

Political Economy of Separating Conventional and Merchant Banking

JAMALUDDIN AHMED*

1. Background and Introduction

In the US, two key factors shaped the history of banking: a deep suspicion of financial power and a political preference for small local banks. The post-crisis debate on the merits of separating commercial and investment banking has been more animated in the UK than elsewhere. While moral hazard is seen as the central issue, as it is in the US, those who advocate separation also argue that it could make a material contribution to the stability of the financial system if implemented in conjunction with other measures such as substantially higher capital requirements. The idea of separating commercial and investment banking by law was not seriously considered by either the UK or Germany for most of their history. In the UK, a system of large commercial banks developed gradually, and by the time these institutions were large enough to enter into investment banking, that slot was already occupied by specialized firms organized as partnerships. Before the Big Bang in the 1980s the rules of the London Stock Exchange played a role in maintaining this structure, although they concerned only a subset of investment banking activities. Germany's system was one in which the large banks defined themselves primarily as banks for bigger companies, a role that naturally included related commercial and investment banking activities. These large banks were late entrants into retail banking and even today play only a minor part in a market segment dominated by savings banks and cooperative banks.

* Author Dr Jamaluddin Ahmed FCA is a former President of the Institute of Chartered Accountants (2010), Vice President of Bangladesh Economic Association, Director of Emerging Credit Rating Limited, an Independent Director of Power Grid Company of Bangladesh Limited and Grameenphone Limited also a former Director of Dhaka Stock Exchange Limited (2010).

The financial crisis of the early 1930s soon put the process into reverse. The stock market fell by 90 percent from its 1929 peak, a third of all US banks failed, and the majority of international bond issues defaulted. Public anger was inevitably directed at bankers, or "banksters," as they were now known. The debate about the causes of the Great Depression has raged ever since the early 1930s. At the time, most people blamed the Wall Street Crash of 1929, which seemed to mark a sharp transition between the "fat years" of the 1920s and the "lean years" of the 1930s. Since then, opinion has changed. Most economists now believe that the crash need never have developed into the depression. Some blame the banking crises of 1930–33 for transforming a normal business recession into the worst depression in modern history. When they look at the US banking industry, they identify the small local "unit" banks as the fatal weakness that made the outcome so much worse in America than it was in Canada or the UK, with their well-established branch banks.

Similar views were held in the 1930s by the advocates of the large banks, who hoped to use the crisis to break down the barriers that prevented them from establishing statewide if not nationwide branch networks. The advocates of the small banks countered by arguing that the unit banks that failed in large numbers were not the cause of the problem, but its victims. Blame should, they maintained, be laid at the door of the securities activities of the large money-centre banks for blowing up the stock-market bubble and setting off the crisis. Other commentators have taken a different view. Many economists now believe that the deflationary spiral was triggered by failures in central banking practice that allowed the money supply to shrink and permitted banks to fail in the absence of a lender of last resort. Others point to the collapse of trade as the world retreated into protectionism in the wake of the disastrous Smoot–Hawley Tariff Act of 1930.

Separation of conventional from investment banking in the period immediately after the depression, the question of what had caused it was central to enacting reforms intended to prevent future crises. In 1932, Carter Glass, the most influential member of the Senate banking committee, introduced a bill to separate commercial and investment banking. He and his supporters reasoned that allowing the banks to enter the securities business had created an "overproduction of securities"⁵ that had inexorably led to the crash. At the same time, the holding of volatile securities on banks' books had weakened their balance sheets and contributed to a loss in confidence in the banking system. Moreover, selling securities to their customers had given rise to serious conflicts of interest. The bill was opposed by the Hoover administration and by the Federal Reserve of New York, on the grounds that regulation was a sufficient solution to any problems that

had occurred and that separation would cause further disruption to an already fragile financial system. Support in Congress was mixed, and the bill might have died had it not been for the confluence of three factors.

The first was the bill's adoption by Franklin Roosevelt in his presidential campaign. He declared, "Investment banking is a legitimate business. Commercial banking is another, wholly separate business. Their consolidation and mingling is contrary to public opinion"(US Congressional Record, volume 77, part 4, p. 3956). The second factor was the Senate investigation into banking practice led by Ferdinand Pecora in early 1933, which uncovered a series of unsavoury insider deals, conflicts of interest, the public and so embarrassed the heads of the two largest New York banks that they closed down their securities businesses. The third factor was an alliance of convenience between Carter Glass in the Senate and the chairman of the House Committee on Banking and Currency, Henry Steagall. An advocate of the small unit banks, Steagall sought to forestall any attempt to allow nationwide branch banking, while establishing a national deposit insurance system that would allow the unit banks to compete with the larger banks.

The result of this alliance was the Glass-Steagall Act of 1933, which forced banks to close down or spin off their securities businesses and established the Federal Deposit Insurance Corporation (FDIC). In spite of critics' misgivings, the separation of banking activities was achieved relatively simply. Banks had to choose whether they wished to accept deposits or deal in securities; they could no longer do both. By and large, the commercial banks got out of the securities business, and the investment banks stopped accepting deposits.

From 1933 to the late 1970s, the Glass-Steagall Act remained largely unchallenged. However, it is not hard to see why the commercial banks started to push for its repeal in the 1980s. Profits from traditional lending were declining as creditworthy corporations funded themselves in the commercial paper market. Meanwhile the investment banks were expanding their scope and seeing their profits soar. Access to investment banking activities would provide commercial banks with sources of non-interest income as an alternative to seeking capital-intensive interest income from ever riskier sources (although some of these banks did that too). Universal banking was becoming the norm in an increasingly globalized financial world, especially once the UK put an end to its tradition of specialized financial institutions in the mid-1980s.

The US banks had a number of eminent supporters, most notably Alan Greenspan, who argued strongly in favour of deregulation. In addition, revisionist academic

accounts started to appear that attributed the destabilization of the banking system in the 1930s not to securities activities, but to the small local banks without securities businesses that failed in their thousands while the large national banks survived. Support for this analysis seemed to be provided by the savings and loan crisis of the 1980s and 1990s. More than 700 S&L associations failed, demonstrating once again the frailty of a system based on single-branch banks.

The passage of the Glass–Steagall Act took just over a year; its repeal arguably took twenty. Bankers Trust made the first inroad in 1978 by starting to sell commercial paper. Despite being sued for breach of the Act by the Securities Industry Association, it was eventually allowed to set up an affiliate that was permitted to generate up to 5 percent of its total revenues through underwriting. In 1988 the Federal Reserve Board gave bank affiliates permission to underwrite commercial paper, mortgage-backed securities, and municipal revenue bonds with a limit of 10 percent of total revenues. In 1990 this concession was extended to corporate bonds and shares. In 1995 an attempt at legislative repeal failed, but in 1996 the FRB expanded the acceptable level of securities business to 25 percent of total revenues. By 1999, when the Gramm–Leach–Bliley Act repealed the provisions of Glass–Steagall, the return of universal banking had become inevitable.

By 2008, the large US banks under the supervision of the Federal Reserve were all universal banks of one kind or another. Over the same period, former non-deposit-taking “broker-dealers” under the supervision of the Securities Exchange Commission (in particular Morgan Stanley, Goldman Sachs, Merrill Lynch, Bear Stearns, and Lehman) had expanded their balance sheets substantially to become sizeable lenders funded through the securitization of assets and the wholesale funding market. They were also among the weakest parts of the system, as demonstrated by the bail-out of Bear Stearns and the bankruptcy of Lehman in 2008.

The US debate in the past couple of years about the separation of commercial and investment banking has been less concerned with conflicts of interest than was the case in the 1930s. Nor has it regarded universal banking *per se* as a risk to financial stability, because all types of banks failed: pure investment banks, specialized retail banks, and universal banks. Rather, those who argued for separation were mainly concerned about the moral hazard that would arise if banks were able to fund themselves cheaply thanks to an implicit government guarantee and then use those deposits to invest in risky assets.

Germany carried a long tradition as a counterpoint to the United States which can be found, a country where universal banking has grown up organically and seldom been challenged. As in most other continental European countries – and most other parts of the world – large banks have traditionally been universal banks. When Friedrich Krupp wanted to build his first factory in 1811, he had to turn to his mother and siblings for a loan. However, by the 1840s German private banks were helping to finance business start-ups in exchange for board representation. In the 1850s they were joined by the first joint-stock banks, which were able to deploy the greater amounts of capital needed for railway investment. The German equivalent of America's Louis Brandeis was the Marxist economist Rudolf Hilferding, who published his *Das Finanzkapital* in 1910. He argued that the concentration of business into cartels through bank finance was the ultimate development of capitalism:

"As capital itself at the highest stage of its development becomes finance capital, so the magnate of capital, the finance capitalist, increasingly concentrates his control over the whole national capital by means of his domination of bank capital" (Rudolf Hilferding, Finance Capital, 1910, chapter 14).

This analysis led to calls for curbs on the power of banks in some quarters. From a socialist perspective, though, this was a moot point, since the "concentration of economic power in the hands of a few capitalist magnates" was regarded as the result of the fatal inherent contradictions of capitalism and perceived as leading naturally to the concentration of economic power under the dictatorship of the proletariat.

Break-up and restoration is also apparent on the arrival of the American occupation in 1945 brought a new perspective in Germany. Cartels were regarded with suspicion, and the closely linked German networks of companies and banks were viewed as the economic backbone of a pernicious nationalistic military machine that should be reformed along decentralized democratic lines. The three big Berlin banks were broken up into ten constituent parts, one for each of the new Länder in the federal republic. This drastic cutting down to size of the big banks along geographic lines may have explained why they were not legally required to give up universal banking. In Japan, by contrast, a version of the Glass-Steagall Act was imposed under the American occupation.

The advent of the Cold War soon necessitated the rebuilding of West Germany as an effective industrial power, while thoughts of re-modeling its economy on American lines receded. The ten subdivisions of the big banks were restored to three in 1952, and then in 1957 they were allowed to reconstitute themselves as

nationwide universal banks. Although not as dominant as they had been before 1914, they still retained the old practices of shareholdings and interlocking directorships. By the 1970s they were being criticized by left and right alike: the left because of excessive concentration of capitalist power, the right because of the inhibition of free-market competition. In 1975 the Social Democratic Party published a programme calling for the abolition of universal banking and greater government control of credit allocation. Meanwhile the right called for bank shareholdings in non-financial corporations to be limited to 5 percent.

The Gessler Commission was set up in 1974 to investigate the banking system in the light of such criticisms. After extensive delays it eventually produced its report in 1979, concluding that

"The universal banking system has proved its worth. . . . deficiencies of the current banking system are not sufficient to necessitate a change of system. . . . A transition to a system based on separation might be able to eliminate the kinds of conflict of interest which exist within the universal banking system. However, the major structural change of this nature would have such detrimental effects that it can ultimately not be justified" (Andreas Busch, Banking Regulation and Globalization, Oxford University Press, 2008, p. 110).

The only reform proposed was a limit on shareholdings in non-financial companies of 25 percent. A sceptical press suggested that the commission had been merely a stonewalling exercise – a suggestion seemingly supported by the fact that even its modest proposals were not put into effect. Discussions about the influence banks exerted on corporations through minority shareholdings and directorships continued through the 1980s and 1990s. By the late 1990s most banks had started to divest their corporate shareholdings and reduce their directorships, partly in response to pressure from their investors and partly so that they could boost their capital with the gains from divestitures. Today German banks no longer hold significant corporate shareholdings, and the number of their directorships continues to decline.

In the United Kingdom, The advent of limited-liability banking was followed by a wave of consolidation, so that by the early twentieth century Britain was dominated by a small number of nationwide banks. However, unlike their German counterparts, the large British banks confined themselves to commercial banking even though there was no law requiring them to do so. The likely explanation for this division of labour is that Britain had had plenty of time to develop efficient capital markets with specialist investment banks, so there was no need for commercial banks to get involved in securities activities. At the same time, because of the relatively late development of limited-liability banking, an

increasingly wealthy society was able to provide more than enough profitable business for retail banking. By comparison, Germany came much later to the Industrial Revolution and found it needed a lot of capital to catch up with Britain. Since its capital markets were undeveloped, it needed universal banks.

By the First World War, some qualms were emerging at the excessive concentration of banking in Britain, which now had the world's biggest banks. In 1918 the Colwyn Committee recommended that any further consolidation be avoided. However, the issue did not excite the passion aroused in America or Germany, most likely because the absence of universal banking meant that British banks had never exercised the control over industry that the American and German banks were accused of maintaining. Once it had consolidated into a system of big banks with nationwide branches, the British banking system became impressively stable. Moreover, its focus on short-term self-liquidating business loans allowed it to operate with leverage of 10:1 in 1913 (compared with 4:1 in the United States and 3:1 in Germany) without undue risk. Unlike their American and German counterparts, the British banks emerged from the crisis of the early 1930s virtually unscathed, a point that was not lost on American lawmakers.

Deregulation and expansion and the separation of investment and commercial banking in Britain had always been a matter of convention rather than law. During the 1960s and 1970s the clearing banks started to provide a wider variety of loans than before, moving into consumer finance, mortgages, and medium-term business loans. They also made their first steps into investment banking when Midland bought a 25 percent equity stake in Samuel Montagu and National Westminster set up a merchant-banking subsidiary. The rise of the Eurodollar market in London heralded the arrival of numerous foreign banks and introduced the practice of longer-term loans funded on a revolving basis. By the 1980s the biggest barrier to the creation of fully integrated banks was posed by the internal rules of the London Stock Exchange. These required members to operate as partnerships specializing either as brokers or as market makers, and prevented outsiders from owning a significant financial interest in member firms. It was the breaking down of these rules in response to a government investigation into restrictive practices and price fixing that opened the door to fully integrated universal banking. By the eve of what would become known as Big Bang on 27 October 1986, the four big clearing banks had positioned themselves to become fully integrated banks, and had between them invested close to £1 billion in securities businesses at a time when the capital of the average stockbroker or merchant bank could be measured in tens of millions. These figures were a

foretaste of the massively increased scale on which globalized universal banking was to operate in the coming years.

In the years up to the financial crisis of 2008, British banks enhanced their standing among banks internationally. Commercial banking was a highly profitable business in the UK, and from time to time it gave rise to concerns about the level of competition, especially in retail banking. HSBC and Standard Chartered Bank continued to expand internationally in line with their roots in emerging-market banking. Barclays successfully built an investment bank, and RBS became one of the largest banks in the world through a series of acquisitions and rapid expansion into leveraged lending to corporations and private equity firms. By the time of the financial crisis all of them had become universal banks, albeit with very different mixes of commercial and investment banking activities. While Barclays, HSBC, and Standard Chartered weathered the crisis without government support, RBS, Lloyds (largely as a result of its purchase of HBOS, and smaller banks relying on the securitization market for funding (most notably Northern Rock) needed substantial government funds and guarantees. The UK government had to inject billions in capital into the industry, and the Bank of England (and the European Central Bank) had to provide significant funding to a number of these banks to keep the industry afloat. The sheer size of the banks, and the resultant bail-out costs for the UK, raised real concerns.

Objective and structure of the paper

Keeping in mind the problem and discussion stated above about combining commercial and investment banking activities, the objective of the study is identified as what are the theoretical support for and against a separation of commercial and investment banking and how politicians dealt with the issue. For this purpose, we reviewed the academic literature concerning the separation of commercial and investment banking so that one can shed light upon whether regulators should separate these activities or not. Another purpose is to provide an overall picture of this problem area to the reader and hopefully be an aid to future research. *Section two* provides a detail review on the political economy of combining and separation of conventional banking and investment banking and regulatory development thereof in different parts of the World. *Section three* discusses on the economics of combining and separating conventional and investment banking from the practicing point of view. *Section four* provides an update on the state of regulatory aspects on security business by the commercial banks in Bangladesh. *Section five* presents the discussion and critical summary and *Section six* draws conclusion of the paper.

2. Arguments of Combining and Separating

To understand the complexity of separating commercial and investment banking, the literature review will start off with the first category being the historical background of the Glass-Steagall Act and its subsequent deregulatory period. Secondly, categories discussing the main arguments, for and against a separation, of our reviewed literature are presented and compiled in a critical manner. Thirdly, the category discussing the connection between the recent financial crisis and the combination of commercial and investment banking is assessed. Lastly, we briefly present the recent regulatory frameworks considering a separation of commercial and investment banking. Annexure is attached in this paper by categorizing them choosing and developed due to the high frequency of them being discussed. Category distribution provides an insight in how many articles discussing each category. the first category in this paper, the historical background, has been left out from this table since almost every paper in some context touch this area. The 75 number of papers reviewed are: Conflicts of Interest (30), Too Big to Fail & Moral Hazard (22), Diversification & Risk Impact (43), Recent Financial Crisis (22) and Recent Regulatory Reforms (14) .

2.1 The historical background of separation

The Great Depression was the hardest hit the modern economy has ever experienced. From December 1929 to December 1933 the number of American banks decreased by 39 percent from 24,633 to 15,015 according to the Federal Reserve Board (1943), and almost one quarter of the American work force was out of a job. The people eagerly demanded that something had to be done. When the Roosevelt administration took office in 1933, they introduced the New Deal Reform, consisting of several laws aimed at correcting a faulty financial system. The New Deal package included a law called the Glass-Steagall Act (GSA). The GSA is technically part of the Banking Act of 1933 and consists of the sections 16, 20, 21 and 32. The GSA prohibited any member of the Federal Reserve from purchasing, dealing in, or underwriting non-government securities for their own account, or affiliating with any corporation principally engaged in these activities (Cargill, 1988). It also prohibited investment banks from accepting demand deposits (Cargill, 1988). The separation of commercial and investment banking activities is often referred to as a Glass-Steagall separation since this was the first law that effectively separated these activities.

Following the stock market crash on "Black Thursday", October 24,1929, an investigation was opened to investigate its causes. Congressional hearings,

commonly referred to as the "Pecora Hearings" were held in 1932 (Calomiris, 2010). These hearings accused banks of actively trying to fool naive public investors into taking positions in poor issues. It has been argued that the Pecora Hearings ultimately had a great impact upon the enactment of the Glass-Steagall Act, which was directly designed to prevent conflicts of interest between commercial and investment banking during the 1920s (Calomiris, 2010 & Cargill, 1988). The Nobel Prize winner Paul Krugman (2010) recently argued that "the United States managed to avoid major financial crises for half a century after the Pecora hearings were held and Congress enacted major banking reforms. It was only after we forgot those lessons, and dismantled effective regulation, that our financial system went back to being dangerously unstable" (Krugman, 2010).

The GSA remained active from 1933 until 1999 but it was gradually weakened due to lobbying efforts from the commercial banking industry beginning in the 1970s (White, 2010). It was argued that the separation of commercial and investment banking activities weakened US banks relative to foreign rivals who were not constrained by those limitations (Calomiris, 2000). The Second Banking Directive of 1989 had allowed European banks to combine banking, insurance and other financial services within the same institution (even though many European countries had pursued universal banking prior to 1989), thus increasing global competition (De Jonghe, 2010). This provided the new head of the Federal Reserve in 1987, Alan Greenspan, with incentives to loosen regulatory limitations. Section 20 of the GSA allowed a bank holding company or its non-bank subsidiary to engage in non-banking activities including securities activities, as long as the Federal Reserve determined that the activities were "closely related to banking" (Barth et al., 2000a). From 1987 the interpretive freedom of this section made it possible for the Federal Reserve to allow bank holding companies to establish securities subsidiaries engaged in underwriting and dealing in several financial products. These subsidiaries were commonly referred to as "Section 20 subsidiaries." At first, the Federal Reserve limited the revenue allowed from the Section 20 subsidiary's securities underwriting to 5 percent of total revenue. This threshold was raised in 1989 to 10 percent and furthermore to 25 percent in the end of 1996 (Barth et al, 2000a). However, these revenue limitations made it found that the securities activities of commercial banks bore little responsibility for the banking crisis of the Great Depression. Securities underwritten by commercial banks performed better than those underwritten by investment banks, and diversified banks operating securities activities defaulted less often. Secondly, the experience from allowing US banks to undertake limited securities and insurance activities during the years before the GLBA proved successful. This,

along with the extensive experience from other developed countries such as Europe provided support for a repeal of Glass-Steagall. Lastly, the technological advances had reduced the cost of using data from one business to benefit another, together with increased cost-efficiency when providing insurance and securities products. Barth et al. (2000a) argue that these three factors added power to the case for the enactment of the GLBA.

