard lay at the heart of the concerns of the shrewdest bankers and they set out, unsuccessfully, to argue their case with members of Congress. Bankers were traditionally split over this question. Major banks were openly opposed to it, for instance Percy H. Johnson, president of the Chemical Bank and Trust Company of New York, Winthrop W. Aldrich, president of the Chase National Bank (Burns, 1974, p.67; 87) or Guy Emerson, CEO of the Bankers Trust Company (Emerson, 1934).

For decades, the most fervent supporters of deposit insurance were the small unit banks, operating as state-chartered banks in rural areas, where the local banking commissioners prohibited bank branching. But since the crisis of 1921, many of them had gone out of business, they were on their way out and political support was not as strong as it had been. After World War I, the collapse of farm prices and the ensuing rural exodus were a catalyst for change. Small banks realized that if they were to survive, they would have to grow and diversify in order to strengthen their geographic base and the volume of their deposits, rather than rely on hypothetical outside protection.

The least that can be said is that the parties involved had reached points of view that had matured through the years. Advocates of insurance, including small banks, had come to oppose any strengthening of the concentration of major banks. On the other side, opponents of insurance considered that such concentration was the best way to assure financial stability. The decisive arguments of advocates of the federal system were inspired directly by the scorn heaped upon the major Wall Street banks.

Democrat Senator Carter Glass was the sponsor of banking reform proposals already presented to Congress in 1931 and 1932. He pleaded for an end to the dual system of banking charters and to the distorted competition instilled by regulatory prerogatives and constraints, which differed according to whether a bank obtained its charter from state authorities (state-chartered bank) or from the federal Comptroller of the Currency (national bank). Glass supported the idea whereby the unification of banks into a single national system allowing the creation of branches without territorial restriction would be more stable, because it would be less dependent on purely local conditions. The business of commercial banks should consist in the collection of deposits and the distribution of short-term commercial loans. Breaches should be sanctioned by an increase in their resources. Banks should be more strictly controlled by the federal authorities.

Congressman Henry Steagall, also a democrat and chairman of the House Committee on Banking and Currency, recommended a national deposit guarantee system. He was opposed to the unification of state-chartered banks and national banks, just as he was to bank branching through fear of excessive concentration and abuse of power. His draft reform was introduced to Congress in 1932 and 1933. He also received backing from RFC chairman Jesse Jones. Further to a compromise reached between Glass and Steagall, thanks to an amendment introduced by Senator Arthur H. Vandenberg, the two bills were merged to form the Banking Act. The Act was approved almost unanimously then promulgated by the president on June 16, 1933, less than three months after the temporary bank holiday and the Emergency Relief Banking Act of March 9.

4.3 The Federal Deposit Insurance Corporation

The FDIC was created by the Glass-Steagall Banking Act with the status of non-subsidized independent public corporation, and so a self-sufficient agency. Its mission was to *“maintain stability and public confidence in the national finance system through the insurance of deposits, the control and surveillance of financial institutions and the handling of their provisional administration”*. To do so, the FDIC was given three joint assignments: insurer of bank deposits, supervisor of banks and administrator of bank failures.

Consequently, the role of the FDIC was not confined to deposit insurance. For the first time, the legislator defined a prudential regulator in its own right, independent from both the Treasury and the central bank. The FDIC was a major and unprecedented innovation which retained its originality through the 1990s¹⁷. The supervisory powers and resolution authority of the FDIC were reinforced by the Banking Act of 1935.

¹⁷ However, it was not unique because in 1934, in a move towards symmetry, Congress created the Federal Savings and Loan Insurance Corporation, an FDIC counterpart charged with thrift institutions, and the National Credit Union Administration for credit unions.

The capital in FDIC was underwritten by the Treasury, the Federal Reserve banks from districts, and banks subscribing to the deposit insurance scheme. The FDIC got its act together very quickly. National banks and Federal Reserve System member banks automatically adhered to the deposit insurance scheme. The 8,000 state-chartered banks who were not members of the Federal Reserve System could elect to join or not join. Those who chose to join were assessed prior to admission.

The 1933 Banking Act set up a temporary deposit insurance scheme for the first semester of 1934¹⁸, a period that was in fact prolonged by one year. The first permanent scheme was amended by the 1935 Banking Act¹⁹. The Act originally set the flat-fee subscription insured banks had to pay into the FDIC at 1/12 of 1% of total deposits²⁰. A subscription supplement (denominated "*assessment*") could also be called for by the FDIC if guarantee fund resources were insufficient. But with banks protesting this new charge just when they were starting to see positive results, Congress looked to lighten the load. The compromise suggested by Senator Vandenberg proposed that banks be exonerated from remunerating demand deposits and that the rate of interest paid on term deposits and savings accounts be pegged (Bradley 2000). The Regulation Q amending the articles of the Federal Reserve ratified this system, which was also supposed to put an end to the one-upmanship and destructive competition banks had been engaged in to attract deposits and win market share.

Although the FDIC was the examining and controlling authority for all insured banks, in order to avoid duplication of controls with the Federal Reserve, it confined itself to the main supervision of state-chartered banks adhering to deposit insurance who were non-members of the Federal Reserve System. In this respect, it was competent to examine and establish prudential standards aimed at promoting safe

¹⁸ The FDIC was then temporarily assisted by the Deposit Insurance National Bank, charged with reimbursing insured deposits. This bank was put in abeyance from 1935 onwards.

¹⁹ In 1950, a new Act, the Federal Deposit Insurance Act, consolidated the various texts relating to deposit insurance.

²⁰ The risks related to banking assets were taken into account to modulate insurance premiums only from the 1980s.

and sound banks. The FDIC also had shared authority over national banks adhering to the Federal Reserve System, which were obliged to take out deposit insurance.

The regulatory structure was becoming more complicated with this proliferation of new institutions. The issue regarding the optimal structure of regulation was often debated. In the early 1930's, the Brookings Institution analyzed the federal bureaucracy for a Senate committee and its report recommended reorganizing the bank regulatory structure (Kushmeider, 2005). The FDIC would have become the principal federal bank regulator, the OCC would have been abolished, and the Federal Reserve's examination and supervisory responsibilities for state banks would have been transferred to the FDIC. No further action was taken. However, from 1935 on, the FDIC substituted to the RFC as a banking regulator. The debate was reopened in 1949 when three Hoover Commission task forces recommended that federal bank regulatory authority be centralized. One task force wanted to transfer the FDIC to the Federal Reserve, the second wanted to transfer the OCC to the Federal Reserve, and the third wanted to fold both the FDIC and the OCC into the Federal Reserve. The Commission itself opted for a fourth approach, recommending that the FDIC be transferred to the Treasury Department.

4.4 Safety net

A public safety net protecting depositors was able to forestall massive withdrawals together with bank panics, while also overcoming depositor reluctance to entrust their money to the banking system. The FDIC provided this type of safety net in the form of insurance for demand deposits guaranteeing a full refund up to \$10,000, then 75% of the next \$40,000 and 50% of the deposit over \$50,000. With almost full coverage of deposits, depositors did not need to make massive withdrawals to recover their money – despite worries over the robustness of their bank – because they were guaranteed to-par recovery of their deposits. Between 1930 and 1933 – the years directly preceding the creation of the FDIC – the average number of banks failing each year in the United States was around 2,000. After 1934, this number fell to fewer than 15 banks a year, up until 1981.

The nature of the insurance offered by the FDIC gave rise to heated exchanges at the time of its introduction. For Emerson (1934), it was not insurance in the proper sense of the term inasmuch as the beneficiary of compensation was not the payer of the premium. It could only be a guarantee offered by the public authorities with a view to protecting financial stability, which is for the public good. This particular argument was actually of secondary importance, given that in both cases – insurance or guarantee – when the FDIC started up operations, compensation came from tax-payers' money paid in the form of Treasury advances.

Between 1930 and 1933, while over 9,000 banks failed, only 9 went out of business in 1934 and the figure leveled out at a few dozen a year up until 1939. Although this success is often put down to deposit insurance and the FDIC, judgment should be qualified. The actual time sequence also suggests that the Bank Holiday from March 6 to 13th, plus the verification of a bank's solvency to authorize re-opening, were more effective in stopping bank panics than the vote, three weeks later, in favor of the Banking Act, or the start-up of deposit insurance in 1934. Whatever, despite the continuing depression, bank runs and panics stopped. They reappeared in the United States only in the 1980s.

4.5 The FDIC's resolution authority

In addition, the regulations governing business bankruptcies were amended and now brought into play, in various forms, a bankruptcy trustee who, better than the bankruptcy estate, was able to speed up adjustment or liquidation. Thus, a trustee was often called in and he reported to the bankruptcy judge. The focus on awarding new banking and financial regulatory institutions assignments for the orderly resolution of failing banks was one of the great contributions of the New Deal.

The reform of the bankruptcy law introduced by the amended Nelson Act of 1898, then the Chandler Bankruptcy Act in 1938, modernized the older legislation. The reform contained a large

number of provisions, one of which, for instance, gave the Securities and Exchange Commission²¹ powers of administration for failing investment banks. It did so via a specific procedure different to that for the bankruptcy of common law commercial companies, and different to that for the resolution of bank failures by the FDIC. The traditional technique of equity receivership, which gave preference to the rights of the failing debtor over the bankruptcy estate with a view to pursuing the company's adjustment, left scope for the appointment of a provisional trustee by the bankruptcy courts in order to oversee the legal adjustment process. The trustee ousted directors and took over the asset estate of the failing bank, at the expense of stockholders. The SEC was thus given powers to settle the bankruptcies of investment banks, albeit less extensive than the powers of the FDIC. Indeed, the trustee did not have to report to the SEC over the fate of the investment bank entering into adjustment proceedings or liquidation, whereas the administrator appointed by the FDIC worked concertedly with it in order to restructure failing commercial banks.

The FDIC's resolution authority introduced also a special administrative ruling for commercial banks bankruptcy, which departed from the law governing commercial bankruptcies and from the Securities and Exchange Commission in the capital market regime as well. The traditional commercial act protected the debtors, i.e. the holders of the company's rights of property and assets, from lawsuits taken out by creditors so that, after restructuration, they could manage the company as a going concern. When bank failures were handled using this commercial procedure, or when the FDIC used the pay-off method²², depositors had to wait for liquidation, often wrapped up several years after the bank

²¹ The 1934 Securities Exchange Act regulated the market of securities. Congress transferred the assignment of the Federal Trade Commission to the Securities and Exchange Commission (SEC), a regulator with special powers to oversee securities business.

²² The *deposit pay-off method* was the only method the FDIC could use in the first years. The bank was closed under its supervisory authority and the FDIC repaid deposits to the set limits. After liquidation, the FDIC paid off the other creditors and recouped by selling off the remaining assets. With this method, depositors whose deposits exceeded the set limit recovered more than 90% of their money, even though the procedure continued to be spread over several years. The *bridge bank method* was less often used. Sometimes, the closure of the defaulting bank was unexpected and precipitated further to a liquidity shortage with no possibility to borrow the cash needed. The FDIC could then set up a bridge bank which provided the FDIC with the liquidity for the defaulting

had closed, before recovering a part of their deposits. In banking terms, these times were excessively long and funds needed to be returned to depositors faster. They needed special legal protection inasmuch as they were both clients unable to observe the bank's management, and creditors who entrusted the bank with the settling of their transactions by debiting/crediting their accounts.

The FDIC was given its own power of resolution that it was required to implement whenever an insured bank defaulted. Default was declared when the authority that delivered its charter observed that the bank was unable to honor immediate or short-term payments and obligations. Depending on the bank's status, the federal state's banking authority, the OCC or the Federal Reserve, shut the bank down and appointed the FDIC as receiver charged with resolution, i.e. the legal winding-up of the establishment. For national banks depending on the OCC, this procedure was mandatory. It was optional for state-chartered banks but it was also very often used in such cases.

Of the different instruments the FDIC would use to handle an insured bank's default on payments, the *purchase and assumption transaction* method had the advantage of allowing a swift reallocation of resources. It was a painful process for stockholders, for creditors other than depositors, and often for employees, but history had shown that the early recognition of losses, closure and the sell-off of non-viable financial institutions was the surest way to financial stability. The 1935 Banking Act gave the FDIC the possibility to organize mergers between insured banks. As a result, the FDIC was able to restructure the defaulting bank by finding a merger from more powerful banks, one that was ready to assume the bank's commitments in such a way that depositors recovered all their deposits. The FDIC could help the overtaking by granting preferential loans or by buying back the defaulting establishment's worst receivables. In the end, this method, which became the most widely used, offered a full guarantee for all deposits by the FDIC, not only those deposits insured within the fixed upper limit. The objective

bank to continue to operate. During that time, the regulator could evaluate and sell off the bank's assets. With the bridge bank, the defaulting bank's stockholders were ousted, as occurs in cases of liquidation.

was fully achieved when the cost of resolution was borne entirely by stockholders alone, and not by tax-payers.