2.2 Political and Self-interest Reasons for the Enactment of Glass-Steagall

Several academics such as Calomiris (2010) and Tabarrok (1998) argue that there may have been politically biased and self-interest incentives as to why the Glass-Steagall Act was enacted in the wake of The Great Depression. The question is whether the GSA would have been signed in to law if these reasons did not exist. During the Great Depression the Federal Reserve followed an economic theory called the real bills doctrine⁵. Calomiris (2010) argues that the real bills doctrine heavily worsened the Great Depression due to the Federal Reserve implementing a contractionary monetary policy and by not providing credit to the already illiquid securities markets⁶. According to Calomiris (2010), Senator Carter Glass was the premier supporter of the real bills doctrine and advocates for the real bills doctrine had incentives to separate commercial and investment banking since the real bills doctrine opposes banks being in the business of creating money through securities underwriting and "casino gambling" activities. In addition to the real bills doctrine argument, Calomiris (2010) states that Representative Henry Steagall was the leading representative of the interest of unit bankers in the US Congress.

According to Calomiris (2010) one of the most obvious flaws of the US banking system during the Great Depression was the problem of unit banking. He states: "the fragmented structure of the 'unit banking' system in the US was at the core of the systemic fragility of the system ...unit banking made banks less diversified, and thus more exposed to location-specific shocks" (Calomiris, 2010, p. 542). The lack of diversification in unit banks' loan portfolios thus reflected the operations of their local economy. In agricultural areas, the income for these banks was closely correlated to the changes in prices of one or two crops. Therefore, unit banking made banks less competitive, cost efficient and less profitable (Calomiris, 2010). Indeed, Benston (1994) states that all but ten of the 9,096 banks that fell during the Great Depression period of 1929-1933 were small unit banks. Representative Steagall therefore had clear incentives to support the separation of commercial and investment banking, and especially to pass the federal deposit insurance program. Both of these laws undermined large banks'

ability to outperform smaller unit banks that did not have the same possibilities to compete in the underwriting business.

The unit banking and real bills doctrine arguments show that Carter Glass and Henry Steagall, the enactors of the Glass-Steagall Act, may have had incentives for self-interest purposes such as maximizing the probability of being re-elected. Apart from these arguments, a study made by Tabarrok (1998) comprehensively covers a struggle between rival elements in the banking industry at that time. Tabarrok (1998) argues that the separation of commercial and investment banking can be better understood as an attempt by the Rockefeller banking group to raise the cost of their rivals, the House of Morgan. During the 1930s both of these banking conglomerates exercised enormous political and economic power, but it was the Rockefeller group that seized the moment of opportunity to gain even more market power. In the wake of the Great Depression the public also eagerly sought redemption and were happy when someone pushed for change. Calomiris (2010) therefore argues that the creation of regulatory frameworks in the period after a severe financial crisis may produce regulations that do not truly capture the real sources of the crisis.

Although these self-interest incentives are interesting, Ramirez and De Long (2001) state that it is hard to argue that the passage of Glass-Steagall was entirely a symbolic, "we are doing something", attempt by legislators to calm the public during the Great Depression. They conclude that both states with large manufacturing sectors and poor states, that were hit the hardest, voted in favor of Glass-Steagall. This happened despite a strong coalition of National banks who tried to prevent the act from being passed.

2.3 The Conflicts of Interest Argument

The reviewed literature has pointed out that one of the main arguments as to why commercial and investment banking should be separated is the concern that conflicts of interest may arise within an institution that provides both of these activities. Conflicts of interest can arise in various forms but the main issue is that the bank uses the informational advantage it gains from conducting both activities to its own advantage. The concern is thereby that banks may mislead customers and investors in various ways.

According to Kroszner and Rajan (1994), Kroszner (1998), Hebb and Fraser (2003), Stiglitz (2010a) and others, conflicts of interest may arise when a bank combines lending and deposit taking with underwriting. If a bank has outstanding loans to a corporation, and prior to public knowledge finds out that the firm is in

financial trouble, a bank may underwrite bonds on behalf of this firm and require the corporation to use the proceeds to repay the bank loan. This effectively shifts the increased default risk from the bank to the securities market and its investors (Hebb and Fraser, 2002). Thus, a universal bank may find itself in a situation where it actively tries to mislead naive public investors by issuing securities of bad quality.

As mentioned before, the GSA was directly designed to prevent conflicts of interest within financial institutions. During the Great Depression the general conception was that conflicts of interest existed and were severe enough to hurt public investors. However, Kroszner and Rajan (1994) argue that this general conception was driven by weak arguments and invalid evidence. In a study based upon data from the Great Depression era, Kroszner and Rajan (1994) investigated whether commercial bank underwritten issues performed differently compared to investment bank underwritten issues. They state that if commercial banks systematically misled naive public investors into investing in low-quality issues, these issues would have performed poorly. The results from Kroszner and Rajan's (1994) study, however, show that commercial bank underwritten issues defaulted significantly less often than comparable investment bank underwritten issues. Commercial bank underwritten issues also tended to be of higher quality and Kroszner and Rajan (1994) thereby conclude that commercial banks do not seem to have misled the public into investing in low-quality issues. By 1940, 28 percent of the investment bank underwritten bonds had defaulted compared to only 12 percent of the bonds underwritten by commercial banks. Several other academic studies, such as White (1986), Benston (1990), Ang and Richardson (1994), and Puri (1994), have reached the same conclusions. Studies based upon data from the Great Depression era thus seem to heavily reject the existence of conflicts of interest among commercial bank underwritten issues.

The main evidence supporting the enactment of the Glass-Steagall Act was the allegations of conflicts of interest put forward in the Pecora congressional hearings. The hearings leveled evidence against mainly two banks: The First National Bank and The Chase Bank (National/Chase) (Ang and Richardson, 1994). These banks were accused of actively trying to mislead the public into investing in low-quality issues. However, Ang and Richardson (1994), and Puri (1994) provide empirical evidence showing that these two banks were not a fair selection among commercial banks during the Great Depression. Ang and Richardson (1994) compared default rates of 1926-1930 issues from commercial banks, investment banks, and issues from National/Chase. Until 1939, when considering the number of defaults, National/Chase issues had a default rate of

51.8 percent compared to investment bank issues' default rate of 48.4 percent. The default rate of other commercial bank issues was, however, only at 39.8 percent. Furthermore, when considering total volume in defaults, National/Chase issues had a default rate of 45.6 percent, which was almost similar to the default rate of investment bank issues at 45.3 percent. Still, default rates for commercial banks were significantly lower at 34.3 percent. This clearly shows that National/Chase was not a fair representation of commercial banks' underwriting activities prior to the Great Depression and that National/Chase did not perform worse than investment banks. Ang and Richardson (1994) argue that the Pecora hearings may thereby have condemned an entire industry on the basis of two banks' performance and they, together with Puri (1994), supported critics of the GSA, and questioned whether such separation is justified when commercial banks in total performed so much better than investment banks.

During the 1920s, American commercial banks conducted securities underwriting either through an in-house department or through a separate affiliate (Kroszner and Rajan, 1997). Kroszner and Rajan (1997) provide empirical evidence showing that in-house departments underwrote higher quality (lower risk) issues compared to issues underwritten by affiliates. This means that in-house departments of commercial banks were more cautious when underwriting, and Kroszner and Rajan (1997) believe that this might be due to the public's conception of conflicts of interest. Furthermore, Kroszner and Rajan (1997) found that these higher quality issues were also sold at lower prices compared to affiliate underwritten issues. They state that this implies that investors actively discounted for the possibility of conflict of interest in in-house departments and that their results suggest that the market indeed was self-regulating and could handle conflict of interest problems on its own. Stiglitz (2010c), however, argues that one cannot rely on self-regulating banks since this eventually will generate deregulation.

The evidence and reasoning for conflicts of interest when combining commercial and investment banking has so far mainly been based upon data from the Great Depression era. However, Ber et al. (2001) among others stress the importance of contemporary evidence. The following section will therefore highlight the more recent findings concerning conflicts of interest.

Johnson and Marietta-Westberg (2009) provide anecdotal evidence showing that investment banks may feel pressured to hold initial public offerings (IPOs) issued by the same bank's underwriting division. They describe an event at Deutsche Bank in 2003 where an underwriting executive at Deutsche Bank phoned the chief investment officer at the bank's asset management division and asked him to buy

issues of the struggling media company Vivendi Universal, which Deutsche Bank had helped make public. The chief investment officer was told to be a team player. However, the request was refused causing a noisy dispute. Similarly, a bank's lending division may feel pressured to provide bank loans to a firm whose shares have been issued by the bank's underwriting division, even though these loans are unwise and risky.

According to Johnson and Marietta-Westberg (2009) there is clear potential for conflicts of interest within a bank that underwrites IPOs and simultaneously manages client funds. They provide empirical evidence based upon a six year sample from the US market that banks with both IPO underwriting and asset management divisions tend to use client funds to attract more future business to their underwriting divisions. These banks do this by holding more poorly performing IPOs compared to other institutions and thereby distort market conditions. Another study from Ber et al. (2001) comes to the same conclusion but their empirical evidence adds another dimension. Their study is based upon the Israeli universal banking system, and even though they provide evidence showing that the combination of bank lending and bank underwriting is not harmful and probably beneficial, they find that the combination of bank lending, underwriting, *and* asset management results in conflicts of interest: "...banks must choose between selling the IPO stocks of client firms at a high price, generating a substantial amount of cash in exchange for minimal dilution of ownership, and selling these stocks at a low price generating good returns for investors..." (Ber et al, 2001, p. 215) Their findings suggest that banks generally decide to favor client firms over fund investors by overpricing the IPOs. Ber et al. (2001) argue that these market price distortions clearly indicate the existence of conflicts of interest and show that banks may very well mislead investors into investing in poor (over-priced) issues.

A study that contrasts sharply with the American evidence is provided by Kang and Liu (2007). Their study examines the Japanese experience of universal banking. Japan had a Glass-Steagall- issues are lower, thus rejecting any conflicts of Interest problems and supporting the movement to universal banking. Apart from the Canadian evidence, Hebb and Fraser (2003) also investigated concerns of conflicts of interest in the United Kingdom. The UK had also separated commercial and investment banking through a Glass-Steagall-like law until 1986 when universal banking was allowed. Hebb and Fraser's (2003) UK study concludes that both ex-ante and ex-post performance of corporate bonds underwritten by commercial banks during the sample period of 1986-1997 did not differ from the returns of investment bank issues. The empirical results from Hebb

and Fraser (2002), Hebb and Fraser (2003) and Benzoni and Schenone (2009) are thereby consistent with the evidence based upon data from the Great Depression era provided by Ang and Richardson (1994), Benston (1990), Kroszner and Rajan (1994), Puri (1994), and White (1986), thus rejecting allegations of conflicts of interest.

2.4 The too Big to Fail and Moral Hazard Argument

One of the main concerns addressed by financial market regulators is that banks are increasingly becoming "too big to fail" (TBTF). The reviewed articles in this literature review indicate that a separation of commercial and investment banking would effectively hinder a TBTF doctrine, even though it will not eliminate it. Saunders and Walter (1994) argue that a bank becomes TBTF when its failure could create a severe credit freeze on the financial market, and since the bank is simply too large and too interconnected with other banks on the market, its failure can lead to market contagion where other banks may fall with it. This contagion could lead to longstanding and severe consequences for the whole economy. The cost of letting the bank fail may thus exceed the cost of saving it.

The problem of banks that are too big to fail also creates a moral hazard issue. Grant (2010) states that the safety net creates adverse incentives when a bank's balance sheet has been weakened by financial losses. If the bank knows that it will be saved due to it simply being too big to fail, it may have incentives to pursue excessive risk-taking to receive higher returns. This could over time potentially strengthen the bank's balance sheet and ease the difficulty, but it could on the other hand worsen the situation. Similarly, deposit insurance can push this excessive risk-taking even further since depositors will not rush to withdraw their funds even though the bank may be in a troubled situation. Stiglitz (2010c) argues that if the bank succeeds with these risky investments, the managers and shareholders take the profits, but if they fail, it is the government who picks up the pieces. "The major players are simply too large to fail, and they, and those who provide them credit, know it" (Stiglitz, 2010c, p. 46).

like separation of commercial and investment banking due to the American occupation of Japan following the World War II. Commercial banks were however finally allowed to provide investment banking services in 1993. From a sample period of 1995-1997 Kang and Liu (2007) found empirical evidence showing that commercial banks entering the securities business significantly discounted the price of corporate bonds that they underwrote to attract investors. This generates conflicts of interest that are harmful to issuers since these corporations received fewer proceeds than they should have. Moreover, prior lending relationships between the

bank and their clients were the main driving force for these conflicts of interest and competition from investment banks only partly limited these conflicts. Kang and Liu (2007) suggest that the US experience with universal banking cannot be justified for all countries due to different norms and traditions in countries' bank-firm relationships and how well-developed their capital markets are.

Bessler and Stanzel (2009) add an additional view to conflicts of interest within universal banks in Germany. Their empirical findings indicate conflicts of interest by showing that earnings forecasts and stock recommendations provided by an analyst working within the same institution as the lead-underwriter are on average inaccurate and positively biased. Unaffiliated analysts perform better and provide higher long-run value to their customers. Bessler and Stanzel (2009) state: "...stock recommendations of the analysts that are affiliated with the lead-underwriter are often too optimistic resulting in a significant long-run underperformance for the investor." (Bessler and Stanzel, 2009, p. 757) This is strong evidence showing that universal banks (at least in Germany) to some extent can mislead naive public investors by providing biased recommendations.

In contrast, Benzoni and Schenone (2009) provide empirical evidence based upon a three year sample from the USA rejecting the conflicts of interest argument. They state that commercial banks underwriting IPOs for existing clients avoid conflicts of interest by only choosing to underwrite their best clients' IPOs. These relationship banks thereby exploit their informational advantage in another way and underwrite higher quality issues that are more accurately priced for investors.

In addition to Benzoni and Schenone's (2009) article examining the US experience of commercial bank's securities underwriting, Hebb and Fraser (2002) examined the experiences from Canada who in 1987 implemented a law similar to the Gramm-Leach-Bliley Act, and thereby allowing universal banking. From a sample period of 1987-1997, Hebb and Fraser's (2002) empirical findings shows that ex-ante bond yields of commercial bank underwritten

Wieandt and Moenninghoff (2011) argue that TBTF banks are not a new phenomenon. They take the American rescues of Continental in 1984, First Republic in 1988, and the rescue of the hedge fund LTCM in 1998 as evidence of a TBTF doctrine in the USA prior to the recent financial crisis. The TBTF doctrine has according to Wieandt and Moenninghoff (2011) also been illustrated globally in countries such as Norway, Finland, Sweden and Japan where governments have laid out significant amounts of taxpayer money to troubled banks. At the day of the Glass-Steagall repeal Senator Reed, a proponent of the GLBA, highlighted the TBTF issue in the United States Congress:

"As we celebrate passage today, we should also underscore and point out areas that bear close watching. Fundamental changes as we are proposing today include consequences which may have adverse effects if they are not anticipated and watched carefully. Among those is the issue of the consolidation of our financial services industry. We are witnessing the megamergers that are transforming our financial services industry from small multiple providers to large providers that are very few in number. We run the risk of the doctrine "too big to fail;" that the financial institutions will become so large we will have to save them even if they are unwise and foolish in their policies. We have seen this before. We have to be very careful about this." - Senator Reed (1999), p. 28334.

Even though there were people addressing the importance of being careful about letting banks become TBTF, Wieandt and Moenninghoff (2011) state that there were several indicators pointing to the fact that banks grew significantly larger and more complex prior to the recent crisis. They highlight that in the decade leading up to the recent crisis the financial sector grew faster than GDP in all major Western economies. Additionally, between the years 2002 to 2007 financial institutions' leverage in the United States grew by 32 percent and in the United Kingdom by 27 percent, even though it remained almost unchanged in other Western economies (Wieandt and Moenninghoff, 2011). This increase in leverage and thereby risk did, however, not lead to any notable action trying to prevent a crisis.

Wieandt and Moenninghoff (2011) take the failure of the investment bank Lehman Brothers as an appearance of TBTF in the recent financial crisis. The collapse of Lehman Brothers sent contagious Shockwaves throughout the global financial system, effectively proving that there indeed exists a TBTF doctrine. The market could not absorb the losses on its own. Since Lehman Brothers was not saved, Wieandt and Moenninghoff (2011) argue that market participants understood that other large investment banks would not be either. This caused a loss of confidence among banks and created a credit and liquidity freeze, causing asset prices to decline.

Interestingly, the TBTF issue seems to have grown even further after the recent crisis. Stiglitz (2010b) claims that both the Bush and Obama administrations have allowed collapsed banks to be taken over by bigger banks, in turn creating even larger TBTF banks. Grant (2010) states that the USA a few years ago only had 11 banks that regulators considered to be too big to fail but the list has now grown to 21 banks. Furthermore, Grant (2010) argues that one thing we should learn from the recent financial crisis is that organizations can grow too big to manage. He takes the Citigroup merger⁷ between Citicorp and Travelers Group as an example

of a bank that became both too big to fail and too big to manage. Grant states that a bank with too many businesses strays far off path in fulfilling its primary mission - banking. Even though Stiglitz (2010b) argues that the TBTF problem is one of the main systemic issues of today's financial system, he also recognizes the problem of having a large number of small banks since this can also give rise to systemic risk. It is therefore important to have neither a system dominated by many small banks nor a system dominated by too large banks. The government and its regulators therefore have an important agenda to set the rules for the system.

2.5 Power Concentration

The TBTF problem also causes further issues such as power distortions. Herring and Santomero (1990) identifies monopoly power as a concern when large financial conglomerates are allowed to offer a full range of financial products. The concern is that these conglomerates may be able to acquire and exercise monopoly power and create barriers to entry. Herring and Santomero (1990) do however reject this concern due to the increase of international competition across borders and technological development. In contrast to these conclusions, Johnson and Marietta-Westberg (2009) provides American empirical evidence showing that institutions with both underwriting and asset management divisions tend to use their informational advantage to earn annualized market-adjusted returns at 7.7% more than their competitors that did not underwrite the IPOs. This is especially notable when there is little information available about the company that has been underwritten, and when the underwriter/asset manager belongs to a high reputation rank institution. Large financial conglomerates are thereby more likely to outperform smaller and specialized institutions, and become more powerful by establishing barriers to entry. This may however also generate positive effects; Bessler and Stanzel (2009) argue that this informational advantage may produce underwriting that performs better and thereby lowers the risk of defaults among universal bank underwritten securities. The question is if these benefits outweigh the concern of banks being too big to fail and gaining too much market power.