Despite everything, deposit insurance had one major flaw. As from the 1935 Banking Act, banks had to pay a flat-fee insurance premium to feed the deposit guarantee fund run by the FDIC. The insured bank was encouraged to take more risks, since in the event of successful investments, it achieved better financial returns, while in the event of failure it was the FDIC and the tax-payer who paid. To quote the now hackneyed formula, it was “heads the bank wins, tails the FDIC loses”. In fact, all deposits, even uninsured, were covered by the FDIC’s forms of resolution. Such a moral hazard could be only lessened (in part) by a dissuasive system of variable insurance premiums according to the risk rating of the bank’s assets. It was only in 1952 that the principle of weighting assets with risks slipped quietly into the equation, and it was only in the 1990s that the insurance premium paid to the FDIC began to vary in accordance with bank asset risk.

5. Separation of commercial and investment banking

For advocates of the (second) Glass-Steagall Act, commercial banks investing directly in the securities business increased the level of risk-taking by banks for the financial system. The Glass-Steagall Banking Act of 1933 put an end to this competition by ordering the separation of commercial banks and investment banks at the organic rather than functional level. The justification given was that owing to conflicts of interest, commercial banks were deceiving the public by selling unsound securities.

In reality, as demonstrated by White (1986), it has never been proved that the securities affiliates of commercial banks systematically behaved any worse toward their clients than independent investment banks. But the public opinion, loudly stirred by committee chief counsel of Senate hearings Ferdinand Pecora²³, was convinced, not without reason, that conflicts of interest were possible and

²³ Ferdinand Pecora, the former New York prosecutor was a celebrated populist speaker. He was called to chair the Congress commission of inquiry backed by Senator Glass. Pecora demanded an end to the chicanery of Wall Street

placed heavy constraints on the securities subsidiaries of commercial banks in their investment business through the underwriting of issues.

5.1 The commingling of commercial and investment banking

The reasons for prohibiting commercial banks from engaging in the underwriting of private securities were actually deeper than the chicanery or conflicts of interest that attracted so much attention with the Pecora Commission.

The separation of banking and commerce had been a prevailing regulatory principle applied to banks since colonial times. Early federal and state bank charters granted only limited banking powers and expressly prohibited banks from owning real estate or dealing in goods and merchandise. This policy was continued through the 19th Century into the 1920s. The separation policy was dictated by the demand nature of bank commitments, which required a high degree of liquidity of banks investments used as collateral to guarantee deposits by customers. Banks were also limited in their relations to commerce as they were considered public utilities whose proper role was confined principally to accepting deposits, providing a system of monetary payments and making loans.

As mentioned earlier, the traditional concept of banking was influenced by the real-bills doctrine enunciated by Adam Smith in *The Wealth of Nations* (1776). The separation of banking and commerce was a necessary corollary of the orthodox view: since the assets of a commercial bank had to be capable of ready liquidation, bank investments in real estate and corporate stock or other enterprises were incompatible with this view. Early state and federal bank charters in the United States were designed after the charter granted by Parliament to the Bank of England in 1694 (Miller, 1927). The Bank was prohibited from *"directly or indirectly dealing or trading or permitting anyone on their behalf to deal or trade, with any of the money, stock or effects of the corporation, in buying or selling any goods, wares or*

banks that was reprehensible in the eyes of the general public. The hearings conducted by Ferdinand Pecora galvanized public opinion and were followed with keen interest.

merchandise whatsoever." This charter restriction was deemed to avoid the hazard of bankruptcy as well as to allay fears of merchants that the bank's powers would give it an unfair competitive advantage and monopoly control. According to these principles, the Bank of North America, the first incorporated bank in the United States in 1781, chartered by the Continental Congress to help finance the Revolutionary War, was limited to issuing demand notes, accepting deposits, making short term loans against good collateral, and acting as fiscal agent for the federal government (Hammond, 1957). These provisions were intended to keep the bank "closely within the reach of the state". Alexander Hamilton's *Treasury Report on a National Bank* of 1790 reflected the concept of banking as limited to providing a means of exchange and making loans for business purposes, and clearly did not allow for the bank's involvement in commercial enterprises.

The separation of banking and commerce was not strictly adhered to in the 19th Century. Industrialization and the opening of the South and the West generated huge capital needs to support the nation's rapid growth. Early instances of commingling of commercial banking and security activities tended to occur outside of the banking structure, developing rapidly a new shadow banking system. Trust companies, unregulated private banks owned by individuals, the forerunners of investment banks, or even public improvement companies such as railroad companies were allowed to issue notes and asset-backed commercial paper to raise capital or to invest in the stocks of various public works projects, encouraging widespread speculation. The notion that banking could be safely combined with other security activities was then discouraged by some of these ventures²⁴.

In a number of states, state-chartered banks had always been able to grow their financial services directly without being obliged to work through affiliates. Commercial banks were then competing directly with investment banks. Competition existed firstly in the origination of securities

²⁴ Gorton (1988) found that bank failures were insignificant in explaining the financial crises under the national banking era. On the contrary, according to Park (1991), most banking panics in the US history involved trust companies and other nonbank under-regulated financial institutions which were closely related to business firms, notably Messrs Kenyon, Cox & Co. in 1873, Grant & Ward in 1884, the National Cordage Company in 1893 and the Knickerbocker Trust Company in 1907.

issues by corporations and their initial public offerings on the stock market, and secondly in the guarantee of these issues by the underwriting of securities and their placement with private investors, either directly or by way of affiliates.

By contrast, the National Banking Act of 1864 prohibited national banks from holding ordinary shares in private companies (Peach 1941, pp. 44-51). Nevertheless, many national banks opened departments to handle the management of assets, bonds and other fixed-rate instruments, but decisions handed down by the judiciary in the early 20th century cast doubts over the legality of these activities (White 1984). To dispel any ambiguity and particularly to avoid restrictions on their direct securities underwriting, national banks preferred to create specialized affiliates. They often elected to establish these entities in states where financial law was the most accommodating²⁵.

When banks have diverged significantly into nonbanking areas, Congress and the states tried to reaffirm the separation of banking and commerce by imposing specific statutory limitations. In particular, Congressional concern over the commingling of commercial banking and investment banking was first aroused in 1912 by the Pujo Committee hearings focusing on the concentration of money and credit in the so-called money trusts (Fein, 1986). The Pujo Committee recommended that national banks be prohibited from underwriting corporate securities, but no further Congressional action was taken to limit the securities activities of commercial banks or their affiliates.

The rise of the securities market and the way it really took off in the 1920s originated from that same period. According to W. Nelson Peach (1941), the issuance of Liberty Bonds by the government during the First World War fueled the public's infatuation with the bond market. In the 1920s, companies turned more and more toward the financial market to cover their needs for cash through issues of bonds and short-term commercial paper (Carosso 1970). Benefiting from the general rise in the price of assets, share issues also soared. Commercial banks then had to deal with a degree of

²⁵ For instance, the Union Trust Company of Detroit incorporated a company in the state of Delaware, an affiliate named the Union Commerce Investment Company, which in fact was engaged in investment bank business from which the parent company was excluded (Peach 1941, p.51).

disintermediation and so piled pressure on legislators to obtain a widening of the range of financial activities in which they could engage.