A concern identified by Herring and Santomero (1990) is that universal banks may exploit their access to the safety net by using cross-subsidization. Large universal banks are generally more likely to receive official assistance when facing financial problems, compared to small banks. Thus, it is natural to have a concern that these banks may use their position to raise funds cheaply in their more traditional banking departments and then transfer (cross-subsidies) these funds to their more risky activities to generate more profits. This would in turn

distort market competition and undermine the possibility to compete on equal terms for other financial institutions that do not have access to the safety net. Herring and Santomero (1990) address this concern as highly viable but also present ways to control this problem. They suggest that it is possible to employ cross-subsidy rules to generate financial separateness (similar to firewalls) between banking departments so that basic banking functions are protected from other activities. Regulators may also increase the cost for these banks by requiring risk-based deposit insurance or risk-based capital requirements to offset the subsidy.

Herring and Santomero (1990) also identify the concern that large financial conglomerates can gain too much economic and political power, and thereby distort political decisions. Concerns raised are, according to Herring and Santomero, most common in Germany where large universal banks are present. They do, however, state that they are seldom expressed in Switzerland where the presence of large universal banks is also common. These concerns were, however, according to Herring and Santomero (1990), surprisingly common in Japan (due to the financial power of *keiretsus*), even though commercial and investment banking were rigorously separated in Japan until 1993. Previous to the enactment of the GLBA, there were also many American concerns raised about the political and economic power of money center banks and Wall Street (Herring and Santomero, 1990). Herring and Santomero (1990) also conclude that they do not regard this concern as a significant argument against combining commercial and investment banking. However, Grant (2010) argues strongly in his article that the concentration of financial resources may distort financial transparency and increase the complexity of the industry. He also expresses concern about a cluttered market where financial products are sold by untrained professionals. Furthermore, Esen (2001) states that Germany experienced a series of corporate failures involving large German banks at the end of the 1990s. At that time universal banks in Germany held powerful positions with extensive voting majorities within Germany's largest corporations. The financial power that German universal banks possessed had, according to Esen (2001), huge consequences upon how firms were run and how they operated. This shows that combining commercial and investment banking by utilizing a universal banking system may very well provide problems of power concentration.

2.6 The Diversification Argument

The literature examined has outlined diversification as the main argument as to why universal banking should be allowed. It is argued that the benefits from diversification would strengthen the financial industry and make banks more

competitive and less likely to fail. Wieandt and Moenninghoff (2011) argue that large diversified global banks offering a broad range of services can contribute to economic growth. They state that these banks contribute to more efficient stock, bond and foreign exchange markets while at the same time they realize economies of scope. Universal banks can thereby share infrastructure, know-how and information, and thus reduce costs in areas such as IT, back-office and regulatory requirements (Wieandt and Moenninghoff, 2011). Furthermore, Barth et al. (2000a) argue that diversified universal banks can pass along lower prices and offer more products and services to their customer. A benefit that comes from this is, according to Neale et al. (2010), the benefit of one-stop shopping. However, several academics such as Cairns et al. (2002), Herring & Santomero (1990), state that corporations and customers do not want a one-stop shop for banking. Instead, they will pick the 'best of breed' in each product category and choose specialists that can customize the product to the individual's preferences. Moreover, universal banks may according to Barth et al. (2000a) be less affected when firms bypass banks and raise funds directly in the capital markets through corporate bonds; the decline in lending activities may be offset by an increase in securities activities. Additionally, Wieandt and Moenninghoff (2011) argue that large diversified global banks can contribute to the stability of the financial system by supporting an effective resolution of failing institutions. The financial sector can take over troubled institutions as illustrated by JPMorgan's acquisition of Bear Sterns, and thereby government support can also be reduced (one should, however, keep in mind that JPMorgan's acquisition of Bear Sterns was heavily sponsored by the American Government). Arguments like these are, according to Wieandt and Moenninghoff (2011), important to keep in mind when discussing regulation since large diversified global banks perform various functions benefiting the global economy. However, the question is how large the benefits from increased diversification are, and if they are accompanied by increased risk-taking.

As illustrated in the conflicts of interest section, a separation between commercial and investment banking is heavily opposed by several academics since issues underwritten by commercial banks performed significantly better than investment bank underwritten issues. Because the GSA does not want banks to diversify into investment banking activities, one would assume that commercial banks that diversified into investment banking activities during the Great Depression era would default more often than traditional non-diversified banks. However, White (1986) provides evidence showing that commercial banks that diversified into investment banking activities had significantly lower default rates compared to non-diversified commercial banks. According to White's (1986) study, 26.3

percent of all US national banks failed during that period, compared to only 6.5 percent of commercial banks with a securities affiliate, and 7.6 percent of commercial banks with a bond department. These results can however, according to White (1986), be explained by the tendency of the typical commercial bank involved in investment banking to be far larger than average, thus making it possible to take advantage of diversification benefits. Even though the Pecora hearings may have exploited some problems, White (1986) concludes that the Great Depression was not caused by the involvement of commercial banks in the securities business.

Moreover, Ramirez (1999) provides empirical findings suggesting that the enactment of the GSA led to increased cost of financing for corporations in the US and thus limited the potential of economic growth. Ramirez (1999) states that the GSA led to a substantial reduction of bank involvement in corporate decision-making, followed by an increase in liquidity constraints for corporations. However, Ramirez and De Long (2001) argue that it is hard to prove that the passage of the GSA had significant costs in terms of slowing down the US economy. They also state that "perhaps the web of financial intermediation channeled funds elsewhere, so that the net flow of capital for industrial investment was undisturbed." (Ramirez and De Long, 2001, p. 111).

Similar to the American repeal of the GSA in 1999, Canada made the same move to universal banking in 1987. Ursel (2000) provide empirical evidence from Canada suggesting that corporate issue costs were lower if corporations used a bank-owned underwriter, compared to an independent (investment-bank) underwriter. These findings suggest that economies of scope provide diversification benefits when combining commercial and investment banking. In addition to this, by studying more than 60 countries' banking systems, Barth et al. (2000b) find that tighter restrictions upon banks' securities activities and corporate ownership will lead to more inefficient banks and increase the likelihood of a banking crisis. However, Rime and Stroh (2003) analyzed the performance of universal banks in Switzerland and concluded that all types of Swiss universal banks have large cost and profit inefficiencies. Thereby, these banks do not appear to benefit from broader product mixes, and Rime and Stroh's (2003) study provides evidence showing that diversification does not always result in benefits; more products may just as easily lead to higher costs and a more complex organization structure. A study from Berger and Humphrey (1991) also shows that inefficiencies among US banks are often operational, involving overuse of labor and physical capital, rather than financial. Moreover, Benston (1994) argues that economies of scope within universal banks are not

overwhelming. He takes the universal banking experiences from Germany as an example; even though German financial institutions may offer all kinds of financial services, universal banks do not totally dominate the market. Therefore, diversification and economies of scope and scale do not automatically lead to more efficient banks. Indeed, a literature study covering 130 empirical studies from 21 countries made by Berger and Humphrey (1997) finds that there is no predominance of evidence either for or against economies of scale in the financial sector. Their failure to find consistent evidence therefore shows that diversification benefits among banks may be trivial.

3. The Regulatory Developments and Reforms

This section will address recent regulatory reforms that consider a separation of commercial and investment banking. Even though politicians have discussed the problem of unified banking activities in several countries, it is only the US and the UK who have actually taken action towards such a regulation. Switzerland discussed a ban on investment banking activities, mainly due to the massive \$2.3 billion loss at the huge Swiss bank UBS in 2011, however, the Swiss parliament narrowly voted against this Glass-Steagall-like suggestion in 2011 (Thomasson and Taylor, 2011). In addition to regulations concerning unified banking activities, there have been a few changes at the European level. Tropeano (2011) names the creation of three new regulatory bodies: The European Banking Authority, The European Securities and Markets Authority, and the European Insurance and Occupational Pensions Authority. He also outlines EMIR, European Market Infrastructure Regulation, and Basel III as the main regulatory reforms that Europe has put forward after the recent financial crisis. However, none of the above stated laws considers a separation of commercial and investment banking, and we will therefore not elaborate on them further. Obviously, European financial market regulators and politicians have mainly taken another view compared to that of separating commercial and investment banking. They seem to have taken the view of Norton (2010), who concludes that a re-introduction of Glass-Steagall would appear to be unnecessary due to the high level of sophistication of today's institutional investors. Furthermore, he states that Glass-Steagall was an appropriate law for a unit-based, state-based banking system, which prohibited national banking, but in today's context of global banking it would be "peculiarly inappropriate and restrictive".

To address one of the primary causes of the recent financial crisis, namely the politically motivated government subsidization of mortgage risk in the financial system. Neither does it address the worst performing shadow banks of Fannie

May and Freddie Mac, who, according to Acharya et al. (2011a), were at the center of the crisis. Acharya, et al. (2011a) state that the Dodd-Frank Act "...would have done little to prevent the enormous lending bubble specific to subprime mortgages in the United States." (Acharya et al., 2011a, p. 53). Additionally, it is argued by Acharya et al. (2011b) that restrictions such as the modified Volcker rule will provide a competitive disadvantage for American banks compared to their foreign competitors and in turn increase offshore banking. They conclude that international cooperation is needed when enacting restrictions such as the Volcker rule to prevent banks circumventing the restrictions.

Calomiris (2010) argues that the time after severe financial crises puts political pressure upon regulators, making them commit to politically faulty regulations just because the public want something to be done. He argues that not enough time and effort are sacrificed to ensure that safe and sound regulations are put into practice that actually correct the fundamental problems; instead theories of influential people dominate the reforms. The Volcker rule and restrictions that apply to one set of financial institutions could, according to Kroszner and Strahan (2011), also actually increase interconnectedness, reduce stability and make the market less transparent. They argue that restrictions such as these will just move the problem to other institutions and that this in turn would provide incentives for shadow banking and regulatory arbitrage. Kroszner and Strahan (2011) concludes that the new regulatory framework should not try to turn back the clock, but try to improve the stability of the modern interconnected financial system by minimizing regulatory arbitrage and increasing transparency. A reenactment of Glass-Steagall thus seems far away, even though some restrictions have been revived in the form of the modified Volcker Rule.

3.1 The Vickers Report

In the summer of 2010, the Independent Commission on Banking, chaired by Sir John Vickers was created to consider reforms to the UK banking sector. Their goal was to promote financial stability and competition, and to make recommendations to the UK government (ICB, 2011b). The final report was released in September 2011 and has been commonly referred to as the Vickers Report. It tries to ensure a new structure that will make it less costly and easier to resolve future banking crises. The Vickers Report advocates a so-called "ring-fencing" of a bank's retail business from its wholesale business (Chambers, 2011). The report defines retail banking as "provisions of deposit-taking, payment and lending services to individuals and SMEs" (ICB, 2011a). In contrast, wholesale banking typically serves "large corporate customers, other financial institutions and governments

providing a range of services including arranging financing, trading, advising and underwriting" (ICB, 2011a). This ring fencing therefore aims to separate retail and wholesale banking activities, which bears a resemblance to the separation of commercial and investment banking. The report wants to ensure separate legal, economic and operational standards for both activities and to make sure that the bank treats the retail business as a third party and a separate entity (Chambers-Jones, 2011). Both businesses can however be owned by the same company (Chambers-Jones, 2011). This regulatory change would increase investment banks' cost of borrowing to a total cost of £7bn for banks in the UK, equating to about 0.1 percent of their assets (BBC News, 2011). Apart from the ring-fencing, retail banks should have a primary loss absorbing capacity of at least 17 percent and equity capital should be at least 10 percent of risk weighted assets (Chambers-Jones, 2011). The Vickers Report therefore goes considerably further than the capital adequacy requirements of Basel III.

Chambers-Jones (2011) states that the Vickers Report has been criticized for not going far enough, but that a reform is essential and that it does take steps in the right direction towards a safer and more effective system. However, Ghosh and Patnaik (2012) argue that the key recommendation of the Vickers Report, i.e. to ring-fence the retail business from the wholesale business, goes only mid-way in securing the objectives of stability and safety that the Report set out to achieve. In contrast to this, Kroszner and Strahan (2011) argue that Glass-Steagall-like restrictions such as those that the Vickers Report proposes could increase, not decrease, financial fragility through the creation of market incentives for regulatory arbitrage. Indeed, Cargill (1988) claims that given the ability of the financial system to circumvent regulations that limits profit, it is not likely that regulatory firewalls will be effective, unless they are very thick. This raises problems such as, if the firewall is too thick, the benefits of combining commercial and investment banking will not be realized, and if the firewall is too thin, the increased risk may outweigh the benefits. Cargill (1988) continues by stating "the basic problem with the firewall concept, for example, is that it focuses on limiting the opportunities for risk-taking rather than addressing the incentives for risk-taking".

"Whatever regulatory system we devise, there will be those who will try to find weaknesses and exploit those weaknesses for their own gain, even if it imposes costs on others—and those in the financial markets will continue to use their financial clout to induce the political processes to make "reforms" (as arguably they did in the repeal of Glass-Steagall) that enhance their profits, at the expense of the well-being of society more generally." - Stiglitz (2010c)

3.2 The Dodd-Frank Act and the Modified Volcker Rule

The United States Congress voted the Dodd-Frank Wall Street Reform and Consumer Protection Act into law on July 21, 2010 (Tropeano, 2011). The reform introduced several structural changes for the US financial markets. This thesis will however only put emphasis on the part of the Dodd-Frank Act that discusses the separation of commercial and investment banking. This part is referred to as the modified Volcker rule, named after the previous Federal Reserve chairman Paul A. Volcker.

The original Volcker rule put forward by the Obama administration would have prohibited banks from conducting private equity, hedge fund, or proprietary trading businesses, and thereby effectively separating these activities from commercial banks (Tropeano, 2011). In its original form, the Volcker rule would have reenacted many Glass-Steagall-like prohibitions. However, due to harsh political pressure the Volcker rule was eventually signed into law in a weakened form. The approved law limits commercial banks' private equity and hedge fund business activities up to 3 percent of total assets while still prohibiting "proprietary trading"⁹(Tropeano, 2011). This "proprietary trading" is, however, hard to define and Tatom (2011), among others, argues that it will be hard to eliminate since this trading is usually conducted in many different sectors of the same bank. Thus, it is not possible to simply flip the switch of a department to stop the proprietary trading; the whole bank would need to be overhauled. Acharya et al. (2011b) argue that the definition of proprietary trading creates gray areas, which invites manipulation: "What is to prevent a bank from accumulating a large exposure in a given security or derivative in expectation of an eventual customer demand for the asset?" (Acharya et al., 2011b, p. 201). These gray areas make it very difficult for regulators to know what is proprietary trading and customer driven trading. Additionally, the Volcker rule will not limit bank holding companies merchant banking activities.

4. Economics of Combining and Separating Conventional and Investment Banking

An analysis of the effects associated with commercial banks' expansion into the securities business, particularly the underwriting of corporate securities, should consider why commercial banks exist in the first place. Traditional literature focused on banks' provision of payment and portfolio services. In contrast, contemporary theory of financial intermediation emphasizes banks' role as providers of liquidity and as delegated monitors in environments characterized by

asymmetries of information among participating agents. Within the framework adopted in the modern literature, it is usually conjectured that commercial banks' main gains from expansion into the securities business result from their information advantages and from economies of scope.

4.1 Information advantages

Firms generally have information about their creditworthiness and about relevant features of their investment projects that is not readily available to outsiders.⁸ Some firms can reduce the information gap by contracting with an independent agent (a rating agency) that conveys the relevant information to outsiders and at the same time certifies its quality [(Holthausen and Leftwich (1986), Stickel (1986) and Hand, Holthausen and Leftwich (1992)]. Rating agencies have an incentive to provide accurate information in order to maintain their reputation, while firms are willing to incur the costs of that process because it gives them access to capital markets and so saves them the costs of contracting with a bank. Other firms, however, are not able to reduce the information gap by making use of rating agencies. The production of information about these firms may be too costly or it may require a continuous and extensive relationship with them. Under these circumstances, important savings can be achieved by delegating certain functions to financial intermediaries. The costs of financial intermediation are reduced by avoiding the duplication of functions such as gathering the relevant information about the borrower [Diamond (1984) and Ramakrishnan and Thakor (1984), James (1987), Mikkelson and Partch (1986), Lummer and McConnell (1989), Slovin, Johnson and Glascock (1992), Best and Zhang (1993), Diamond (1991), Best and Zhang (1993)].

In establishing a relationship with a firm, the bank incurs the costs of gathering information about the firm and its investment opportunity before making the funding decision. Once this decision is made, a new stage of the bank-firm relationship begins; the bank starts monitoring the firm, making sure that it observes the conditions of the funding contract and, at the same time, gathering further information about the firm. As a result, bank financing tends to be more expensive than public financing, thus explaining why firms tend to avoid the former type of funding. Moreover, some firms may also avoid bank funding to avert the additional scrutiny that usually comes with it. Because of this, firms with a higher reputation (usually larger firms) tend to raise funding directly in capital markets, while smaller and younger firms tend to rely on banks [Diamond (1991), Rajan (1992), Fulghieri (1994) Yosha (1995)].

Within that set-up, it is usually conjectured that universal banks have some advantages over specialized ones. By offering a broader set of financial products than a specialized bank, a universal bank can develop "wider" and longer-term relationships with firms. This enhancement of the bank-firm relationship may be a source of important gains to both parties. A "wider" bank-firm relationship may be a source of scope economies. It allows the bank to learn more about a firm by observing its behavior with respect to more financial instruments and it gives the bank the opportunity to use the information it collects by monitoring a firm's checking account in various businesses rather than just in lending decisions.¹² Furthermore, by offering a larger number of services, a universal bank has more instruments to consider in the design of financing contracts and more leverage over firms' managerial discretion, thus reducing agency costs. The empirical research on these scope economies is still very limited, but the results already unveiled are consistent with the existence of advantages in a "wider" bank-firm relationship. Petersen and Rajan (1994), for example, find that the larger the number of services a bank provides to a firm the greater the availability of funding.

The duration of the bank-firm relationship is also important (Boot and Thakor, 1994). If both the bank and the firm expect to do business for a long time, then the bank is more willing to invest in gathering information about that firm and to spread the costs of such investment over a longer time horizon, reducing the up-front cost of capital to the firm. The information available about a firm, its financial needs and its reputation change over its life cycle. As a result, a firm's ability to raise funding through the various financial instruments available and its ability to access the different providers of funding also changes over its life cycle [(Myers (1984), Hubbard (1997))] In the early stages of their existence, because they are unknown, firms tend to rely heavily on retained earnings and on funding provided by their founders. After a successful beginning, firms start raising most of their funding from banks, usually through loans. At this stage, they are highly dependent on banks' investment in information and on their monitoring services. As firms mature and develop a reputation they often divert to capital markets to raise funding, in many cases by issuing bonds initially and only some time later by issuing stock. During this transition some firms raise funding from venture capitalists, in some cases by selling them a participation in their capital. This reduces firms' leverage and the presence of a reputable intermediary as one of the firm's shareholders provides a positive signal to outside investors. In an evolution like that, unlike a specialized bank, a universal bank can fulfill a firm's funding needs throughout its existence. This fosters a long term relationship that can be beneficial to both parties.

The bank is willing to enter into a long-term implicit contract only if it expects to do business with the firm for a prolonged period. To the extent that part of the information generated in the bank-firm relationship is private to the bank and not easily transferable by the firm to other parties, the firm will incur some costs if it decides to switch banks. These costs have a positive effect, in that they lend credibility to the implicit bank-firm contract. Because of this, the bank can make funding available on better conditions to firms in the early stages of their life cycle. But the switching costs also have a negative effect. They permit the bank to extract (ex post) "quasi-rents" associated with its information advantage even when ex ante rents had been competed away by the competition from the other banks. This gives firms an incentive to rely more on internal funds in order to avoid becoming too dependent on a bank in the first place [(Greenbaum, Kanatas and Venezia (1989), Sharpe (1990) and Rajan (1992)].

The critical issue regarding the switching costs arising in a bank-firm relationship, however, is how these costs compare when the relationship is in a universal banking system as opposed to a specialized banking system, and how the "quasi-rents" associated with them are extracted in each system. On the one hand, it is frequently argued that switching costs are larger in a universal banking system, thus giving banks an opportunity to extract more "quasi-rents". Two reasons are put forward to explain that difference. The first is the pre-emptive behaviour that a universal bank can adopt to deter other banks from competing for its client's businesses. Because of its better information, the bank can anticipate the firm's funding needs and so can prepare some of the necessary work in advance to gain an advantage over potential competitors.

The second is a new "lemons" problem that can arise when a firm leaves a universal bank. In a specialized banking system, when a firm switches from a commercial bank to an investment bank for the purpose of issuing in the market, no special meaning can be attached to this move except that the firm is interested in raising funds through a different channel. The investment bank knows that the firm's bank is not allowed to underwrite its securities. In a universal banking system, however, when the firm switches to an investment bank, this bank will wonder why the firm's bank does not provide the underwriting service. This doubt may create a "lemons" premium, thus raising the firm's switching costs.

On the other hand, it is also commonly argued that a universal banking system allows for a smoother extraction of the "quasi-rents". Because it creates the conditions for a long-term bank-firm relationship, a universal banking system enables the bank to extract such rents over a longer time horizon. As a result, financing costs in the early stages of the relationship may be lower than in a

specialised banking system, where banks might need to extract the rents over a shorter time period (Calomiris (1995)).

Empirical research on bank-firm relationships finds evidence supporting the claim that these relationships are valuable. For example, Berger and Udell (1995) find that borrowers with longer banking relationships obtain better financing conditions in terms of both collateral and interest rates. Petersen and Rajan (1994) fail to find a positive association between the duration of the relationship and the interest rate charged, but they do find a positive impact on credit availability. In sum, there seem to be important information advantages associated with a universal banking system. That system allows for an enhancement of the bank-firm relationship because it permits additional points of contact between the parties and because it gives them the possibility of developing a long-term relationship. Empirical research on these issues is still in its early stages. However, the results already unveiled seem to confirm that the enhancement of a bank-firm relationship is a source of important benefits in terms of cost and availability of funding.

4.2 Economies of scope

Economies of scope are pivotal to the efficiency of financial conglomerates in general and universal banks in particular. They may arise both from the production of financial services and from their consumption. Regarding production, economies of scope are said to exist when the cost of one organization producing a given mix of products is less than the cost of several specialized firms producing the same bundle of products. Baumol, Panzar and Willig (1981) suggest that economies of scope in production arise when there are inputs that are shared or used jointly.

In the previous section, we saw how universal banks may benefit from the economies of scope in information gathering. Universal banks may also benefit from the conventional technological economies of scope because, first, they can spread the fixed cost (in terms of physical and human capital) of managing a client relationship over a wider set of products (Steinherr and Huveneers (1990)). Second, they can use their branch networks and all their other existing delivery channels to distribute additional products at low marginal cost (Llewellyn (1996)). Third, they can face the shifts in demand for the products they offer (some of the products offered by financial institutions are, to a certain extent, close substitutes) more easily because they can respond by shifting resources within their organisations. Finally, to the extent that it is easier to gain reputation in some businesses than in others, and to the extent that there are spillovers in

reputation, universal banks can use the reputation gained in offering one service to recommend their other services (Rajan (1996), Beatty and Ritter (1986) and Carter and Manaster (1990), Slovin, Sushka and Hudson (1990), Billet, Flannery and Garfinkel (1995)).

Economies of scope may also arise from the consumption of financial services. Consumers may save on searching and monitoring costs by purchasing a bundle of financial services from a single provider instead of acquiring them separately from different providers. Thus, from a theoretical point of view, there appear to exist various sources of technological economies of scope associated with the combination of commercial banking with investment banking activities. The debate on the importance of these economies, however, has not been settled. On one hand, the evidence found so far is mixed. Research on U.S. banks finds little support for economies of scope in the joint production of commercial and investment banking services. It is important to note, though, that at the time this research was developed commercial banking organizations were allowed to offer only limited investment banking services and these had to be housed in a subsidiary of a bank holding company (BHC) separated from the banks in that holding company by an extensive set of firewalls [Mote and Kaufman (1989), GAO (1995)]. Research on banks in Japan, Israel and some European countries, such as Belgium, France and Italy, finds stronger evidence of scope economies in the joint production of these services [Clark (1988), Mudur (1992) and Forestieri (1993)].

On the other hand, the data and method that the empirical research on scope economies has generally used has been questioned. The traditional literature focused mainly on deposits and loans in samples of small banks. More recent studies have expanded that literature to include large banks, information issues and larger sets of financial products, but their conclusions continue to be questioned (Berger, Hunter and Timme, (1993)). Some researchers note the limitations and instability of the most popular method of accounting for scope economies – the estimation of cost economies through the translog cost function or its Box-Cox variants (Pulley and Humphrey (1993)). Others raise concerns about the quality of the data used, particularly the lack of micro data. Still others question the research on economies of scope because it does not take regime-change effects into account. Calomiris (1995), for instance, argues that the impact on banks' current profits and costs of combining different activities is not the correct way to estimate the scope economies that would result if the United States were to move to a universal banking system. The reason is that this procedure does not account for the fact that banks would change their policies with that

change in the banking system. Finally, some researchers claim that the results reported in the literature are not representative of a universal banking system's potential economies of scope because they ignore the possible economies on the consumption side. Berger, Humphrey and Pulley (1996), however, find that economies of scope in the consumption of bank deposits and loans are insignificant in the United States. In conclusion, from a theoretical viewpoint there is a significant consensus that potentially important economies of scope are associated with universal banking. However, the empirical research thus far has not been able to generate the same consensus, partly because of its mixed results and partly because of problems with the approach it has adopted.

4.3 Potential costs of universal banking

The most frequent arguments for maintaining the separation between commercial banking and the securities business are that combining these activities would create serious conflicts of interest and would threaten the safety and soundness of the banking system. These arguments have a historical precedent: they were the main reasons invoked by the U.S. Congress for enacting the Glass-Steagall Act in 1933. The investigation conducted by the Senate Banking and Currency Committee following the bank failures that occurred after the stock market crash of 1929 was highly influential in shaping public opinion at the time and in facilitating the enactment of the Glass-Steagall Act. Among other things, the Committee claimed that banks had been exploiting the conflicts of interest inherent in their securities dealings and that the securities activities were a major cause of the bank failures.

Recent research on banks' securities activities prior to Glass-Steagall, however, finds no evidence for the claims of widespread abuse and failures due to these activities. Instead, this research concludes that some of the allegations made at the time regarding conflicts of interest were either unfounded or greatly exaggerated, and that banks engaged in securities activities had no higher risk of failing than banks with no links to the securities industry [(Carosso (1970), Kelly (1985a) and Benston (1990)]. After the enactment of Glass-Steagall, alleged conflicts of interest and threats to banks' stability continued to be evoked in defence of the separation between commercial banking and the securities industry. For example, a 1971 report by the President's Commission on Financial Structure and Regulation states that "this separation was prompted by the conflicts of interest that developed when the same organisation handled the two functions. The possibility of conflicts of interest would still exist if banks were again permitted to underwrite new issues of corporate securities. The Commission, therefore,

strongly recommends the continued prohibition against bank underwriting of private securities issues." (Report of the President's Commission on Financial Structure and Regulation, December 1971, p. 52).

4.4 Conflicts of interest

Edwards (1979, p. 282) defines conflicts of interest as follows: "A conflict of interest exists whenever one is serving two or more interests and can put one person in a better position at the expense of another." Bröker (1989, p. 228) states that "a conflict of interest arises for a bank ... dealing with a client if it has a choice between two solutions for a deal, one of which is preferable from its own interest point of view while the other represents a better deal for the client. A conflict of interest arises also for a bank ... if it carries out activities involving two different groups of customers and if it has to strike a balance between the respective interests of the two customer groups." In light of these definitions, it becomes clear that even the existing specialised institutions face many situations where conflicts of interest may develop. Naturally, as financial institutions offer more products, and as the set of customers expands, so do the possibilities for conflicts to emerge.

With respect to commercial banks' expansion into the securities business, conflicts of interest are said to arise because of the bank's advisory role to depositors (the bank may promote the securities it underwrites, even when better investments are available in the market) and because of its role as a trust fund manager (the bank may "dump" into the trust accounts it manages the unsold part of the securities it underwrites). Conflicts of interest may also develop because of the bank's opportunity to impose tie-in deals on customers (the bank may use its lending relationship with a firm to pressure the firm to buy its underwriting services under the threat of increased credit costs or nonrenewal of credit lines) and because of the bank's ability to design deals aimed at transferring bankruptcy risk to outside investors (the bank may pressure a borrower that is in financial difficulties to issue securities that the bank will underwrite and sell to the public with the understanding that the proceeds of the issue are to be used to repay the loan)[Rajan (1994), Puri (1995) and Kanatas and Qi (1995)]. Finally, conflicts of interest may also arise because of "inside information" (the bank may use the confidential information that it learns when it underwrites a firm's securities in a way that the firm did not contemplate, such as to disclose that information, directly or indirectly, to the firm's competitors)[Edwards (1979), Saunders (1985a), Kelly (1985b) and Benston (1990)].

The critical issue regarding any potential conflict of interest is not whether the conflict exists *per se* but rather whether the parties to the transactions have incentives – and opportunities – to exploit it. It is not clear that banks have a strong enough incentive to exploit the conflicts of interest listed above for several reasons, including the potential damage to their reputation, particularly to their certification role; the monitoring by bond rating agencies; and the supervision exercised by regulatory authorities. Furthermore, it is unclear that banks would have an opportunity to turn these conflicts to their advantage. In general, conflicts of interest can only be exploited when there is some monopoly power (as with tie-in deals) or asymmetry of information between the contracting parties (as in the conflict between the bank's promotional and advisory roles) or when one of the parties is "naïve" (as when securities are issued to transfer bankruptcy risk to outside investors).

Some of the conflicts of interest claimed to arise with commercial banks' expansion into the securities business, such as the dumping of securities into trust accounts, tie-in deals, or the "insider information" problems, are already present, to a certain extent, in existing specialized institutions. The ability to exploit these conflicts, however, has been restricted by legal constraints (such as the Securities Act of 1933, which defines, among other things, the disclosure requirements to be met in the issuance and distribution of securities to the public), (Kelly, 1985b) private self-regulatory standards adopted by the participating institutions (such as the disclosure rules and firewalls that commercial and investment banks have adopted to deal with the new conflicts of interest arising from their involvement in derivatives contracting, namely those resulting from their simultaneous participation as advisors to the client on what product to use and as the counterparties who provide that product), market forces (such as the competition from other financial institutions) and "nonmarket" monitors (such as rating agencies). Finally, economic theory suggests that if agents are moderately rational, when they enter into a contracting relationship they will consider the other party's incentives and, as a result, they will not generally be fooled. For example, if firms perceive that they may be forced into future tie-in deals they can protect themselves in advance by maintaining relationships with more than one bank. If investors perceive that a bank has been exploiting a certain conflict of interest they can take that into account by applying a "lemons" discount to the bank's products affected by such conflict.

Empirical research on the conflicts of interest associated with commercial banks' securities activities has not uncovered strong evidence supporting the claim that banks do exploit these conflicts. For the period before Glass-Steagall, Kroszner

and Rajan (1994), comparing the ex post default performance of ex ante similar securities underwritten by commercial banks (either through trust departments or through affiliates) with those underwritten by investment banks, find no evidence that commercial banks systematically fooled the public by offering low-quality securities. Instead, their findings indicate that commercial banks underwrote higher-quality securities, which performed better than comparable securities brought to the market by investment banks. These findings confirmed the results of two other independent studies, by Ang and Richardson (1994) and Puri (1994), Moore (1934) and Edwards (1942).

Some have questioned these studies because of their use of the default rate as the performance variable. The reason is that it is a one-time-event variable, which does not capture the continuous variation in value over the bond's lifetime (Calomiris (1992)). However, studies that have looked at other performance variables have found results consistent with research that used the default rate. For example, Ang and Richardson (1994) find, for the period prior to Glass-Steagall, that bonds issued by commercial banks' affiliates had lower ex ante yields and higher ex post prices than those issued by investment banks. For the same period, Puri (1996) finds that securities underwritten by commercial banks had higher prices (lower yields to maturity) than comparable securities underwritten by investment banks, which suggests that investors perceived commercial banks' certification role, net of conflicts of interest, to be more valuable than that performed by investment banks.

There has also been some research on conflicts of interest associated with commercial banks' securities activities in modern banking systems. The Gessler Commission carried out an extensive study of that issue in relation to the German banking system in the late 1970s. Krümmel (1980, p. 46) summarises its findings as follows: "On the whole, consideration of potential conflicts of interest in universal banking did not lead the Commission to recommend the separation of the banking functions but rather to conclude that restraints of competition caused by such conflicts of interest are small and can be remedied or abolished by provisions within the existing system". More recently, Gande, Puri, Saunders and Walter (1997) have studied conflicts of interest in the present US banking system by comparing the bonds underwritten by BHCs' Section 20 subsidiaries with those underwritten by investment banks. Once again, their results suggest that the certification role of commercial banking organizations, net of conflicts of interest, is more valuable than that of investment banks.

In conclusion, some of the conflicts of interest that could develop if commercial banks expand into the securities business already exist in the specialized

institutions. Others could result from enlargement of the range of banks' activities and customers. Despite that growth, banks will exploit conflicts of interest only if they have the incentives and opportunities to do so. The incentives are constrained by the importance that banks attribute to their reputations. The opportunities are limited by investors' expected behavior, by competition in the financial markets and by existing regulations, such as those on disclosure.

4.5 Bank safety and soundness

The negative externalities that may result from a bank failure continue to be used as a major justification for making bank soundness the subject of regulation (Dewatripont and Tirole, 1994). It is frequently argued that the failure of a bank, particularly of a big bank, may spread domino-fashion, forcing other banks (solvent and insolvent) into bankruptcy and creating a system failure (Calomiris and Gorton, 1991).

A bank may fail because of liquidity problems (a run on its deposits may lead to the failure of a healthy bank because it forces the bank to liquidate its assets in a very short period of time) or because of other problems, such as a systemic shock (a deep recession, for example, may lead to a situation where the bank's losses exceed its capital) or fraud. In most countries, the desire to protect banks from runs on their deposits and to reduce the risk of a system failure led to the development of governmental deposit insurance systems and discount window facilities (Diamond and Dybvig, 1983). However, these mechanisms create problems of their own. Most notably, they reduce depositors' incentives to monitor banks and they give banks incentives to take excessive risk (Calomiris and Khan (1991), Diamond and Dybvig (1983), Kareken and Wallace (1978), Merton (1977, 1978) and Dothan and Williams (1980), Schwartz (1992). These problems, in turn, have been used to justify banking supervision and regulation. They have also been used as an argument for implementing a system of narrow banks. In that system banking organizations, such as holding companies, would own a bank, which would invest insured deposits in risk-free assets (short-term government securities), and other affiliates, which would be financed by securities not federally insured and would conduct the other businesses, such as lending and securities activities (Kareken (1986), Litan (1987), Bryan (1988), Pierce (1991) and Gorton and Pennacchi (1992)). These affiliates would be completely separated from the bank by an extensive set of firewalls (Diamond and Dybvig (1986) and Wallace (1996). With regard to banking regulation, some of it, such as the capital requirements, aim at limiting banks' incentives to undertake too much risk. Other regulations, such as the restrictions on banks' permitted activities, aim

at limiting banks' opportunities to undertake too much risk. The prohibition on U.S. commercial banks undertaking investment banking activities is often presented as an example of the latter group of regulations.

Investment banking activities can be divided into agency-type activities and principal type activities. In the former, the investment bank acts as an agent; that is, it conducts two-way transactions on behalf of customers. These include acting as a securities broker, as a "placement" agent in private underwritings and on a best-efforts basis in public underwritings. In the principal-type activities, the bank acts as a principal; that is, it conducts transactions for its own account. These include firm-commitment underwritings of public issues and securities dealing. Agency-type activities are usually perceived to be less risky than principal-type activities because they are mainly fee-based while in the principal-type activities the investment bank attempts to profit by acquiring securities in the expectation of reselling them at a higher price. This makes the profitability of the principal-type activities very dependent on the bank's assessment of the value of the securities and on that of the market (Saunders and Walter (1994, Chapter 5).

For example, in the case of securities underwriting, the risk occurs mainly in the case of firm-commitment underwriting of public issues. The securities firm may not be able to resell the securities it underwrote at a price high enough to cover the costs of the operation and the price guaranteed to the issuer. Research finds that IPOs of common stock are usually underpriced. Smith (1986) reviews that literature and concludes that on average under pricing exceeds 15 per cent. The evidence, however, is less clear in the case of seasoned offerings. Loderer, Sheehan and Kadlec (1991) find little evidence that underwriters systematically set offer prices below the market price on the major exchanges (NYSE and Amex), but they find evidence of under pricing for NASDAQ issues.

As it happens in the underwriting business, the risks incurred by the principal in the trading business vary with the activities performed. For example, when a securities firm buys a block of securities to facilitate a customer trade, it incurs the risk of having to resell that block later at a lower price. Holthausen, Leftwich and Mayers (1987) find that transactions of large blocks of common stocks have a price effect that is predominantly temporary for seller-initiated transactions and permanent for buyer-initiated transactions. These studies reveal important information about the performance of the underwriting and trading businesses on a stand-alone basis (Saunders (1985b).

However, the issue relevant to the debate on commercial banks' expansion into the investment banking business is the potential risk effects for banks and BHCs

from performing those securities activities. Some research has provided important information for that debate by studying commercial banks' securities activities prior to Glass-Steagall. White (1986) studies the securities activities of national banks before 1933. He finds that both the mean and the coefficient of variation of four measures of profitability were greater for the securities affiliate than for the bank, and that the coefficients of correlation for these measures between the bank and the securities affiliate were insignificant in all cases. He also finds that the existence of a securities affiliate or a bond department had either a decreasing impact or no impact at all on the probability of failure of the banks included in his sample.

Other research has attempted to evaluate the securities activities impact on banking organisations' risk using data on the existing banks and securities firms. Some studies focus on the securities activities that banking organisations are already allowed to perform. For example, Kwast (1989) finds, on the basis of firm-level data on banks' trading accounts for the period 1976-85, that the correlation between the return on securities activities and the return on banking activities is time and bank-size dependent. He also finds the maximum percentage of assets devoted to securities activities that yields diversification gains to be less than 5.0 percent. Other studies focus on the potential risk impact of new securities activities. For example, Wall and Eisenbeis (1984), using accounting data at the industry level, find that there was a negative correlation between bank earnings and securities broker/dealer earnings over the period 1970-80. Litan (1987, 1985) finds, on the basis of Internal Revenue Service profit data, that the correlation between bank profits and securities broker/dealer profits is time-dependent. Litan also estimates that the share of the securities activities in the portfolios on the efficient risk/return frontier is less than 4.0 percent. Brewer, Fortier and Pavel (1989) find, on the basis of daily stock market returns for a sample of banks and nonbanking firms that were actively traded in 1980, 1982 and 1986, a positive correlation between the average daily returns of banking and securities brokers/dealers. They also find that a hypothetical merger of a "representative banking firm" with a "representative securities firm" would increase the variance of the banking firm's average daily returns.