The 1920s saw a boom in the number of financial affiliates from national banks, rising from 10 in 1922 to 114 in 1931. The securities departments of state-chartered commercial banks rose from 62 to 123. A number of them, and many affiliates too, specialized in underwriting private bond issues, which tripled in volume at the beginning of the 1930s. By 1930, commercial banks and their affiliates participated in the distribution of 61% of all bond issues and had become the dominant force in the investment banking field (Fein, 1986).

5.2 Conflicts of interest

Senator Carter Glass, the instigator of this provision in Congress, was convinced that the purchase of securities directly from commercial and industrial companies by commercial banks carried a risk, the taking of which should be prohibited because it was harmful to financial stability. Senator Glass' position was based on the real-bills doctrine tirelessly advocated by his life-long secretary, the economist H. Parker Willis, namely that banks should discount only short-term bills that represent real commercial transactions.

Additionally, combining the functions of commercial banking and the trading of securities inevitably created conflicts of interest. These conceptions were also implicitly contained in the inquiry led by the Senate's committee on banking and currency in 1933-34. It was launched following pressure from ruined stockholders and examined the dealings and potential skullduggery of universal banks.

Many investors complained to the committee that they had been pressured into purchasing large quantities of securities, whose value plummeted sharply very soon afterwards. Investors and savers blamed universal banks for their hugely hyped-up advertising campaign inciting savers to purchase these securities. In the eyes of the general public, bankers had behaved like gangsters and became known as "banksters".

The Pecora Commission effectively unearthed several cases of serious abuse committed by universal banks. One employee of the National City Bank (now Citibank) was accused of selling “exposed and speculative securities” to the bank’s customers, most notably debentures issued by the Republic of Peru, which repudiated its debt shortly afterwards.

The case of the Fox Motion Picture Company was examined at length by the committee to illustrate the failings of universal banking (B. Wigmore 1985, pp. 171-75, R.S. Kroszner & R.G. Rajan 1993). Criticism was leveled at the chairman of the National City Bank, Charles E. Mitchell, and the director of the Chase National Bank (Chase NB), Albert H. Wiggin, for having mounted concerted operations in which the resources of both banks were used to send their share prices sky-high and line the pockets of their directors and allies. In 1929, the General Theaters and Equipment Company (GTE) purchased the ailing Fox Company thanks to a loan of \$15 million from the Chase NB. In early 1930, the Chase Securities Company, a subsidiary of the Chase National Bank, underwrote 23m dollar worth of ordinary shares and 30 million bonds issued by GTE; GTE used a part of the proceeds from these issues to pay back the loan granted by the Chase NB. The following year, a struggling GTE once again turned to Chase NB to obtain additional loans. Chase Securities, which already held GTE shares and debentures, decided to underwrite a further 30 million bonds. Two years later, GTE went bankrupt. According to Wigmore (1985), the Pecora Commission inquiries showed that conflicts of interest within the Chase Group led to its underwriting low grade securities to pay back its own debts, and that the information relative to the securities that Chase was trying to sell to the public was dissimulated or distorted.

5.3 The prohibition of commercial banks' securities operations

The (second) Glass-Steagall Act has come to mean only those sections 16, 20, 21, and 32 of the Banking Act of 1933 that refer to banks' securities operations. These four sections of the Act govern commercial banks' domestic securities operations in various ways.

Section 16 and 21 refer to the direct operations of commercial banks. Section 16, as amended by the Banking Act of 1935, generally prohibited Federal Reserve member banks from purchasing securities for their own account. But a national bank (chartered by the Comptroller of the Currency) might purchase and hold investment securities (defined as bonds, notes, or debentures regarded by the Comptroller as investment securities) up to 10 per cent of its capital and surplus. Section 16 permitted commercial banks to purchase and sell securities directly, without recourse, solely on the order of and for the account of customers.

Sections 16 and 21 also proscribed deposit institutions from both accepting deposits and engaging in the business of "*issuing, underwriting, selling, or distributing, at wholesale or retail, or through syndicate participation, stock, bonds, debentures, notes or other securities*", with some important exceptions, principally US Treasury securities, obligations issued by federal agencies, states and political subdivisions. Municipal revenue bonds were not included in the exceptions.

Section 20 banned Federal Reserve member banks from affiliating with a company "*principally engaged* [in the] *issue, flotation, underwriting, public sale, or distribution at wholesale or retail or through syndicate participation of stocks, bonds, debentures, notes, or other securities*"²⁶. *Principally engaged* was defined by the Federal Reserve as activities contributing more than from 5 to 10 per cent of the affiliate's total revenue.

Section 32 prohibited a member bank from having interlocking directorships or close officer or employee relationships with a firm *principally engaged* in securities underwriting and distribution. Section 32 applies even if there is no common ownership or corporate affiliation between the commercial bank and the investment company.

²⁶ In June 1988 the U.S. Supreme Court (by denying certiorari) upheld a lower court's ruling accepting the Federal Reserve Board's April 1987 approval for member banks to affiliate with companies underwriting commercial paper, municipal revenue bonds, and securities backed by mortgages and consumer debts, as long as the affiliate does not principally engage in those activities.

Sections 20 and 32 did not apply to non-member banks and savings and loan associations. They were legally free to affiliate with securities firms. Thus the law applied unevenly to essential similar institutions. Furthermore, commercial banks were not forbidden from underwriting and dealing in securities outside of the United States, so that the larger money center banks, against whom the prohibitions of the Glass-Steagall Act were directed, became particularly active in these markets. In addition, commercial banks' trust departments were permitted to trade securities through their securities subsidiaries or affiliates for pension plans and other trust accounts.

5.4 An aggressive banking duopoly

According to another interpretation (Tabarrok, 1998), the separation of banking and security activities was a reflect of a fight between two powerful financial groups for market shares and dominance. The banking market was dominated by an aggressive duopoly between the Rockefellers and the Morgans. The separation of commercial banks and investment banks resulting from the Glass-Steagall Act of 1933 might have been the indirect means used by one of the Act's sponsors, the influential Winthrop Aldrich²⁷, to give a competitive advantage to the Rockefeller Group banks, the Chase National and the National City, at the expense of the Morgan banks.