Some researchers have examined the risk effects of banking firms' expansion into the securities business by studying hypothetical mergers between BHCs and securities firms. Boyd, Graham and Hewitt (1993) extend the earlier work by Boyd and Graham (1988). They use accounting and market data over the period 1971-87. The authors find that mergers between BHCs and securities firms generally increase BHCs' risk of failure (measured by an indicator of the

probability of bankruptcy). Santomero and Chung (1992) also use the hypothetical merger approach. They use market data over the period 1985-89 and, like the previous studies, they use the probability of bankruptcy as the measure of risk. Their approach, however, differs from those studies in that they use option-pricing theory to estimate the implied volatility of the rate of return on assets and the market value of assets (Boyd et al. 1993). Santomero and Chung find that mergers between BHCs and regional securities firms usually lead to a reduction in the BHCs' risk. However, mergers between BHCs and large securities firms generally lead to an increase in the new organizations' risk of failure.

The empirical literature on the potential risk to banks from undertaking securities activities has been questioned on several grounds. Some studies have been questioned for using the variability of profits as a measure of risk instead of the more appropriate probability of bankruptcy. Others have been questioned for using industry-level data, which introduces an aggregation bias (Boyd, Hanweck and Pithyachariyakul, 1980). The studies of hypothetical mergers between banks and securities firms have also been questioned for not taking into account the effects of policy changes that usually follow a merger. The outcome of a merger between two firms is not the same as the combination of their balance sheets. Firms change their policies after the merger in order to take advantage of, for example, the scope economies associated with the new mix of activities that they undertake. In sum, the research on the potential risk to banks from conducting securities activities finds mixed results. These results, however, appear to disprove the idea that the securities business is highly risky for banks. On balance they show that the securities business gives banks some potential diversification gains, but these seem to be somewhat limited.

4.6 Profit and Risk Impact

The deregulatory period with increased investment banking activities through Section 20 subsidiaries and the repeal of Glass-Steagall have increased the share of banks' noninterest income. This diversification and change in source of income has arguably had an impact upon banks' profitability and risk. For example, Freixas et al. (2007) shows that financial conglomerates utilize excessive risk-taking due to their access to the safety net, and that this effect wipes out any diversification benefits. Moreover, a study from Yeager et al. (2007) failed to find significant diversification benefits within the financial services industry after the enactment of the GLBA. They state that universal banks significantly underperformed peer banks in profitability during this period. Yeager et al. (2007) do however argue that if synergies between commercial and investment banking

arose, they were most likely captured in the 1990s due to the evolution of Section 20 subsidiaries.

The introduction of Section 20 subsidiaries and their impact upon bank performance and risk has been examined by Cornett et al. (2002). They found empirical evidence from data sampled between 1987-1997 showing that banks diversifying through a Section 20 subsidiary performed better compared to banks that did not have a Section 20 subsidiary and investment banks. The increased revenues appear to stem from non-traditional banking activities while industry-adjusted risk measures indicate that the risk for these banks does not change significantly. Another study performed by Czymnik and Klein (2004) argues that the relaxation of firewalls and the enactment of the GLBA produced only winners and no losers in the financial services industry. Commercial banks experienced greater revenue due to the possibilities of diversification, while thrifts and investment banks experienced no significant impact upon their businesses. Additional studies by Cyree (2000) and Geyfman (2010), together with Cornett et al. (2002) and Czymnik and Klein (2004), point to the conclusion that Section 20 affiliates were beneficial for commercial banks.

The findings from studies that investigated increased Section 20 subsidiary activity are consistent with the standard portfolio theory. According to the standard portfolio theory, if the returns of two or more sources of income are less than perfectly correlated, it is possible to reduce risk through diversification (Geyfman, 2010). Financial regulation has, according to Wagner (2010), been heavily influenced by this theory and it is widely believed that diversification at financial institutions benefits the stability of the financial system. However, Wagner (2010) argues that even though diversification reduces each institution's individual probability of failure, it makes systemic crises more likely were several institutions fail at the same time. Diversification thereby tends to make banks more similar to each other since they are exposed to the same risks. Wagner's theory suggests that if all banks diversify, they will all be exposed to roughly the same risks, and thereby the systematic risk will increase. He provides evidence indicating that banks have become substantially more similar to each other. For example, the correlation of share prices among large American banks rose from 28 percent to 54 percent between 1995 and 2000 (Group of Ten, 2001). Additionally, Deyoung and Roland (2001) find American empirical evidence indicating that banks diversifying into noninterest income will experience an increase in revenue volatility and thereby risk. An increase in bank profitability does, however, partially compensate for this increase in risk.

When the GSA was repealed in 1999, several studies investigated the change in risk for banks. Mamun et al. (2005) and Akhigbe and Whyte (2004) document a significant decline in systematic risk for the financial market due to the increased diversification opportunities. Mamun et al. (2005) also conclude that larger firms benefited the most from the GLBA. Akhigbe and Whyte (2004) do, however, also find strong evidence for a significant increase in total and unsystematic risk for banks and insurance companies, whereas securities firms experience a significant decline in both total and unsystematic risk. What is even more interesting is that banks experience an increase in risk regardless of whether they have actually taken steps into investment banking activities or not; the general volatility of bank stocks increased, which Akhigbe and Whyte (2004) suggest was due to the market taking into account the possibility of participation in investment banking. Their research suggests that to minimize total risk for commercial banks, expansion into investment banking activities should be prohibited.

Consistent with the findings of Mamun et al. (2005) and Akhigbe and Whyte (2004), Neale et al. (2010) state that there was an initial decline in overall systematic risk after the GLBA was enacted. However, Neale et al. (2010) find from their longer⁸ sample period that the systematic risk later on increased for all firms when they expanded into non-traditional businesses, and the passage of the GLBA made systematic risk of financial services firms converge. Furthermore, De Jonghe (2010), Stiroh (2004), Stiroh (2006), and Stiroh & Rumble (2006) find that the increased risk of combining commercial and investment banking in a bank holding company offsets any diversification benefits due to noninterest income activities being far more risky than traditional interest income activities. Stiroh (2004), Stiroh (2006), and Stiroh & Rumble (2006) also conclude that noninterest activities do not yield higher returns compared to traditional commercial banks that rely mainly on interest income. Moreover, consistent with Neale et al.'s (2010) findings, De Jonghe's (2010) European evidence and Stiroh's (2006) American evidence show that banks were exposed to a significant increase in systematic risk after the enactment of the GLBA, thus reducing banking system stability. Stiroh (2004) states that his results raise fundamental doubts about the belief that noninterest income will stabilize banks' revenues and profitability, and thereby reduce their exposure to risk.

Baele et al. (2007) also support findings that systematic risk increases, but bank diversification of revenues generally also leads to a decrease in unsystematic risk. Their results have a number of implications for different stakeholders. Firstly, investors that are able to diversify themselves are mostly interested in systematic risk exposures since a market downturn will affect the whole portfolio, whereas

unsystematic risk would only affect a small portion of the portfolio. Secondly, large bank shareholders should, however, mainly be interested in the unsystematic bank-specific risk. Thirdly, regulators and bank supervisors are, however, concerned about both systematic and unsystematic risk of banks since they are interested in the bank sector's stability (Baele et al, 2007). Additionally, Gcyfman and Yeager (2009) find that universal and traditional banks have different risk-exposure. Although they have similar systematic risk, universal banks are exposed to higher total and unsystematic risk. This is especially interesting for regulators since if the unsystematic bank-specific risk is higher for universal banks, which also tend to be the larger banks, a failure of such a bank could cause market contagion and a systemic crisis. If the bank at the same time is considered as being TBTF, the problem is even worse.

4.7 Market Value Impact

A study from Ramirez (2002) investigates whether security affiliates had any impact upon banks' market value during the 1920s. When combining commercial and investment banking, economies of scale and scope should eventually translate into a higher stock market value. Ramirez (2002) concludes that banks' security affiliates added 4 to 7 percent to the market value of commercial banks in 1926 and 1927. This could explain the substantial increase in the share of American banks that became involved in securities underwriting during the 1920s, increasing from 277 banks in 1922 to 591 banks in 1929 (Peach, 1941). Additionally, Ramirez (2002) is the only article that we have been able to find that provides an estimate of the direct cost for banks when they are not allowed to combine commercial and investment banking. The direct cost per bank was about \$8 million in 1927's dollar value, roughly equivalent, according to Ramirez, to approximately \$61.5 million per bank in the dollar value of 1999. Although Ramirez (2002) estimates a cost for banks, he argues that one should be careful when interpreting these numbers; the private profits that seem to appear when combining commercial and investment banking do not necessarily translate to a loss for society in general. Consistent with Ramirez's (2002) Great Depression era study, Czynnik and Klein (2004) find that the repeal of the GSA increased the market value of commercial and investment banks. Also Neale et al. (2010) find that the enactment of the GLBA was associated with an overall positive reaction in share prices for all kinds of financial services firms.

In contrast to these findings, Schmid and Walter (2009), and Laeven and Levine (2007) find empirical evidence from the US showing that diversification is value destroying for financial institutions. Both studies argue that there is a significant

conglomerate discount involved when banks are allowed to fully diversify. This means that the market value of banks that engage in multiple activities is much lower than if those banks were broken up into specialized and separate financial intermediaries. They also argue that the positive elements of economies of scope and diversification do not outweigh the negative elements, and Laeven and Levine (2007) argue that intensified agency problems have adverse implications upon market value. Due to these findings, Schmid and Walter (2009) question why financial managers urge for diversification even though benefits seem trivial.

The American evidence from Schmid and Walter (2009), and Laeven and Levine (2007) is, however, opposed by Beale et al. (2007) and Elsas et al. (2010). Baele et al. (2007) provide empirical evidence from Europe showing that there is a positive relationship between banks' market value and their degree of diversification, even though they argue that unlimited diversification may not be optimal. The study from Elsas et al. (2010) is based upon data from 6 European countries but also from Australia, Canada and USA. They find that positive effects of diversification upon market value remained undiminished during the recent financial crisis and argue that there is evidence against a conglomerate discount in banking. Their findings indicate that economies of scope are indeed pronounced in banking. Both Beale et al.'s (2007) and Elsas et al.'s (2010) studies conflict with the American evidence from Schmid and Walter (2009), and Laeven and Levine (2007), but Baele et al. (2007) argue that this is due to the longer track records of European banks compared to their American counterparts. This raises the question as to whether there are fundamental differences in banking culture between the European and American financial markets.

4.8 The Financial Crisis of 2007-2009

The recent financial meltdown has heavily increased the political pressure upon regulating the financial markets. In several countries around the world, politicians have discussed regulations concerning a separation of banking activities, especially with regards to putting a ban on investment banking activities for depository institutions. This section outlines the main causes of the recent financial crisis discussed in the reviewed literature and tries to shed light on whether the repeal of the GSA contributed to the crisis. The academic literature concerning the recent financial crisis in this literature review unanimously argues that an American housing bubble was at the center of the crisis. White (2010) states that the bubble was caused by allowing under-qualified households to commit to residential mortgages well above the market value. He argues that all market participants had overconfidence in housing prices continuing to rise and

that the heart of the problem was the commercial banks' overly excessive sub-prime lending to underfinanced households. These sub-prime mortgages were in many cases repackaged into AAA-rated securities and sold to insufficiently cautious investors. Calomiris (2010) sees the problem of rating agencies, "whose opinions had been at the heart of the capital standards arbitrage that allowed banks to back subprime mortgages with so little equity capital". Stiglitz (2010c) says that the rating agencies played a critical role by converting C-rated sub-prime mortgages into A-rated securities, thus allowing these securities to be held by pension funds and ensuring the continuous flow of liquidity to the mortgage market. He continues by identifying the flawed incentives of rating agencies; rating agencies are paid by those they are rating and thereby have clear incentives to produce good grades for their customers and thus enable investment firms to engage in financial alchemy.

When the mortgage finance system finally imploded, it dragged much of the financial sector down with it due to relatively low capital levels (White, 2010). Tatom (2010) argues that the trend for mortgages to "originate and distribute" instead of "originate and hold" changed the whole mortgage process. He states that banks originated and served mortgages as before, but the next step was to sell the mortgages to investment banks and government-sponsored enterprises (GSEs) such as Fannie Mae and Freddie Mac. Stiglitz (2010c) also attributes the problem of the repackaging of mortgages into securities as one of the main causes of the recent financial crisis and he questioned the move to securitization in the 1990s (Stiglitz, 1992). According to Stiglitz (2010c), in a system allowing securitization, banks do not actually hold the mortgages and they therefore only have incentives to produce pieces of paper that they can pass off to others, instead of making sure that those to whom they issue mortgages can repay them. The former Chairman of The Federal Reserve, Paul A. Volcker, agrees and states that one unintended consequence of securitization within commercial banks has been less attention to careful credit analysis (Volcker, 2008). Stiglitz (2010c) suggests that banks should be required to keep a part of the risk from the loans that they originate, which in turn would encourage greater care in lending. Tropeano (2011) agrees and suggests that a model for securitization could be the German *Pfand-briefe*, i.e. that bonds issued by banks remain on their balance sheet. These *Pfand-briefe* are highly standardized and give banks incentives to care about the quality of loans and the creditworthiness of the borrowers.

"Financial markets are supposed to allocate capital and manage risk. They did neither well. Products were created which were so complicated that not even those that created them fully understood their risk implications; risk has been amplified,

not managed." –Stiglitz, 2010c, p. 19). Stiglitz (2010c) argues that banks and other market participants failed to understand diversification and underestimated systematic risk. He believes that market participants thought that securities consisting of a large number of mortgages would not be able to fall more than ten percent in market value. Stiglitz (2010c) also argues that when mortgages are sold as securities and bought by investment banks, repackaged, and partly sold to others, it creates information asymmetries and dilutes the knowledge of the underlying risk factors. Norton (2010) states that asymmetric information spread among banks resulting in them being unable to determine which banks were financially stable, and which banks held toxic assets and mortgage backed securities. Stiglitz (2010c) agrees and states that one reason for the malfunctioning was the lack of transparency, which in turn created a credit freeze because no bank was willing to lend to another. There was simply no way of knowing if a bank was solvent or not. In addition, Stiglitz (2010c) argues that financial institutions have strong incentives for a lack of transparency since transparent and standardized markets provide lower profit margins and higher competition. The lack of transparency has therefore, according to Stiglitz (2010c), been a central part in the business model of American financial institutions.

Securitization does, however, according to Kroszner and Strahan (2011), foster both liquidity and diversification. But they also argue that securitization expanded too far prior to the crisis. Kroszner and Strahan (2011) argue that the government sponsored this expansion by supporting GSEs such as Fannie Mae and Freddie Mac, and that this inflated the housing bubble even more. These GSEs subsidized securitization by offering credit at low prices and at the same time by purchasing securitized subprime mortgages in the secondary market. They go on by pointing out that the original Basel capital adequacy framework encouraged securitization of low-risk loans due to the fact that it treated all loans to businesses equally for the purposes of required capital. This led to it becoming attractive to securitize loans to highly rated creditors and hold lower-rated loans on the balance sheet, thus making fragile banks even more fragile.

Kroszner and Strahan (2011) state that an increased usage of securitization has transformed both the liability and asset sides of bank balance sheets, which in turn has created greater interlinkages among financial institutions. This gives rise to a highly interconnected financial system providing opaque distributions of risk. Wieandt and Moenninghoff (2011) argue that the recent financial crisis stems from a bank's interconnectedness with other institutions, its similarity to other banks, and its complexity. The many links in our present financial system have, according to Kroszner and Strahan (2011), introduced a contagion problem, allowing shocks to spread rapidly across the system. Kroszner and Strahan (2011)

also state that today's regulations focus too much on depository capital adequacy standards and too little on the interconnectedness of our financial system. Moreover, they argue that modern financial innovations have made the financial system more liquid with improved opportunities for diversification and lower cost of capital, but it has also led to risk concentrations to grow large, thereby increasing the potential for a crisis.

White (2010) argues that a separation of commercial and investment banking would not have eliminated the sources for financial instability that caused the crisis. He argues that the losses arose due to bad investments in mortgage-related securities, not due to losses from commercial banks underwriting corporate securities. The latter, is what the GSA would have prohibited; the sale of mortgage-related securities would still have been allowed. Therefore, he also concludes that the repeal of the GSA bore little, if any, responsibility for the recent financial crisis.

However, Stiglitz (2010c) argues that conflicts of interest arose after the repeal of the GSA. Even though these conflicts of interest may not have been at the center of the problem, Stiglitz (2010c) states that they clearly played a role in the recent financial crisis. He argues that commercial and investment banking have very different business cultures, where the former was previously conservatively risk adverse and the latter has a speculative and profit-driven culture. Stiglitz (2010c) argues that when the GLBA was enacted in 1999, it was the investment banking culture that dominated and took over the modern financial system.

According to Stiglitz (2010b) one can understand the recent financial crisis as a result of a failure of regulation. He states that the 25 or 30 years after World War II has been the only period during the past 200 years without continuous financial crises. Interestingly, that period was also characterized by strong regulation, which at the same time provided rapid and widely shared economic growth. However, White (2010) argues that critics of the GLBA are mistaken in attributing a connection between the GLBA and the recent financial crisis. He argues that the GLBA had very little to do with the recent financial crisis and that the GLBA did not go far enough when deregulating the US financial system.

5. Bangladesh: Updates on Separation of conventional and merchant banking

5.1 Capital market and financial market of Bangladesh

Capital market and financial market of Bangladesh undergone series reforms since the independence of the country in 1971. The post independence

Bangladesh the banks, financial institutions, insurance companies, and 90% of industrial assets were nationalized following socialist economic philosophy. There was no private sector banks and financial institutions excepting Standard Chartered and Grindlays Bank in the capacity of foreign bank branch. Capital market was not in operation. The only stock exchange named as Dhaka Stock Exchange established in 1954 was non-functioning from 1971 in the post Liberation War period, the trading was stopped temporarily for five years which started again in 1976 following the over throw of elected civilian government and change of economic philosophy government shifting in economic management from state to market that followed deregulation in the capital and financial market. Denationalization took place by selling to private sector and returning to former owners. For example, state owned Pubali Bank was returned to the Bengali owners which later on listed in the stock market, another state owned Rupali Bank was privatized and listed in the stock market. State owned industrial enterprises were privatized by creating disinvestment cell. Later on this disinvestment cell was turned into privatization commission. The Board of Investment was created to attract Foreign Direct Investment. The Securities and Exchange Commission was established (1992). Banking Companies Act 1962 inherited from former Pakistan was replaced by the Banking Companies Act of 1991. Central Bank order, foreign exchange regulation, banking supervision and monitoring, corporate governance in banking sector, withdrawal of restriction on foreign investors to stock market took place to create a market friendly economic environment through financial sector reform program.

5.2 Investment Corporation of Bangladesh

(ICB) is an investment bank. An Investment Bank is a financial institution which mobilize fund from the surplus economic units by selling securities and deployed funds to the deficit economic units also by buying or underwriting share and securities. After liberation in view of social economic changes, the scope for private sector investment in the economy was kept limited by allowing investment in projects up to Tk. 2.5 millions. The new investment policy, which was announced in July, 1972 provides for an expanded role of private sector by allowing investment in a project up to Tk. 30 millions. The ceiling has further being raised to Tk. 100 millions in spite of the adequate facilities and incentives provided to the private sectors encouraging response was not for the coming. One of the reasons among other was the lack of institutional facilities, which provides underwriting support (Like former ICB) to industrial enterprise that was required to raise much need equity fund. Thus, the need for reactivation for capital market,

stock market was keenly felt. In the received investment policy, which was announced in December, 1975, Government announced its decision reactivate the stock exchange and examine the question of recreation of Investment Corporation of Bangladesh. Accordingly a committee of officials examined the matter and recommended for creation of ICB. After that recommendation ICB established on the 1st October 1976, under "The Investment Corporation of Bangladesh Ordinance-1976" (No. XL of 1976). The establishment of ICB was a major step in series of measures undertaken by the Government to accelerate the pace of industrialization and to develop a well organized and vibrant Capital Market particularly securities market in Bangladesh. It created to the need of institutional support to meet the equity gap of industrial enterprise.

5.3 Bank and FI Exposure in Shares and Securities under Bank Companies Act (BCA) 1991

Under the financial sector reform program government allowed license to Commercial Banks and Leasing Companies and Insurance Companies since 1982. As a part of series of banking reform the Banking Companies Act was passed by the Parliament. Insurance Regulatory Authority is also being established. Regulation is being made mandatory that within three years of incorporation banks and h institutions shall go IPO and list in the stock market. The Bank Companies Act 1991 allowed a banking company to hold less or equal to 30% shares of any borrower company as mortgage or in the form of pledge and absolute owner of shares maximum 30% of paid up capital including reserves. The BCA also allows a Bank Company to invest in the shares of various companies in aggregate 10% of bank companies liabilities of its own. However, the exposure bank companies and FIs investment in stock market during 1996 crash was very insignificant which could make little dent on the banking sector. In the late 2007 the bank and FIs investment exposure in the stock market increased significantly. This is evident from the annual financials of banks and FIs. Share of profits from merchant banking division demonstrated 15% to 35% of total profit of banks and FIs in financial year 2009 and 2010. This indicated that banks and FIs took the opportunity earning speculative profit exploiting public deposit money. During this time the Private sector banks involved aggressively in the process while exposure of the public sector banks was little compared to their size and volume. Eventually, stock market crash took place by the end of 2010. Policy makers awoken up and started rethinking the separation of conventional and merchant banking to resolve the issue.

5.4 Central Bank Regulation to separate conventional and merchant banking

In October 2009, the central bank came up with regulation that banks and FIs to create separate legal subsidiary company to carry out merchant banking operation to protect interest of the deposit holders. Thus legal shape of separating conventional banking officially took place. The regulation further detailed the rules and procedures for the formation of subsidiary company under the parent bank. The regulation prescribes that to hold more than 15% shares of any company the subsidiary merchant bank shall have to take prior permission from the central bank. In case subsidiary company borrows loan from the parent bank this needs prior permission from the central bank. To avoid the conflict of interest situation restrictions have been imposed that no subsidiary merchant bank can buy shares of company in its own portfolio or in the clients margin accounts where the parent bank or any its directors or their family members and all other dependents of directors. For opening subsidiary merchant bank the Bank Holding Company (BHC) shall apply for permission from the central bank. The BHCs financial statement shall include half yearly and annual financials of merchant bank subsidiary in line with the provisions of International Financial Reporting Systems-27. The subsidiaries constituted by parent bank shall conduct businesses in compliance with the requirements of Bangladesh Securities and Exchange Commission. The central bank also published detailed instructions on holding shares and securities exposures to capital market. In particular, time line for formation of BHC and extending loans and other operating procedures.

Stock market brokers, common investors in shares and investors started criticizing the central bank's move on the issue. The Association of Banker's, Association of listed companies and many others gave their opinion in favor and against central bank move. Parliamentary committee on Finance and Banking, Economic think tanks, and professional bodies raised their voice on the issue. Government formed investigation committee with diverse professionals to investigate the matter and suggest recommendation. The central bank after issuing circular relating to bank's investment on shares and securities proposed amendments of Banking companies ordinance and inserted new provisions in the ordinance 26A,26B,26C,&26D.

Under the amended central bank ordinance and banking company in share and security business 5% of its paid up capital plus share premium, statutory reserve and retained earning but not exceeding 10% of paid up capital of Investing Company (Company where investment is made). Moreover in extending lending or contribution to any fund to the subsidiary formed for such purpose shall be restricted to 25% of paid up capital plus share premium, statutory reserve and retained earnings. Later on BB allowed some space through issuing a circular

(Dos Circular Letter No.-7, dated 25/02/14) regarding maximum amount of investment in capital market on consolidated basis. Now the maximum limit is 50% of the sum of its consolidated paid up capital, balance in share premium account, statutory reserve and retained earning (on consolidated basis). Critics observe that needs review on two issues. First one is on the basis of limit, which stated about *market price of investment in place of Cost price* but in reality investors has no control over market price exposure at all which need be at cost price and the second one is the *consolidated paid up capital is a misleading term* for this purpose. The central bank should come forward to address this criticism if this argument has valid justification.

6. Discussion and Critical Summary

The results of this literature review have shown that papers provide contradictory evidence and opinions on whether commercial and investment banking should be unified or separated. Papers, such as those from Kroszner and Rajan (1994), Puri (1994), Benston (1990) etc., that were written prior to the repeal of the GSA provides compelling evidence in support of a repeal. These studies found significant evidence showing that banks involved in investment banking activities during the Great Depression were not the root cause of that crisis. Additionally, studies on international banking structures, such as Barth et al. (1997), also supported the argument that the USA was at a competitive disadvantage compared to the rest of the world, which mainly allowed universal banking. Moreover, research from Cornett et al. (2002), Cyree (2000), and Geyfman (2010) etc., pointed to the conclusion that Section 20 subsidiaries were beneficial for bank holding companies in the USA during the 1990s. Thus, we argue that there was plenty of evidence pointing to the conclusion that the repeal of the GSA in 1999 was warranted and that USA would benefit from a universal banking system.

Papers based upon data from the Great Depression era, such as those from Kroszner and Rajan (1994), Puri (1994), Benston (1990) etc., together with more recent studies from Hebb and Fraser (2002). and Hebb and Fraser (2003), which are based upon findings from Canada and the UK provide empirical evidence that clearly rejects problems of conflicts of interest. These studies mainly base their evidence upon the fact that bonds underwritten by commercial banks default less often than bonds underwritten by investment banks. We therefore argue that the bond underwriting of commercial banks does not seem to be a major concern; commercial banks seem to utilize their informational advantage to underwrite mainly high quality firms. However, as shown by Ber et al. (2001), Bessler and Stanzel (2009), and Johnson and Marietta-Westberg (2009), conflicts of interest

seem more severe and more likely to exist in a universal bank that has an underwriting division together with an asset management division. These studies seem to support the view that asset management divisions may feel pressured by the bank's underwriting division to buy and hold poorly performing issues to make a customer satisfied, even though this may be unwise. These asset management divisions also seem to give worse investment advice to the public, compared to stand-alone asset managers. Thus, we believe that it is important that regulators are aware of these issues and that they actively aim to limit the possibility for universal banks to mislead the public through market making and poor investment advice. One way of doing this would be to separate commercial and investment banking, but we do not believe that this argument alone is strong enough to justify such will allow them to invest in small business investment companies and other "public welfare" investments (Real Estate Finance, 2010). Furthermore, Calomiris (2010) states that the Dodd-Frank Act does nothing to separation. These problems could instead be resolved through supervisory control measures of regulatory bodies.

A commonly recognized issue of today's financial system is that banks are increasingly becoming too big to fail. This TBTF-doctrine would most certainly at least be limited by separating commercial and investment banking; the sum of two parts is arguably larger than one part alone. Moreover, banks' access to the safety net (either through them being too big to fail, or by deposit insurance) creates an intrinsic moral hazard problem as shown by Grant (2010) and Herring and Santomero (1990). By separating commercial and investment banking, excessive risk-taking through proprietary trading within banks and the problem of moral hazard would thus be effectively limited in theory. However, the recent financial crisis has shown that investment banks and specialized institutions also can be too big to fail and thereby indirectly have access to the safety net. We argue, therefore, that a separation of commercial and investment banking would not eliminate banks that are considered as being too big to fail. On the other hand, the enactment of the GLBA has increased the number of institutions that the Federal Reserve considers as being too big to fail (Grant, 2010). A reenactment of the GSA would thus probably limit the number of institutions that are seen as being too big to fail.

As Wieandt and Moenninghoff (2011) argue, large diversified global banks can contribute to economic growth and more efficient financial markets by performing various functions benefiting the global economy. These benefits should be kept in mind when discussing regulation. However, as shown in this thesis, there is no unanimous evidence either for or against diversification benefits.

from economies of scope within the financial industry. Diversification benefits for banks thereby seem trivial at best. This is also consistent with the findings of Acharya et al. (2011b), and Berger and Humphrey (1997). Combining commercial and investment banking on the argument of diversification benefits thus seems weak. Furthermore, studies about the impact upon banks' risk from increased investment banking activities are frequently contradictory. The evidence provided by Stiroh (2004), Stiroh (2006), and Stiroh and Rumble (2006) shows that increased noninterest income does not seem to yield higher returns for banks, only higher volatility in earnings. Furthermore, most studies based upon modern evidence, such as Baele et al. (2007), De Jonghe (2010), Neale et al. (2010), and Stiroh (2006), clearly indicate that the systematic risk has increased since the enactment of the GLBA. These studies are consistent with the view of Wagner (2010); even though diversification into investment banking activities has reduced each institutions probability of failure, the diversification has at the same time increased the similarity between institutions. Banks have thereby become exposed to the same risks, which has arguably increased interconnectedness between institutions and the likelihood of a systemic crisis. Thus, if the systematic risk heavily increases for banks, a bubble could potentially cause more institutions to fail at the same time since they are all more exposed to the overall market risk. On the other hand, if banks were less exposed to systematic risk, a downturn in the market would not affect these banks as much. The arguments of Wagner (2010) therefore seem highly relevant to consider in today's financial system. Since the repeal of the GSA and increased investment banking activities within banks seems to have caused an increase in banks' exposure to systematic risk, a separation and a reenactment of the GSA would probably be preferable when trying to limit "boom and bust" cycles in the financial system. Even though studies such as Ramirez (1999) and Ramirez (2002) find that the GSA increased cost of financing for corporations and lowered commercial banks' market value, we agree with Ramirez and De Long (2001) that it is hard to argue that the GSA had significant costs in terms of slowing down the US economy. As Ramirez and De Long (2001) argue: "Perhaps the web of financial intermediation channeled funds elsewhere, so that the net flow of capital for industrial investment was undisturbed." (Ramirez and De Long, 2001, p. 111).

A separation of commercial and investment banking would, according to the papers we have presented, not have prevented the recent financial crisis. Rather, it was the highly relaxed lending policies that played the most significant part. Securitization changed commercial banks' lending policies from originate and hold to originate and distribute. This, along with government sponsored

enterprises such as Fannie May and Freddie Mac, provided a stream of liquidity to the American housing market, thereby inflating the housing bubble even more. The repeal of the GSA could, however, have had an impact on the severity of the recent financial crisis. Financial institutions have arguably become more interconnected and similar to each other, and arguments from Stiglitz (2010c) that the profit-driven investment banking culture took over the American financial system seems to make sense.

The American modified Volcker rule takes steps to prevent banks from participating in proprietary trading. This rule will probably take time to implement, but the purpose of the rule (to only allow banks to trade on behalf of a customer, and not on its own behalf) makes sense and to some extent will probably limit banks' risk-taking. The development of the firewall concept in the UK, as proposed by the Vickers report, should also be interesting for regulators to follow. The implementation of these regulatory firewalls will take time, but their impact upon the stability of the UK's financial system will be interesting to compare to most other countries in the world that mainly focus on capital adequacy requirements. The future will show whether capital adequacy requirements are enough, or if UK's firewall concept and a separation of banking activities is the most effective way to stabilize the financial system.

The complexity of the financial system introduces an excessive number of variables to consider when regulating the system. Some countries may have more problems with conflicts of interest or banks that are too big to fail, while others experience greater diversification benefits within financial institutions. This may be due to different business, banking and social cultures, different degrees of financial system maturity, together with different regulatory norms and frameworks. A separation of commercial and investment banking may thereby be suitable in one country but not in another. This makes it extremely difficult to suggest and implement a standardized regulatory framework. However, as long as there are countries that do not limit banking activities, there will also be opportunities for regulatory arbitrage and offshore banking, as argued by Acharya et al. (2011b).

7. Concluding Remarks

This paper has through a review of papers given an overall picture of the positive and negative sides that a separation between commercial and investment banking induces. The evidence suggests that a universal banking system does not necessarily lead to more profitable banks but there is no unanimous evidence

showing that a separation of commercial and investment banking would be more beneficial for society overall. This paper has also shown that the recent financial crisis did not directly stem from the combination of commercial and investment banking activities within universal banks. There is, however, compelling evidence showing that the increased degree of diversification within banks has increased the similarity between institutions and their systematic risk exposure. We therefore argue that regulators should focus on limiting the interconnectedness and similarity between financial institutions to prevent banks from failing at the same time, thereby minimizing the risk of systemic crises and market contagion. It is up to financial market regulators to set the playing field for banks, and a separation of commercial and investment banking is one of the tools in the regulators' toolbox. Although this thesis cannot provide an answer to whether commercial and investment banking should be separated, we hope that this review has been helpful in identifying key issues (Conflicts of Interest, Too Big to Fail, Moral Hazard, Diversification and its impact upon risk) Diversification and its impact upon risk) within the area and that it can be an aid to future research.

References

- Aharony, J. and I. Swary (1983): "Contagion Effects of Bank Failures: Evidence from Capital Markets". *Journal of Business* 56, pp. 213-30.
- Allen, F. and A. Winton (1995): "Corporate Financial Structure, Incentives and Optimal Contracting". *Handbooks in Operations Research and Management Science*, Vol. 9, Finance, R. A. Jarrow, V. Maksimovic and W. T. Ziemba, (eds.), New York, North-Holland, pp. 693-720.
- Allen, F. and G. Gale (1997): "Financial Markets, Intermediaries, and Intertemporal Smoothing". *Journal of Political Economy* 105, pp. 523-46.
- Allen, L., A. Saunders and G. F. Udell (1991): "The Pricing of Retail Deposits: Concentration and Information". *Journal of Financial Intermediation* 1, pp. 335-61.
- Ang, J. S. and T. Richardson (1994): "The Underpricing Experience of Commercial Bank Affiliates prior to the Glass-Steagall Act: A Re-examination of Evidence for Passage of the Act". *Journal of Banking and Finance* 18, pp. 351-95.
- Barth, J. R., D. E. Nolle and T. N. Rice (1997): "Commercial Banking Structure, Regulation, and Performance: An International Comparison". *Comptroller of the Currency, Working Paper No. 7*.
- Baumol, W. J., J. C. Panzar and R. D. Willig (1981): *Contestable Markets and the Theory of Industrial Structure*, New York, Harcourt Brace.
- Beatty, R. P. and J. R. Ritter (1986): "Investment Banking, and the Underpricing of Initial Public Offerings". *Journal of Financial Economics* 15, pp. 213-32.
- Benston, G. J. (1990): *The Separation of Commercial and Investment Banking: The Glass-Steagall Act Revisited and Reconsidered*, New York, Oxford University Press.
- Berger, A. N. and G. F. Udell (1995): "Relationship Lending and Lines of Credit in Small Firm Finance". *Journal of Business* 68, pp. 351-81.
- Berger, A. N., D. B. Humphrey and L. B. Pulley (1996): "Do Consumers Pay for One-Stop Banking? Evidence from an Alternative Revenue Function". *Journal of Banking and Finance* 20, pp. 1601-21.
- Berger, A. N., W. C. Hunter and S. G. Timme (1993): "The Efficiency of Financial Institutions: A Review and Preview of Research Past, Present, and Future". *Journal of Banking and Finance* 17, pp. 221-49.
- Best, R. and H. Zhang (1993) "Alternative Information Sources and the Information Content of Bank Loans:". *Journal of Finance* 48, pp. 1507-23.
- Bhattacharya, S. and A. V. Thakor (1993): "Contemporary Banking Theory". *Journal of Financial Intermediation* 3, pp. 2-50.

- Billet, M. T., M. J. Flannery and J. A. Garfinkel (1995): "The Effect of Lender Identity on a Borrowing Firm's Equity Return". *Journal of Finance* 50, pp. 699-718.
- Black, F., M. H. Miller and R. A. Posner (1978): "An Approach to the Regulation of Bank Holding Companies". *Journal of Business* 51, pp. 379-412.
- Boot, A. W. A. and A. V. Thakor (1994): "Moral Hazard and Secured Lending in an Infinitely Repeated Credit Market Game". *International Economic Review* 35, pp. 899-920.
- Boot, A. W. A. and A. V. Thakor (1996): "Banking Structure and Financial Innovation". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 420-30.
- Boot, A. W. A. and A. V. Thakor (1997): "Financial System Architecture". *Review of Financial Studies* 10, pp. 693-733.
- Boyd, J. H. and S. L. Graham (1988): "The Profitability and Risk Effects of Allowing Bank Holding Companies to Merge with other Financial Firms: A Simulation Study". *Federal Reserve Bank of Minneapolis Quarterly Review* 10, pp. 3-20.
- Boyd, J. H., G. A. Hanweck and P. Pithysachariyakul (1980): "Bank Holding Company Diversification". *Proceedings of a Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, pp. 105-21.
- Boyd, J. H., S. L. Graham and R. S. Hewitt (1993): "Bank Holding Company Mergers with Nonbank Financial Firms: Effects on the Risk of Failure". *Journal of Banking and Finance* 17, pp. 43-63.
- Brewer, E. III, D. Fortier and C. Pavel (1989): "Bank Risk from Nonbank Activities". *Journal of International Securities Markets* 3, pp. 199-210.
- Brüker, G. (1989): *Competition in Banking*, Paris, OECD.
- Bryan, L. L. (1988): *Breaking up the Bank: Rethinking an Industry under Siege*, Homewood, Illinois, Dow Jones-Irwin.
- Bryant, J. (1980): "A Model of Reserves, Bank Runs, and Deposit Insurance". *Journal of Banking and Finance* 4, pp. 335-44.
- Calomiris, C. W. (1992): "Remarks on Inside Information in Banking". in *Proceedings to a Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, pp. 293-301.
- Calomiris, C. W. (1995): "The Costs of Rejecting Universal Banking: American Finance in the German Mirror, 1870-1914". *Coordination and Information*, N. Lamoreaux and D. Raff (eds.), Chicago, University of Chicago Press, pp. 257-321.
- Calomiris, C. W. and C. M. Kahn (1991): "The Role of Demandable Debt in Structuring Optimal Banking Arrangements". *American Economic Review* 81, pp. 497-513.

- Calomiris, C. W. and G. Gorton (1991): "The Origins of Banking Panics". *Financial Markets and Financial Crisis*, G. Hubbard (ed.), Chicago, University of Chicago Press, pp. 109-72.
- Carosso, V. P. (1970): *Investment Banking in America: A History*, Cambridge, Mass., Harvard University Press.
- Carter, R. and S. Manaster (1990): "Initial Public Offerings and Underwriter Reputation". *Journal of Finance* 45, pp. 1045-67.
- Chari, V. V. and R. Jagannathan (1988): "Banking Panics, Information, and Rational Expectations Equilibrium". *Journal of Finance* 43, pp. 749-61.
- Chemmanur, T. J. and P. Fulghieri (1994): "Reputation, Renegotiation, and the Choice between Bank Loans and Publicly Traded Debt". *Review of Financial Studies* 7, pp. 475-506.
- Clark, J. A. (1988): "Economies of Scale and Scope at Depository Financial Institutions: A Review of the Literature". *Economic Review, Federal Reserve of Kansas City, September/October*, pp. 16-33.
- Cornyn, A. G. Hanweck, S. Rhoades and J. Rose (1986): "An Analysis of the Concept of Corporate Separateness in BHC Regulation from an Economic Perspective". *Proceedings of a Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, pp. 174-212.
- Cumming, C. M. and L. M. Sweet (1987): "Financial Structure of the G-10 Countries: How does the United States Compare?" *Federal Reserve Bank of New York, Quarterly Review, Winter*, pp. 14-25.
- Dewatripont, M. and J. Tirole (1994): *The Prudential Regulation of Banks*, Cambridge, Massachusetts, The MIT Press.
- Diamond, D. W. (1984): "Financial Intermediation and Delegated Monitoring". *Review of Financial Studies* 51, pp. 393-414.
- Diamond, D. W. (1991) "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt". *Journal of Political Economy* 99, pp. 689-721.
- Diamond, D. W. and P. H. Dybvig (1983): "Bank Runs, Deposit Insurance and Liquidity". *Journal of Political Economy* 91, pp. 401-19.
- Diamond, D. W. and P. H. Dybvig (1986): "Banking Theory, Deposit Insurance, and Bank Regulation". *Journal of Business* 59, pp. 53-68.
- Dothan, U. and J. Williams, (1980): "Banks, Bankruptcy, and Public Regulation". *Journal of Banking and Finance* 4, pp. 65-88.
- Edwards, F. R. (1979): "Banks and Securities Activities: Legal and Economic Perspectives on the Glass-Steagall Act". *The Deregulation of Banking and Securities Activities*, L. G. Goldberg and L. J. White (eds.), Lexington, Mass., Lexington Books, pp. 273-94.