In March 1933, the chairman of National City, Charles E. Mitchell, took everyone by surprise by announcing that the bank was splitting from its securities subsidiary, while Aldrich launched a press campaign aimed at creating greater control over commercial banks, at forcing private banks to separate their commercial and investment activities, and at prohibiting the same directors from holding positions in both different types of financial institutions. For his contemporaries, it was obvious that the Aldrich

²⁷ Winthrop Aldrich was the son of Senator Nelson Aldrich, one of the founders of the Federal Reserve System with Senator Glass, and the brother-in-law of John D. Rockefeller Jr, heir to the Standard Oil Corporation and the Equitable Trust investment fund, which became the country's 8th biggest bank in 1920. Aldrich organized the merger between Equitable and the Chase National Bank, run by Wiggin, which belonged to the house of Morgan. The take-over attempt on Morgan by the Rockefeller Group triggered a bloody war between Aldrich and Wiggin, which ended in the ousting of Wiggin in 1931. In the eyes of the public, his was the reputation of a corrupt figure.

program was aimed at a single target, the life-long rival of the Rockefellers, namely JP Morgan & Company, whose investment bank was specialized in underwriting issues from its ally, the US Steel Corp. and other major corporations. One half of Morgan associates were also directors of commercial banks. The Pecora Commission established that JP Morgan had made loans to 60 directors and managers of the group's other affiliated banks, evidence, in its opinion, that information was circulating and could explain the high levels of insider dealing, price manipulation and other forms of misappropriation to which Wall Street investors were falling victim.

Had Aldrich's action been successful, it could have led to the separation of the Rockefeller-Chase group banks in the same way as those of the Morgan Group. But the cost would be higher for Morgan than for Rockefeller-Chase, which saw in this move a decisive competitive advantage. Indeed, during the depression, business at Chase was flat and the bank shortly came in for criticism from the Pecora inquiry. On the other side, cross-connections between directors at Morgan resulted in an increasing number of lucrative mergers and buy-outs, on the rise on account of failing companies. Morgan had more to lose than Chase and had to cope with the full clout of Rockefeller lobbyists. The separation of commercial and investment banks contained in the Glass-Steagall Act, which according to Senator Glass (close to Morgan) should concern only national banks and not private banks, was the upshot of this exacerbated competitive rivalry.

5.5 Loopholes in the boundaries of loan and security activities

The frontiers of the Glass-Steagall Act were not watertight. The Act authorized commercial banks to place new offers for public securities but banned the underwriting and trading in private securities. It also prevented banks from engaging in insurance or real estate. In return, the law prohibited investment banks and insurance companies from engaging in commercial banking activities, particularly the collection of deposits. For loans, investment banks were able to grant credit to their customers who were buying securities. In every case, investment banks engaged in security loans, their

core business and on average much more lucrative than lending money. The separation thus protected banks from competitors.

Following passage of the Glass-Steagall Act, many affiliates surrendered their charters and liquidated their assets. In certain cases, affiliates separated from parent banks and continued as independent organizations. First Boston Corporation separated from First National Bank of Boston along the lines required by the Act. Private investment banks had to choose between accepting deposits and dealing in securities: J.P. Morgan split into a commercial bank, Morgan Guaranty, and an investment bank, Morgan Stanley.

Despite the prohibitions introduced by the Glass-Steagall Act, the search for profit and financial innovations incited not only commercial banks but also other financial institutions to bend the law and stray into the traditional territory of others. Securities trading firms encroached upon the traditional banking business of deposit collection, prompting the advent of money market mutual funds. A loophole in Section 20 of the Glass-Steagall Act also enabled commercial bank subsidiaries and members of the Federal Reserve System to engage in the underwriting of certain securities as long as revenues did not exceed 10% of the affiliate's total income. While some commercial banks continued to deal in securities to the limited extent permitted for decades thereafter, there was little involvement in the business until the early 1970s

However, bank holding companies had traditionally been an alternative way for commercial banks to expand into new activities, and to spread interstate operations through affiliates. Prior to 1933, they were not restricted by federal law. The Glass-Steagall Act of 1933 imposed limited restrictions as corporations owning more than 50% of the stock of one or more Federal Reserve member bank were required to apply to the Federal Reserve to secure permits to vote their stocks (Shull, 1999). Loopholes in the GSA were quickly identified since holding companies, which controlled both bank subsidiaries and nonbank subsidiaries, were not subject to the federal banking law unless they registered with the

Federal Reserve, which most holding companies managed to avoid²⁸. Transamerica Corporation typified the far-flung scope of activities that could be housed under the same holding company structure, at one time engaging in banking, real estate, insurance, and even commercial activities.

6. The federal organization of nonbank financial institutions

The impact of the economic contraction on thrift institutions, investment funds, financial trust companies, finance companies etc., which at the time made up the shadow banking system, is less documented than for banks. It is true that up until 1932, this sector and its very diverse institutions evaded all federal regulation. However, the role of thrift institutions during the Great Depression was of the utmost importance for the public. Loan delinquencies and foreclosures soared, fueled by falling property values and decreasing household incomes. Thrifts were closely involved in the mortgage market distress and resolution of defaulting mortgages. The government and states took many actions to provide relief to the borrowers to avoid foreclosures and the expulsion of jobless households crippled by debt.

6.1 Mortgage bailouts

Since 1816, Congress had recognized the importance of property ownership and the necessity to distribute long-term home loans to households. Commercial banks were not equipped for these services and Congress preferred to create charters for thrift institutions and mutual savings, inspired by English and Scottish poor laws, which recognized philanthropic financial institutions providing assistance for the poor. All these institutions formed federal savings associations or federal thrifts.

²⁸ These developments provoked the writing of a section in the Bank Holding Company Act of 1956 prohibiting BHC from acquiring "direct or indirect ownership or control of any voting shares of any company which is not a bank". The Douglas Amendment of 1970 restricted banks to engage in only those activities judged to be related to banking by the Federal Reserve Board but it did not entirely eliminate different loopholes with respect to nonbank activities that were being exploited.

Mutual Savings Banks (MSBs) were established as early as 1816 in Philadelphia, Boston and New York, obtaining a charter from Congress authorizing them to pay an interest on the savings of depositors, at once members and owners. Deposits thus constituted equity capital for these banks. Their success was such that they quickly lost their charity calling and attracted the middle classes. They deposited their assets with commercial banks and did not participate in the issue of paper notes. Loans, basically mortgages, were reserved for members. This very conservative and prudent policy enabled savings banks to emerge more or less unscathed from bank runs, even during the 1930s. MSBs had to wait until 1978 before receiving a national charter.

The first mutual thrift association, the Oxford Provident Building Association, was founded by town notables in 1831 in Frankford in the county of Philadelphia. It was based on the model of British mutual building societies with a view to facilitating the acquisition of landed property and home ownership. Prior savings were encouraged and protected, but mutual loans were limited in their amount and term. Loans to businesses were excluded and the financing of commercial realty was authorized only much later. At the end of the 1890s, these associations, which assumed a variety of names (savings & loan (S&L), building & loans, thrift & loans, thrifts, savings banks, building associations, thrift associations, savings associations) were growing quickly. Their numbers were 5,000 in 1880 and 12,000 by the 1920s.