- Edwards, G. W. (1942): "The Myth of the Security Affiliate". *Journal of the American Statistical Association* 37, pp. 225-32.
- Eisenbeis, R. A. (1996): "Banks and Insurance Activities". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 387-412.
- FDIC (1987): *Mandate for Change: Restructuring the Banking Industry*, Washington DC.
- Flannery, M. J. (1986): "Contagious Bank Runs, Financial Structure and Corporate Separateness within a Bank Holding Company". *Proceedings of a Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, pp. 213-30.
- Forestieri, G. (1993): "Economies of Scale and Scope in the Financial Services Industry: A Review of Recent Literature". *Financial Conglomerates*, Paris, OECD, pp. 63-124.
- Freixas, X. and J. C. Rochet (1997): *Microeconomics of Banking*, Cambridge, Mass., MIT Press.
- Gande, A., M. Puri, A. Saunders and I. Walter (1997): "Bank Underwriting of Debt Securities: Modern Evidence". *Review of Financial Studies* 10, pp. 1175-202.
- GAO (1995): "Banks' Securities Activities: Oversight Differs Depending on Activity and Regulator". *General Accounting Office Report No. 214*.
- Gorton, G. (1988): "Banking Panics and Business Cycles". *Oxford Economic Papers* 40, pp. 751-81.
- Gorton, G. and G. Pennacchi (1990): "Financial Intermediaries and Liquidity Creation". *Journal of Finance* 45, pp. 49-71.
- Gorton, G. and G. Pennacchi (1992): "Money Market Funds and Finance companies: Are they the Banks of the Future?" *Structural Change in Banking*, M. Klausner and L. White (eds.), Homewood, Illinois, Irwin, pp. 173-214.
- Gorton, G. and J. G. Haubrich (1987): "Bank Deregulation, Credit Markets, and the Control of Capital". *Carnegie-Rochester Conference Series on Public Policy* 26, pp. 289-334.
- Greenbaum, S., G. Kanatas and I. Venezia (1989): "Equilibrium Loan Pricing under the Bank Client Relationship". *Journal of Banking and Finance* 13, pp. 221-35.
- Hand, J. R. M., R. W. Holthausen and R. W. Leftwich (1992): "The Effect of Bond Rating Agency Announcements on Bond and Stock Prices". *Journal of Finance* 47, pp. 733-52.
- Harris, M. and A. Raviv (1991): "The Theory of Capital Structure". *Journal of Finance* 46, pp. 297-355.
- Herring, R. J. and A. M. Santomero (1990): "The Corporate Structure of Financial Conglomerates". *Journal of Financial Services Research* 4, pp. 471-97.

- Holthausen, R. W. and R. W. Leftwich (1986): "The Effect of Bond Rating Changes on Common Stock Prices". *Journal of Financial Economics* 17, pp. 57-89.
- Holthausen, R. W., R. W. Leftwich and D. Mayers (1987): "The Impact of Large Block Transactions on Securities Prices: A Cross-Section Analysis". *Journal of Financial Economics* 19, pp. 237-67.
- Hubbard, R. G. (1997): "Capital Market Imperfections and Investment". *National Bureau of Economic Research Working Paper No. 5996*.
- Jacklin, C. (1987): "Demand Deposits, Trading Restrictions, and Risk-Sharing". *Contractual Arrangements for Intertemporal Trade*, E. C. Prescott and N. Wallace (eds.), University of Minnesota Press, pp. 26-47.
- Jacklin, C. and S. Bhattacharya (1988): "Distinguishing Panics and Information-Based Bank Runs: Welfare and Policy Implications". *Journal of Political Economy* 96, pp. 568-92.
- James, C. (1987): "Some Evidence on the Uniqueness of Bank Loans". *Journal of Financial Economics* 19, pp. 217-35.
- Journal on Regulation* 3, pp. 1-52.
- Kanatas, G. and J. Qi (1995): *Underwriting by Commercial Banks: Conflicts of Interest vs. Scope Economies*, Mimeo. College of Business Administration, University of South Florida.
- Kane, E. J. (1986): "Confronting Incentive Problems in US Deposit Insurance: The Range of Alternative Solutions". *Deregulating Financial Services*, G. G. Kaufman and R. C.
- Kane, E. J. (1996): "The Increasing Futility of Restricting Bank Participation in Insurance Activities". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 338-417.
- Kareken, J. H. (1986): "Federal Bank Regulatory Policy: A Description and Some Observations". *Journal of Business* 59, pp. 3-48.
- Kareken, J. H. and N. Wallace (1978): "Deposit Insurance and Bank Regulation: A Partial-Equilibrium Exposition". *Journal of Business* 51, pp. 413-38.
- Kelly, E. J. (1985): "Conflicts of Interest: A Legal View". *Deregulating Wall Street: Commercial Bank Penetration of the Corporate Securities Market*, I. Walter, New York, John Wiley & Sons, pp. 231-54.
- Kelly, E. J. (1985a): "Legislative History of the Glass-Steagall Act". *Deregulating Wall Street: Commercial Bank Penetration of the Corporate Securities Market*, I. Walter (ed.), New York, John Wiley & Sons, pp. 41-66.
- Koguchi, K. (1993): "Financial Conglomeration". *Financial Conglomerates*, Paris, OECD, pp. 7-62.

- Kormendi (eds.), Cambridge, Mass., Ballinger Publishing Company, pp. 97-120.
- Kroszner, R. S. and R. G. Rajan (1994): "Is the Glass-Steagall Act Justified? A Study of the U.S. Experience with Universal Banking before 1933". *American Economic Review* 84, pp. 810-832.
- Kroszner, R. S. and R. G. Rajan (1997): "Organisation Structure and Credibility: Evidence from Commercial Bank Securities Activities before the Glass-Steagall Act". *Journal of Monetary Economics* 39, pp. 474-516.
- Krümmel, H. J. (1980): "German Universal Banking Scrutinised: Some Remarks concerning the Gessler Report". *Journal of Banking and Finance* 4, pp. 33-55.
- Kwast, M. L. (1989): "The Impact of Underwriting and Dealing on Bank Returns and Risks". *Journal of Banking and Finance* 13, pp. 102-25.
- Kwast, M. L. (1996): "Supervising the Universal Bank". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 743-49.
- Litan, R. E. (1985): "Evaluating and Controlling the Risks of Financial Product Deregulation". *Yale*
- Litan, R. E. (1987): *What Should Banks Do?* The Brookings Institution, Washington, D.C.
- Llewellyn, D. T. (1996): "Universal Banking and the Public Interest: A British Perspective". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 161-204.
- Loderer, C. F., D. P. Sheehan and G. B. Kadlee (1991): "The Pricing of Equity Offerings". *Journal of Financial Economics* 29, pp. 35-57.
- Lummer, S. and J. J. McConnell (1989): "Further Evidence on the Bank Lending Process and the Capital Market Response to Bank Loan Agreements". *Journal of Financial Services Research* 25, pp. 99-112.
- Merton, R. C. (1977): "An Analytic Derivation of the Cost of Deposit Insurance Loan Guarantees". *Journal of Banking and Finance* 1, pp. 3-11.
- Merton, R. C. (1978): "On the Costs of Deposit Insurance When There are Surveillance Costs". *Journal of Business* 51, pp. 439-52.
- Merton, R. C. (1995): "A Functional Perspective of Financial Intermediation". *Financial Management* 24, pp. 23-41.
- Mikkelson, W. and M. Partch (1986): "Valuation Effects of Security Offerings and the Issuance Process". *Journal of Financial Economics* 15, pp. 31-60.
- Moore, T. (1934): "Security Affiliate versus Private Investment Banker - A Study in Security Organisations". *Harvard Business Review* 12, pp. 478-84.

- Mote, L. R. and G. G. Kaufman (1989): "Securities Activities of Commercial Banks: The Current Economic and Legal Environment". *Research in Financial Services 1*, pp. 223-62.
- Mudur, U. (1992): "Economies of Scale and Scope in National and Global Banking Markets". *The New European Financial Marketplace*, A. Steinherr (ed.), New York, New York University Press, pp. 31-48.
- Myers, S. C. (1984): "The Capital Structure Puzzle". *Journal of Finance 39*, pp. 575-92.
- Nakamura, L. I. (1993): "Commercial Bank Information: Implications for the Structure of Banking". *Structural Change in Banking*, M. Klausner and L. J. White (eds.), Illinois, Business One Irwin, pp. 131-60.
- OECD (1992): *Insurance and Other Financial Services: Structural Trends*, Paris. Peach, W. N. (1941): *The Security Affiliates of National Banks*, Baltimore, Johns Hopkins University Press.
- Perkins, E. J. (1971): "The Divorce of Commercial and Investment Banking". *Banking Law Journal 88*, pp. 483-528.
- Petersen, M. and R. Rajan (1994): "The Benefits of Lending Relationships: Evidence from Small Business Data". *Journal of Finance 49*, pp. 3-37.
- Pierce, J. L. (1991): *The Future of Banking*, New Haven, Connecticut, Yale University Press.
- Pollard, A. M., J. G. Passaic, K. H. Ellis, and J. P. Daly (1988): *Banking Law in the United States*, Boston, Butterworth Legal Publishers.
- Pulley, L. B. and D. B. Humphrey (1993): "The Role of Fixed Costs and Cost Complementarities in Determining Scope Economies and the Cost of Narrow Banking Proposals". *Journal of Business 66*, pp. 437-62.
- Puri, M. (1994): "The Long-Term Default Performance of Bank Underwritten Security Issues". *Journal of Banking and Finance 18*, pp. 397-418.
- Puri, M. (1995): "Conflicts of Interest, Intermediation, and the Pricing of Underwritten Securities". Mimeo, Graduate School of Business, Stanford University.
- Puri, M. (1996): "Commercial Banks in Investment Banking: Conflict of Interest or Certification Role?" *Journal of Financial Economics 40*, pp. 373-401.
- Rajan, R. G. (1992): "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt". *Journal of Finance 48*, pp. 1367-1400.
- Rajan, R. G. (1994): "An Investigation into the Economics of Extending Bank Powers". Mimeo, Graduate School of Business, University of Chicago.
- Rajan, R. G. (1996): "The Entry of Commercial Banks into the Securities Business: A Selective Survey of Theories and Evidence". *Universal Banking: Financial System Design Reconsidered*, I. Walter and A. Saunders (eds.), Chicago, Irwin, pp. 282-302.

- Ramakrishnan, R. and A. Thakor (1984): "Information Reliability and the Theory of Financial Intermediation". *Review of Economic Studies* 51, pp. 415-52.
- Santomero, A. M. and E. J. Chung (1992): "Evidence in Support of Broader Bank Powers". *Financial Markets, Institutions & Instruments* 1, New York University, Salomon Center, pp. 1-69.
- Santos, J. A. C. (1998a): "Mixing Banking with Commerce: A Review". Mimeo, Bank for International Settlements.
- Santos, J. A. C. (1998b): "Securities Units of Banking Conglomerates: Should their Location be Regulated?" Forthcoming in the *Cato Journal*.
- Saunders, A. (1985a): "Conflicts of Interest: An Economic View". *Deregulating Wall Street: Commercial Bank Penetration of the Corporate Securities Market*, I. Walter (ed.), John Wiley & Sons, New York, pp. 207-30.
- Saunders, A. (1985b): "Bank Safety and Soundness and the Risks of Corporate Securities Activities". *Deregulating Wall Street: Commercial Bank Penetration of the Corporate Securities Market*, I. Walter (ed.), John Wiley & Sons, New York, pp. 171-206.
- Saunders, A. (1994): "Banking and Commerce: An Overview of the Public Policy Issues". *Journal of Banking and Finance* 18, pp. 231-54.
- Saunders, A. and I. Walter (1994): *Universal Banking in the United States: What Could we Gain? What Could we Lose?* New York, Oxford University Press.
- Schwartz, A. J. (1992): "The Misuse of the Fed's Discount Window". *Federal Reserve Bank of St. Louis, Economic Review*, September/October, pp. 58-69.
- Shaffer, S. (1984): "Cross-Subsidisation in Checking Accounts". *Journal of Money Credit and Banking* 16, pp. 100-9.
- Sharpe, S. (1990): "Asymmetric Information, Bank Lending and Implicit Contracts: A Stylised Model of Customer Relationships". *Journal of Finance* 45, pp. 1069-87.
- Slovin, M. B., M. E. Sushka and C. D. Hudson (1990): "External Monitoring and its Effect on Seasoned Common Stock Issues". *Journal of Accounting and Economics* 12, pp. 397-417.
- Slovin, M. B., S. A. Johnson and J. L. Glascock (1992): "Firm Size and the Information Content of Bank Loan Announcements". *Journal of Banking and Finance* 16, pp. 1057-71.
- Smith, C. W. (1986): "Investment Banking and the Capital Acquisition Process". *Journal of Financial Economics* 15, pp. 3-29.
- Steinhert, A. and C. Huvencers (1990): "Universal Banks: The Prototype of Successful Banks in the Integrated European Market? A View Inspired by the German Experience". Center for European Policy Studies, Financial Markets Unit, *Working Paper No. 2*.

- Stickel, S. (1986): "The Effect of Preferred Stock Rating Changes on Preferred and Common Stock Prices". *Journal of Accounting and Economics* 8, pp. 197-216.
- Talley, S. H. (1985): "Activity Deregulation and Banking Stability". *Issues in Bank Regulation* 9, pp. 32-8.
- Udell, G. F. (1986): "Pricing Return Check Charges under Asymmetric Information". *Journal of Money, Credit and Banking* 18, pp. 496-505.
- Wall, L. D. (1984): "Insulating Banks from Nonbank Affiliates". *Federal Reserve Bank of Atlanta, Economic Review* 69, pp. 18-28.
- Wall, L. D. and R. A. Eisenbeis (1984): "Risk Considerations in Deregulating Bank Activities". *Federal Reserve Bank of Atlanta, Economic Review*, May, pp. 6-19.
- Wallace, N. (1996): "Narrow Banking Meets the Diamond-Dybvig Model". *Federal Reserve Bank of Minneapolis, Quarterly Review*, Winter, pp. 3-13.
- White, E. N. (1986): "Before the Glass-Steagall Act: An Analysis of the Investment Banking Activities of National Banks". *Explorations in Economic History* 23, pp. 33-55.
- Yosha, O. (1995): "Information Disclosure Costs and the Choice of Financing Structure". *Journal of Financial Intermediation* 4, pp. 3-20.

1 Anthology of views

Table of Selected Papers

References	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
1 Acharya V.V., Cooley T.F., Richardson M.P. & Walker L.(2011)	Regulating Wall Street – The Dodd-Frank Act and the New		Book, Ekonomika Biblioteka Glasborgs University	Empirical & Theoretical reasoning	USA, N/A	Conflicts of interest, Too big to fail & Moral Hazard, Risk Impact, Recent Financial crisis, Recent regulatory reforms etc.	
2 Acharya, V.V., Cooley, T., Richardson M. Sylla, R & Walker, L.(2011)	The Dodd-Frank Wall Street Reform and Consumer Protection Act: Accomplishments and Limitations	Journal of Applied Corporate Finance	Article, Wiley Online Library	Theoretical reasoning	USA, N/A	Conflicts of interest, Too big to fail & Moral Hazard, Recent financial crisis, Recent regulatory reforms	DFA does not address all relevant and fundamental issues, it needs further work.
3 Akhigbe, A. Whyte, A.N.(2004)	The Glass-Steagall-Billy Act of 1999: Risk Implications for the Financial Services Industry	Journal of Financial Research	Article, Wiley Online Library	Empirical	USA, 1996- 2000	Too big to fail & Moral Hazard, Diversification, Risk Impact	Evidence of different risk changes For different institutions Securitized business increases risk for commercial banks
4 Ang, L.S, Richdamb, T.(1994)	The underwriting Experience of Commercial Bank Affiliates Prior to the Glass-Steagall Act: A Reexamination of evidence for Passage of the Act	Journal of Banking and Finance	Article, Science Direct (Elsevier)	Empirical	USA, 1926- 1934	Conflicts of interest, Risk Impact	No evidence of conflicts of interest. Commercial and investment bank issues do not differ in performance. National/State wide risk a good representation of banks in the 1920s hearings.
5 Aronjinnis(2010)	Recent Legislative and Regulatory Proposals	Real Estate Finance	Article, Business Source Premier (EBSCO)	Theoretical reasoning	USA, N/A	Recent regulatory Reforms	States implication of the DFA and Volcker rule
6 Biele, J., De Jonghe, O. & Vankat Venno, B.(2007)	Does the stock market value Bank diversification?	Journal of Banking and Finance	Article, Science Direct (Elsevier)	Empirical	Europe, 1989- 2004	Diversification, Risk Impact, Conglomerate Discount	Diversification increases market Value and systematic risk of banks, But increases unsystematic risk.
7 Barth, J. R., Brantingham Jr R.D., Whitney J.A.(2000)	The Repeal of Glass-Steagall and the Advent of Broad Banking	Journal of Economic Perspectives	Article, JSTOR	Theoretical reasoning	USA, N/A	Diversification, Risk Impact, Competition Between Institutions	Several potential benefits with a universal banking system, but also potential risk effects.

Table of Selected Papers

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
8	Baith, J.R., Caprio, G. & Levine, R. (2009)		Working Paper, Google	Empirical	International, N/A	Comparison between Countries regulations And its impact upon stability	Tiger restrictions upon securities Activities increase bank in efficiency And the likelihood of a financial Crisis Bank regulation in USA is too empirics to work efficiently.
9	Baith, J.R., et al. (2009)	CESifo Economic Studies	Article, Oxford Journals	Theoretical reasoning	USA, N/A	Recent financial crisis, Development of bank Regulation in the US	There is a wide range of banking structures and supervisory practices in different countries. However, USA and Japan are the only countries that not allow an universal banking system.
10	Baith, J.R., Nolle, D., & Reich, T. (1997)		Working Paper, Google	Theoretical Reasoning	International, (1997)	Comparison between Countries' regulatory	Argues that a universal banking system would not be more profitable and safer compared in a separated banking system.
11	Bernstein G.J. (1989)	Journal of Financial Services Research	Article, Emerald (EBSCO)	Theoretical Reasoning and review of empirical findings	USA, 1920-1989	Conflicts of interest, Moral hazard, Diversification, SRJ, Impact	Universal banking offers many benefits and few costs to U.S. consumers.
12	Burton, G.J. (1994)	Journal of Economic Perspectives	Article, JSTOR	Theoretical reasoning	International, N/A	Conflicts of interest, Diversification, Risk Impact, Market efficiency, Power, concentration	No evidence of conflicts of interest. IPOs listed by relationship banks performed similar to non-relationship banks issues.
13	Bonomi, B. & Schrems, C. (2009)	Journal of Financial Intermediation	Article, Emerald (EBSCO)	Empirical	USA, 1991-2000	Conflicts of interest	No clear evidence of conflicts of interest which adding an asset management division.
14	Bar, H., Yafah, Y. & Yoo, O. (2001)	Journal of Monetary Economics	Article, Science Direct (Elsevier)	Empirical	Israel, 1991-1995	Conflicts of interest.	No evidence of conflicts of interest. IPOs listed by relationship banks performed similar to non-relationship banks issues.