States prohibited commercial banks from offering long-term mortgages, which immobilized resources for excessively long periods. The National Bank Act of 1863 reasserted these restrictions for national banks. These bans encouraged people to look for alternative solutions to finance home-buying outside the banking system. Private loan systems arranged by realty brokers were common practice by way of mortgage contracts drawn up and registered by lawyers, but this concerned only the wealthier buyers.

In the 1880s, mortgage banks, incorporated without a charter or controls, were in the habit of raising funds by selling bonds to investors which they then lent over the long term to purchasers of land and housing. This was the forerunner of securitization. The specialized bank would assemble a portfolio of mortgage contracts and use them as collateral for the issue of securities offered for sale to the general public. These loans were widely used for the purchase of farm land in the West until the great recession of 1893, which ruined mortgage banks.

After World War I, national banks were authorized to offer mortgages. Usually, borrowers were required to make down payments averaging around 35 percent for loans lasting only five to ten years at interest of up to 8 percent. At the end of that brief loan period, mortgage holders had to hope they could refinance or else come up with the remaining cost of the property. The home buyers who could manage such terms assumed the additional risk of a lack of uninsured mortgage loans. Basically, the property's loan-to-value ratio became the key indicator for holding onto property. In times of prosperity, this positive value enabled thousands of households to finance their purchase with first and second mortgages one on top the other. When the ratio turned negative, foreclosures speeded up considerably.

6.2 A federal framework for property ownership and home loans

This system was unable to resist the shock of the 1929 economic collapse. Home buyers were ruined by the slump in property prices. Households who lost their income on account of unemployment could no longer make their mortgage payments, resulting in foreclosure and expulsion. Many homeowners went under, dragging mortgage lenders down with them, owing to loan defaults and to the depreciation of property, whose value served as a guarantee for mortgages. The number of mortgages issued nationwide dropped from 5,778 in 1928 to a mere 864 in 1933. Faced with this dire situation, the New Deal had a basic choice (Harriss, 1951). It could follow the lead of Hoover's policy that in 1932 created the Federal Home Loan Bank to provide federal funding for lenders in the private

housing market. Or it could follow the Federal Reserve Board chairman, Marriner Eccles, urging that money should be pumped into the building trades in order to gain both work for the unemployed and the needed public housing. Roosevelt inclined toward the latter course, but with government oversight and a focus on hard-pressed homeowners, rather than on the institutions controlling their mortgages.

At the national level, the thrift sector was still disorganized. In 1932, the Hoover administration established an initial institutional and regulatory framework for nonbank finance institutions. The scheme was completed by a series of New Deal acts in 1933 and 1934, which formed a federal framework in a bid to unify a mixed bag of institutions.

The Federal Home Loan Bank Act of 1932 created the federal chartering for savings associations. S&Ls were given a choice between the federal charter and the traditional charters delivered by states. The FHLBB was appointed regulator of S&Ls. The law established a federal system to provide a federal lender for member S&L, mutual savings banks (and some life insurance companies) specializing in home mortgage loans. Like the Federal Reserve System, the organization comprised a central regulator, the Federal Home Loan Bank Board (FHLBB) and a regional network of twelve home loan banks (FHLB). The FHLBB introduced federal regulation for thrifts and organized the loan market. Member institutions were required to purchase stocks in their district FHLB and could borrow from the bank against collateral consisting of mortgages or Treasury bills.

The Home Owners Loan Corporation Act of June 1933 established the HOLC as a federal bailout agency placed under the control of the FHLB Board. Its role was to purchase and refinance delinquent home mortgages, including mortgages on properties that had been recently foreclosed on (Wheelock, 2008). The HOLC received an initial capitalization from Congress and it funded its activities from its bond issues and current operating revenues. Basically, it exchanged defaulting mortgages for bonds, completing its debt conversion work in 1951 and then it was finally laid to rest. The money raised would enable the HOLC to rescue imperiled mortgages by offering financing up to 80 percent of assessed value

of the underlying property. Harriss (1951) details how the HOLC was authorized to conduct its own appraisals on three criteria: (i) the market value of the property at the time of appraisal; (ii) the cost of a similar estate and (iii) the value of the premises, by capitalizing the reasonable rental value over a ten year period. The appraisals were often more generous than the depressed current property market prices, which incentivized successfully lenders to sell many delinquent loans to the HOLC rather than attempt to recoup their losses through foreclosure (Wheelock). There followed a rush to file applications such that, in 1935, the HOLC held 19% of all mortgage debt outstanding on family homes. As intended, the main beneficiaries were homeowners at the lower end of the middle class who in the private market would have lost their homes. For middle-class America it was a crucial New Deal benefit against the prior restrictive mortgage system.

The HOLC permanently changed the prevailing mortgage system. It offered money at 5 percent, provided insurance for its loans through the Federal Housing Authority and the Federal Savings and Loan Insurance Corporation, and allowed up to 25 years for repayment. To reach far-flung clients the HOLC dispersed into regional centers. Every loan situation was handled individually, including personal visits to prevent default. Given wide discretion to act, agents improved the chances clients would meet their obligations and qualify for public assistance by helping them find work, collect insurance claims and pensions, attract tenants for rental space. The success of this social outreach²⁹ was best demonstrated by the fact that the foreclosure rate for HOLC's risky mortgages was no greater than that for much safer mortgages accepted by banks and insurance companies.

In 1934, Congress passed the National Housing Act to administer a federal mortgage insurance program to private lenders on qualifying loans for the purchase of family houses. This limited insurance system for private savings was run by the newly created Federal Savings and Loan Insurance Corporation (FSLIC), based on the FDIC model, whose direction and management were entrusted to the FHLB

²⁹ However, HOLC policies favored single-family homes outside the central cities and also inclined toward segregation on the grounds that racially homogeneous areas were most stable and thus posed the lowest credit risk. That bias, shared by private sector bankers and realtors, excluded most minorities from much consideration.

Board³⁰. The FSLIC also became the regulator of state-chartered thrifts adhering to the insurance scheme. Lastly, the FSLIC was charged with the resolution of failing thrifts under conditions similar to those for the FDIC.

The National Housing Act of 1934 also sought to guarantee the liquidity of the home loan market by prompting private institutions to agree to a public interest refinancing mission for mortgages distributed by finance companies and specialized home loan banks. It offered federal status to national mortgage associations, which would then be placed under supervision by a Government Sponsored Enterprise. Only the National Mortgage Association of Washington, a private-stock company specializing in refinancing, opted for this status in 1938. Renamed the Federal National Mortgage Association, it operated under the familiar nickname of Fannie Mae.

The National Housing Act also took an interest in public housing. It set up a federal urban development system, the implementation of which was assigned to the Federal Housing Administration (FHA) to subsidize public housing loan programs. However, in practice, the policy of the FHA had perverse effects in that it tended to accentuate racial segregation through the practice of redlining³¹ and the screening of loans to favor wealthier borrowers.

Conclusion

It is difficult to say with any certainty whether or not the stagnation of commercial banks up until the 1960s was down to the Depression then World War II, or to restrictions imposed by the Glass-Steagall Act. For a number of economists looking to measure the cost of the absence of universal banks in the United States, compared with European banks for instance, there is no doubt that the Act stymied the expansion of banks and thereby stripped long-term growth of necessary financing. It is also true that

³⁰ This system was ended by the Financial Institutions Reform, Recovery and Enforcement Act (FIRREA) of 1989 which replaced the FHLBB by the Federal Housing Finance Oversight Board.

³¹ It was only in 1968 that Congress voted in the Fair Housing Act, banning this stigmatization of neighborhoods on racial criteria in urban development plans.

commercial banks had to evolve and learn how to finance products other than short-term commercial credit. Many years were to go by before the Federal Reserve changed its stance and supported this banking development. The real-bills doctrine doubtless exerted a more serious negative influence than the separation of banking and securities.

However, the New Deal banking reforms disclosed new and complex issues that could not be solved immediately. Taming moral hazard and excessive risk taking required a consistent set of regulatory incentives based on integrated federal and state powers in banking supervision, deposit insurance and crisis management, including resolution of insolvent banks and nonbank financial institutions. As these functions were intimately interconnected, only their joint management could eradicate the expectation of bailouts from the system and thus establish proper incentives against reckless risk-taking by banks in their investment activities. The New Deal regulations covered deposit insurance and resolution, partly crisis management, but not bank supervision. More efforts would still be necessary to achieve a full-fledged comprehensive regulatory structure.

Deposit insurance should only protect depositors and never be used to cover bank losses and shield bank managers, shareholders, and creditors. Furthermore, deposit insurance would provide not only equal incentives to bank shareholders and managers with *ex-ante* funding and risk-based fees, but also full risk pooling. An adequately funded insurance fund across the banking system should be able to cushion large shocks affecting one or several of the largest banks. The accumulation and pooling of funds would only start within the new FDIC and FSLIC system.

As to crisis management powers, they should be attributed to the federal regulator in order to establish a credible threat that bank shareholders and managers would be fully liable for the consequences of imprudent behavior and would in no circumstances be bailed out by secondary authorities with taxpayers' money, so as to fully eradicate from the system all possibility for supervisory forbearance. This would require stronger, more constant and non-opportunist resolution rules.

An important matter was where to place the borderline between supervisory corrective action and resolution proper. The 1930s legislation did not require explicitly early intervention including bail in recovery plans and intra-group financial support arrangements. It would also have been preferable to bring under the banking regulator all crisis management measures including the power to order the suspension of dividends, recapitalization, management changes, asset disposal and bank restructuring, up to the creation of a 'bad' bank or even winding up the banks. With these powers in the hand of the FDIC, deterrence would have been stronger and supervisory forbearance at national level would have been precluded.

Resolution would then have become a residual function under common rules preventing regulatory authorities from making good the losses of shareholders and creditors. The banking resolution fund, rather than covering losses emerging from liquidation, should have to provide capital, in case of need, to the 'good bank' carved out by supervisors to preserve deposits, sound commercial loans and other assets, and worthy systemic functions relating to the payment infrastructure. In view of its limited scope, such a fund could have its resources raised by means of a small surcharge over the deposit insurance fee and be managed by the FDIC together with the deposit insurance fund.

References

Benston, George J. "Why Did Congress Pass New Financial Services Laws in the 1930s? An Alternative Opinion", Federal Reserve Bank of Atlanta Economic Review, April 1982, 7-10

_____, The Separation of Commercial and Investment Banking – The Glass-Steagall Act Revisited and Reconsidered, New York, Oxford University Press, 1990

_____, "The Origins and Justification for the Glass-Steagall Act", in A. Saunders & I. Walter, ed., 1996, 31-69

Bordo, Michael D., Angela Redish & Hugh Rockoff, "Why Didn't Canada Have a Banking Crisis in 2008 (or in 1930, or 1907, or...)?" NBER, Working Paper 17312, August 2011

Bradford, Frederick A., "The Banking Act of 1935", American Economic Review, 25, 4, December 1935, 661-672

Bradley, Christine M., "A Historical Perspective on Deposit Insurance Coverage", FDIC Banking Review, 13, 2, 2000, 1-25

Burns, Helen M., "The American Banking Community and the New Deal Banking Reforms, 1933-35", Westport, Conn., Greenwood Press, 1974

Butkiewicz, James L., "The German Influence on the Origin of U.S. Federal Financial Rescues", University of Delaware, Working Paper 19, 2011

Calomiris, Charles W., "Is Deposit Insurance Necessary? A Historical Perspective", Journal of Economic History, 50, 1990, 283-95

_____ & Joseph R. Mason, "Contagion and Bank Failures during the Great Depression: The June 1932 Chicago Banking Panic", American Economic Review, 87, 1997, 863-83

_____ & Eugene N. White, "The Origins of Federal Deposit Insurance", in Claudia Goldin & Gary Libecap, eds, The Regulated Economy: A Historical Approach to Political Economy, University of Chicago Press, 1994, 145-88

Carosso, Vincent P., Investment Banking in America: A History, Cambridge, Mass., Harvard University Press, 1970

Emerson, Guy, "Guaranty of Deposits under the Banking Act of 1933", Quarterly Journal of Economics, February 1934, 229-244

Federal Deposit Insurance Corporation, *The First Fifty Years – A History of the FDIC 1933-1983*, FDIC, Washington DC, 1984

Federal Reserve Bank of Boston, *Closed for the Holiday – The Bank Holiday of 1933*, Public and Community Affairs Department, 1999, 28 pp.

Fein, Melanie, "The Separation of Banking and Commerce in American Banking History", Appendix to Statement of Federal Reserve Board Chairman Paul A. Volcker, *Structure and Regulation of Financial Firms and Holding Companies Part 1*, Hearings Before a Subcommittee of the House Government Operations Committee, 99th Cong., 2d Sess. 393 (June 11, 1986) pp. A1-A13

Flannery, Mark J., "An Economic Evaluation of Bank Securities Activities before 1933", in I. Walter ed., 1985, 67-87.

Flood, Mark D., "The Great Deposit Insurance Debate", *Federal Reserve Bank of Saint Louis Review*, 74, 4, 1992, 51- 77

Friedman, Milton & Anna Jacobson Schwartz, *A Monetary History of the United States, 1867-1960*, National Bureau of Economic Research, *Studies in Business Cycle Series* vol. 12, Princeton University Press, 1963

Gayer, A.D., "The Banking Act of 1935", *Quarterly Journal of Economics*, 50, 1, 1935, 97-116

Golembe, Carter H. "The Deposit Insurance Legislation of 1933: An Examination of its Antecedents and its Purposes ", *Political Science Quarterly*, 76, June 1960, 1-95

Giddy, Ian H., "Is Equity Underwriting Risky for Commercial Bank Affiliates?" in I. Walter ed., 1985, 145-69

Jones, Jesse H., *Fifty Billion Dollars: My Thirteen Years with the RFC, 1932-1945*, Chicago, Macmillan, 1951

Keeton, William R. "Small and Large Bank Views of Deposit Insurance: Today vs. the 1930s", *Federal Reserve Bank of Kansas City, Economic Review*, September 1990, 23-35

Kelly, Edward J., "Legislative History of the Glass-Steagall Act", in I. Walter, ed., 1985, 41-65

Kennedy, Susan Estabrook., *The Banking Crisis of 1933*, Lexington, University of Kentucky Press, 1973

- Kroznor, Randall S. & Raghuram G. Rajan: "Is the Glass-Steagall Act Justified? A Study of the US Experience with Universal Banking before 1933", *American Economic Review*, 84, September 1994, 810-32
- _____ "Organization, Structure and Credibility: Evidence from Commercial Banks Securities Activities before the Glass-Steagall Act", *Journal of Monetary Economics*, 1997, 39, 475-516
- Lowell, Harris C., *History and Policies of the Home Owners' Loan Corporation*, New York, NBER, 1951, (www.nber.org/books/harr51-1)
- Mishkin, Frederic S., ed., *Prudential Supervision: What Works and What Doesn't?* National Bureau of Economic Research, Chicago University Press, 2001
- Olson, James, *Herbert Hoover and the Reconstruction Finance Corporation*, Ames, Iowa State University Press, 1977
- Pecora, Ferdinand, *Wall Street on the Oath*, New York, Simon & Schuster, 1939
- Peach, W. Nelson, *The Security Affiliates of National Banks*, Baltimore, Johns Hopkins University Press, 1941.
- Phillips, Ronnie J., *The Chicago Plan and New Deal Banking Reform*, Armonk, NY, M.E. Sharpe, 1995.
- Preston, Howard H., "The Banking Act of 1933", *American Economic Review*, 23, 4, December 1933, 585-607
- Rajan, Raghuram G., "The Entry of Commercial Banks into the Securities Business: A Selective Survey of Theories and Evidence", in A. Saunders & I. Walter eds., *Universal banking: Financial System Design Reconsidered*, Homewood, Ill., Irwin, 1996, 282-302
- Richardson, Gary, "Bank Distress During the Great Depression: The Illiquidity-Insolvency debate revisited", *Explorations in Economic History*, 44, 4, October 2007, 586-607
- _____, "Bank Distress During the Great Contraction, 1929 to 1933 – New Data from the Archives of Board of Governors", NBER, Working Paper 12590, October 2006
- Robinson, Roland I., "The Capital-Deposit Ratio in Banking Supervision", *Journal of Political Economy*, 49, 1, 1941, 41-57

Saunders, Anthony, "Securities Activities of Commercial Banks: The Problem of Conflicts of Interest", Federal Reserve Bank of Philadelphia, Business Review, July 1985, 17-27

Silber, William L., "Why Did FDR's Bank Holiday Succeed?" Federal Reserve Bank of New York, Economic Policy Review, 15, 1, July 2009, 19-30

Shugart, William F. "A Public Choice Perspective of the Banking Act of 1933", Cato Journal, 7, Winter 1988, 595-619.

Shull, Bernard, "The Separation of Banking and Commerce in the United States: An Examination of Principal Issues", Office of the Comptroller of the Currency, Economics Working Paper 1999-1 (www.occ.treas.gov/publications/publications-by-type/economics-working-papers/1999-1993/wp99-1.pdf)

Tabarrok, Alexander, "The Separation of Commercial and Investment Banking: The Morgans vs. the Rockefellers", Quarterly Journal of Austrian Economics, 1, 1, 1998, 1-18

Todd, Walker F., "History and Rationales for the Reconstruction Finance Corporation", Federal Reserve Bank of Cleveland, Economic Review, 4, 1992, 22-35

Upham, Cyril B. & Edwin Lamke, Closed and Distressed Banks – A Study in Public Administration, Washington DC, Brookings Institution, 1934

Viner, Jacob, "Recent Legislation and the Banking Situation", American Economic Review, 26, March 1936, 106-19

Walter, Ingo, ed., Deregulating Wall Street: Commercial Banks Penetration of the Corporate Securities Market, New York, John Wiley, 1985.

Wicker, Elmus, The Banking Panics of the Great Depression, Cambridge, Cambridge University Press, 1996

White, Eugene N. "The Political Economy of Banking Regulation – 1864-1933", Journal of Economic History, March 1982, 33-40

_____ "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks", Explorations in Economic History, 23, January 1986, 33-55

Wigmore, Barrie A., The crash and its aftermath: a history of securities markets in the United States, 1929-1933, Contributions in economics and economic history, Westport, Conn., Greenwood Publishing Group, 1985

For earlier LAREFI Working Papers, please go to <http://lare-efi.org.u-bordeaux4.fr>

All Discussion Papers can be downloaded free of charge

2011-001 *Trade and Investment in Latin America and Asia : Potential Perspectives from Further Integration* Antoine Bouët

2011-002 *Social responsibility of the countries and their international trade : A gravitational approach* Jean-Marie Cardebat, Alexandru Dimitrescu

2011-003 *Gouvernance territoriale durable via les PME : l'exemple de la région Aquitaine* Anne Musson

2011-004 *Offshoring and export performance in the European automotive industry* Raphaël Chiappini

2011-005 *Envois de fonds et allocation du temps des enfants au Niger : L'effet indirect des chocs négatifs* Delphine Boutin

2011-006 *D'une crise à l'autre : mesurer l'impact des prix alimentaires sur la pauvreté* Delphine Boutin

2011-007 *Foreign banks and the stability of foreign and domestic credit in CEECs* Sophie Brana, Delphine Lahet

2011-008 *Assessing the Effects of Financial Heterogeneity in a Monetary Union : A DSGE Approach* Christina Badarau, Grégory Levieuge

2011 -009 *Which policy-mix to mitigate the effects of financial heterogeneity in a monetary union ?* Christina Badarau, Grégory Levieuge

2011-010 *A note of poor-institution traps in international fiscal policy games* Pierre-Henri Faure

2011-11 *Should governments be more permissive towards corruption ?* Pierre-Henri Faure