Table of Selected Papers

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
13	Bergers, A.H. & Humphrey, D.B. (1991)	Journal of Monetary Economics	Article, Science Direct (Elsevier)	Empirical	USA, 1984	Diversification, inefficiency	Most inefficiencies are equational in nature, involving the ownership of physical inputs, rather than financial
16	Bergers, A.H. & Humphrey, D.B. (1997)	European Journal of Operational Research	Article Science Direct (Elsevier)	Literature Study	International, N/A	Diversification, Risk Impact, Efficiency	No prohibition of evidence path for or against economics of scale in the financial sector.
17	Bessler, W., Stanzel, M. (2009)	European Financial Management	Article, Wiley Online Library	Empirical	Germany, 1997-2001	Conflicts of interest	Evidence of conflicts of interest. Analysis of universal banks tend to produce inaccurate and positively biased stock recommendations.
18	Garns, A.J., Dieckmann, J.A., Dridrovitz, M.L. (2002)	The McKinsey Quarterly	Article, Business Science Premier (EBSCO)	Theoretical Reasoning	USA, 1995-2001	Diversification, Impact upon investment banks' business from the CEJA	Universal & Commercial banks put competitive pressure upon investment banks, and take market shares.
19	Colaninri, C.W. (2010)	Oxford Review of Economic Policy	Article, Oxford University Press	Theoretical Reasoning	USA, 1929-2010	Recent financial crisis, Recent regulatory Reforms, Diversification, Self-interest incentives	Family incentives played a role when structuring the USA. Political entrepreneurs take advantage of crisis for self-interest purposes.
20	Carpill, V.F (1986)	Challenge	Article, Business Science Premier (EBSCO)	Theoretical reasoning	USA, NA	Conflicts of interest, Moral hazard, Diversification	A repeal is premature. At first we should deal with falling banks and thrifts, and then redesign deposit insurance to limit risk-taking and to bolster market discipline.
21	Chambers-Jones, C. (2011)	Business Law Review (UK)	Research Paper, Business Science Premier (EBSCO)	Theoretical reasoning	UK, N/A	Too big to fail & Moral hazard, Recent financial crisis, Recent regulatory reforms	Even though the Vickers Report has been criticized for not going far enough, it is a step in the right direction

Table of Selected Papers Reference

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
22	Cornell, M.M., Ota, E.A. & Talarmin H. (2003)	Journal of Finance	Articles, JSTOR	Empirical	USA, 1987-1997	Diversification, Risk impact	Banks diversifying through Section 20 affiliates performed better with little change in risk.
23	Cyree K.B.(2000)	Journal of Economic and Business	Articles, Science Direct (Elsevier)	Theoretical	USA, 1990s	Conflicts of interest, Diversification, Risk Impact	Commercial banks attain higher Aloncoral returns due to increased securities activities (Section 20). Banks that diversify will insist likely Outperform smaller non-diversified Competitors.
24	Gajownik K. Klein, I. S.(2004)	The Financial Review	Articles, Wiley Online Library	Empirical	USA 1996-1999	Diversification, Market Value impact	Commercial banks are favored due most from deregulation.
25	De Jonghe, O. (2010)	Journal of Financial Intermediation	Articles, Science Direct (Elsevier)	Empirical	Europe, 1992-2007	Diversification, Risk Impact, Too big to fail & Moral hazard, Recent financial crisis	Bank diversification into noninterest income increases banks' systematic risk exposure and thereby reduces banking system stability.
26	DeYoung, R. & Roland, K.P.(2001)	Journal of Financial Intermediation	Articles, Science Direct (Elsevier)	Empirical	USA, 1988-1995	Diversification, Risk impact	Bank diversification into noninterest income increase revenue volatility (risk) but an increase in profitability partially compensates for this.
27	Ecklow, B.E.(2009)	CEISIS DICE Report	Report, CEISIS	Theoretical Reasoning	USA, Norway, Sweden, (1990-2000)	Recent financial crisis, Bailout strategy	The US government should look to the Scandinavian style when bailing out banks.
28	Blum, R., Hockerts, A. & Heldmann, M. (2010)	Journal of Banking & Finance	Articles, Science Direct (Elsevier)	Empirical	Austria, Canada, France, Germany, Italy, UK, USA, Spain, Switzerland 1996-2008	Diversification, Recent financial crisis, Conglomerate discount	Evidence that diversification does not reduce shareholder value but rather improves bank profitability and thereby, indirectly, value.

Table of Selected Papers

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time frame	Topic(s)	Results
29	East, B. (2003) The transition of German Universal banks	Journal of International Banking Regulation	Articles, Klaus Law International	Theoretical reasoning	Germany, N/A	Conflicts of interest, Power concentration	There has been clear conflicts of interest and high concentration of financial power in German universal banks. Shows that extra risk-taking will wipe out diversification benefits within financial conglomerates.
30	Fracan, X. Lanzetta, G & Morrison, A. (2007) Regulating financial Conglomerates	Journal of Financial Intermediation	Article, Science Direct (Elsevier)	Theoretical Reasoning	N/A	Diversification, Risk Impact, Moral hazard	Section 2B affiliates were beneficial for commercial banks, and that BHC's expanding into securities activities were more diversified and less likely to fall relative to commercial and investment banks.
31	Geyrhofer, V (2010) Commercial Banks and Securities Underwriting: The Impact on Risk, Return and Diversification	Journal of the Northeastern Association of Business, Economics and Technology	Article, Business Source Premier, (EBSCO)	Empirical	USA, 1990-1999	Diversification, Risk, Impact	Increased participation in investment banking was associated with higher total and idiosyncratic risks and no significant change in systematic risk.
32	Geyrhofer, V & Vaupel, T.J. (2009) On the Riskiness of Universal Banking: Evidence from Banks in the Investment Banking Business Pre- and Post-OLGA	Journal of Money, Credit and Banking	Article, Business Source Premier (EBSCO)	Empirical	USA, 1990-2007	Diversification, Risk Impact, Recent financial crisis	Concludes that the key Recommendation of the Vickers Report only goes mid-way in securing the twin objectives of stability and safety that the Report has set out to achieve.
33	Ghosh, S. & Paulank, S. (2012) The Independent Banking Commission (Vickers) Report: squaring the circle?	International Journal of Law and Management	Article, Emerald Insight	Theoretical reasoning	UK, N/A	Too big to fail, Recent financial crisis, Recent regulatory reforms	Banks have grown Too Big To Fail and they should face more regulations, CBA should be reexamined.
34	Grant J.K. (2010) What the financial services industry gets together let us person put as under: how the Glass-Steagall Act contributed to the 2008-2009 American capital market crisis	Albany Law Review	Article, Emerald, Online	Theoretical reasoning	USA, N/A	Conflicts of interest, Too big to fail & Moral hazard, Diversification, Risk impact, Recent financial crisis	

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Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Remarks
35	Graetz, I.(2009)	The CPA Journal	Article, Business Source Premier (EBSCO)	Theoretical reasoning	USA, N/A	Conflicts of interest, Moral hazard	Banks should not be able to play With deposits to risky business, bring back the GSA!
36	Hebb, G.M. & Friesz, D.R.(2003)	Journal of Banking and Finance	Article, EconLit (EBSCO)	Empirical	Canada 1987, 1997.	Conflicts of interest	No evidence of conflicts of interest. Commercial and investment bank issues do not differ in performance.
37	Hebb, G.M. & Friesz, D.R.(2003)	Quarterly Journal of Business & Economics	Article, EconLit (EBSCO)	Empirical	UK, 1986, 1997.	Conflicts of interest	No evidence of conflicts of interest. Commercial and investment bank issues do not differ in performance.
38	Herring, H.J. Santomero, A.M. (1999)	Journal of Financial Services	Article, Business Source Premier (EBSCO)	Theoretical Reasoning	Mainly USA, N/A	Conflicts of interest Diversification, Risk Impact, Moral Hazard, Power concentration	Universal banking may pose several concerns of variable significance. But these may differ in different economies. The Volcker rule needs to define proprietary trading
39	Hopkins, C & Hezak, D.(2011)	Investment Dealers' Digest	News Article, Business Source Premier (EBSCO)	Theoretical reasoning	Mainly USA, N/A	Conflicts of interest	Evidence of conflicts of interest. Universal banks that have an asset management division tend to utilize Institutional funds and information advantages to get more underwriting business.
40	Johnson, W.C., Maxwell-Wedberg, J. (2009)	European Financial Management	Article, Wiley Online Library	Empirical	USA, 1997, 1998	Conflicts of interest	Shows that economists of scope, but also conflicts of interest run arise when combining (commercial and) investment banking.
41	Kamstra, G & Qi, J.	Journal of Money, Credit and Banking	Article, JSTOR	Theoretical Reasoning	N/A	Conflicts of interest, Diversification	

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Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
42	Kaiz, J.K. & Liu, W.J. (2007)	Journal of Financial Economics	Article, Fiscalit (EBSCO)	Empirical	Japan, 1995-1997	Conflicts of interest	Evidence of conflicts of interest.
43	Kroszner, R.S. (1998)	Journal of Applied Corporate Finance	Article, Wiley Online Library	Theoretical reasoning	USA, N/A	Conflicts of interest, Moral hazard, Intercorrelatedness	Market forces, rather than regulation, can deal with conflicts of interest
44	Kroszner, R.S. & Rajan R.G. (1994)	The American Economic Review	Article, JSTOR	Empirical	USA, 1992-1940	Conflicts of interest, Diversification	No evidence of conflicts of interest. Commercial banks did not try to mislead the public into investing in poor securities.
45	Kroszner, R.S. & Rajan, R.G. (1997)	Journal of Monetary Economics	Article, Science Direct (Elsevier)	Empirical	USA, 1925-1928	Conflicts of interest, Organizational structure	No evidence of conflicts of interest. 'Classical bank' in-house securities departments underwrote higher quality (lower risk) issues than outside securities affiliates.
46	Kroszner, R.S. & Strahan P.E. (2011)	The American Economic Review	The American Business Source Premier (EBSCO)	Theoretical reasoning	USA, 1930-2011	Recent financial crisis, Recent regulatory reforms, Intercorrelatedness	Regulatory reform should not turn back the clock but instead improve the stability of this interconnected financial system by stabilizing regulatory arbitrage and strengthening transparency
47	Lamman, L. & Levos, R.E. (2007)	Journal of Financial Economics	Article, Science Direct (Elsevier)	Empirical	USA, 1998-2002	Conflicts of interest, Diversification, Risk impact, Conglomerate diversification	Diversification lowers market value of financial institutions. Evidence of a conglomerate dividend
48	Lindbeck D. (2012)		Research Paper, The Swedish Parliament	Theoretical reasoning	N/A	Too big to fail & Moral hazard, Request financial crisis, Recent regulatory reforms	

Table of Selected Papers

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
49	Mannat, A. Hassan, M.K. & Moinany, N. (2005)	Journal of Business, Finance & Accounting	Article, SSRN	Empirical	USA, 1990-2000	Diversification, Risk impact	Banks have after the GLBA experiment a decrease in systematic risk due to diversification opportunities.
50	Mayer, D.G. (2009)	CESifo	Working Papers, SSRN	Theoretical Reasoning	USA, UK, NZ, & Some other European Countries, 2010-2009	Conflicts of interest, Too Big to fail & Moral Hazard, Recent financial crisis, Bailout strategy	Regulatory reform practices differ throughout the world. Discusses the resolution methods in the UK, US and NZ
51	Seale, F.R., Peterson Drake, P & Clark, S. P. (2010)	The B.E. Journal of Economic Analysis & Policy	Article, Ebsco, Electronic Press	Empirical	USA, 1995-2007	Diversification, Risk impact	An overall positive reaction in share prices for firms in the financial services industries, and the systematic risk for financial institutions increased and converged
52	Marvin S.D. (2010)	Journal of Financial Services Marketing	Article, Business Source Premier (EBSCO)	Theoretical Reasoning	USA, 1920's and 2010's	Too big to fail & Moral Hazard, Recent financial Crisis, Recent regulatory Reforms	After the passage of the GLBA, A re-introduction of Glass-Steagall Type legislation, in an updated form, would appear to be unnecessary given the high level of sophistication of today's institutional investors and due to the global banking arena. Bank underwritten issues defaulted less than non-bank underwritten issues.
53	PUBL. no. (1994)	Journal of Banking and Finance	Article, Science Direct (Elsevier)	Empirical	USA, 1927-1929	Conflicts of interest	No evidence of conflicts of interest. Bank underwritten issues defaulted less than non-bank underwritten issues.
54	Ramirez, C.D. (1989)	Journal of Economic History	Article, JSTOR	Empirical	USA, 1926-29 1936-39 1955-59	Diversification, Moral hazard, Cost of financing	The GLBA increased the cost for corporations raising external funds for investment spending.

Table of Selected Papers

Reference	Title	Journal	Type & Publication	Research Approach	Settings & Time Period	Topics	Results
55	Randirez, C.D. (2002)	Journal of Money-Credit and Banking	Article, JSTOR	Empirical	USA, 1926-1928	Conflicts of interest, Diversification, Market Value Impact	Glass-Steagall Act, by disallowing banks' involvement in the securities industry, had a direct cost in lost market value for the commercial banking industry. Evidence indicates that the Staff's Vote was significantly influenced by important interest groups
56	Randirez, C.D. & De Long, J.B. (2001)	Public Choice	Article, EconLit (EBSO)	Empirical	USA, 1900-1933	Why the GISA was enacted, Staff interest incentives	Evidence of large relative cost and profit inefficiencies in Swiss banks
57	Rime, B., Strieth, K.J. (2003)	Journal of Banking and Finance	Article, Science Direct (Elsevier)	Empirical	Switzerland, 1995-1999	Diversification, Efficiency	Argues that the GISA should be repealed and that universal banking should be allowed in the US
58	Saunders, A & Walter, J. (1994)	-	Book, Elsevier, Cambridge University	Empirical & Theoretical Remaining	USA, N/A	Conflicts of interest, Too big to fail & Moral Hazard, Diversification, Risk Impact est.	Diversification and financial conglomerates lower market value. Evidence of conglomerate discount
59	Schaud, M & Walter, J. (2009)	Journal of Financial Intermediation	Article, Science Direct (Elsevier)	Empirical	USA, 1985-2004	Conflicts of interest, Diversification, Risk Impact, Conglomerate Discount	Today's financial system should be replaced by a more extensive and the repeal of the GISA to some extent had an impact upon the recent financial crisis.
60	Stiglitz, J.E. (2009)	-	Book, chapters, Google	Theoretical Remaining	USA, 1999-2009	Recent financial crisis, Risk Impact, Intermediation, Financial regulation	

Table of Selected Papers

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time frame	Topic(s)	Remarks
61	Stiglitz, J.E.(2010) The Financial Crisis of 2007-8 and its Macroeconomic Consequences	-	Book chapter Article, GLNDA	Theoretical Reasoning	USA, N/A	Conflict of interest, Too Big to fail & Moral Hazard, Diversification, Recent financial crisis, Future regulations	To make crisis less frequent and less severe in the future, we have to think more deeply about the causes of the crisis. Regulatory frameworks should be designed to address the underlying problems.
62	Stiglitz, J.E.(2010) Lessons from the Global Financial Crisis of 2008F	Scott Journal of Economics	Article, EconLit (EBSCO)	Theoretical Reasoning	USA, N/A	Too big to fail & Moral Hazard, Recent financial crisis, Risk impact, Future regulations	Argues that regulations upon banks. And financial institutions are Necessary and the only way to go.
63	Strooth, K.(2006) A Portfolio View of Banking With Interest and Noninterest Activities	Journal of Money, Credit and Banking	Article, JSTOR	Empirical	USA, 1997-2004	Diversification, Risk impact	Diversification that generates Noninterest income does not lead to Higher returns, but increases all risk Measures.
64	Strooth, K.J.(2004) Diversification in Banking: Is Noninterest Income the Answer?	Journal of Money, Credit and Banking	Article, JSTOR	Empirical	USA, 1978-2001	Diversification, Risk impact	Little evidence that the shift into noninterest income provides diversification benefits for banks
65	Strooth, K.J.Ruehlitz, A.(2006) The dark side of diversification: The case of US financial holding companies	Journal of Banking and Finance	Article, Science Direct (Elsevier)	Empirical	USA, 1997-2002	Too big to fail & Moral Hazard, Diversification, Risk impact	Diversification benefits between FHCs are more than offset by the More risky non-interest activities, which are quite volatile but not more profitable
66	Taberok, A.(1998) The Separation of Commercial and Investment Banking: The Morgan vs. The Rockefellers	Quarterly Journal of Austrian Economist	Article, Google	Theoretical Reasoning	USA, N/A	Self interest incentives	Argues that the USA can be better understood as an attempt by the Rockefeller banking through its rise The costs of their rivals, the House of Morgan.

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Reference	Title	Journal	Type & Database	Research Approach	Settings & Time frame	Topic(s)	Results
67	Tinoco, LA (2010) Financial Legislation: The Promise and Record of the Financial Modernization Act of 1999	-	Book Chapter, Springerlink	Theoretical reasoning	USA, N/A	Too big to fail, Recent Financial crisis, Recent Regulatory reforms	Discusses connections between the enactment of the GLBA and the recent financial crisis.
68	Troppeau, J.D.(2011) Financial Regulation After the Crisis - Where Do We Stand?	International Journal of Political Economy	Article, Business Source Premier (EBSCO)	Theoretical reasoning	USA, Europe, N/A	Risk Impact, Recent financial crisis, Recent Regulatory reforms	New regulations from USA & Europe Are similar but differ on the Volcker rule.
69	Uzral, M.D.(2000) Bank regulations of investment dealers: Canadian evidence and implications for Glass-Steagall reform	Empirical Economics	Article, Econlit (EBSCO)	Empirical	Canada, 1987-1994	Divertification	Crisis for issue hampered by a bank-revised underwriter are lower than those indexed by an independent underwriter. Indicates the availability of accounts of scope when combining underwriting with commercial banking.
70	Volcker P.A.(2008) Rethinking the Digital New World of Global Finance	International Finance	Article, Wiley Online Library	Theoretical reasoning	USA, N/A	Recent financial crisis, Future regulations	Calls for a global perspective when regulating financial markets.
71	Wagner W.(2010) Diversification of financial institutions and systemic crisis	Journal of Financial Intermediation	Article Science Direct (Elsevier)	Theoretical reasoning	N/A	Diversification, Risk Impact	Shows that diversification reduces each institution's individual probability of failure, but it makes systemic crisis more likely

Table of Selected Papers – Part 12

Reference	Title	Journal	Type & Database	Research Approach	Settings & Time focus	Topic(s)	Results
72	White, E.S.(1986)	Explorations in Economic History	Article, Science Direct (Elsevier)	Empirical	USA, 1916-1933	Diversification, Conflicts of Interest, Risk Impact	Conclusion that, separation of banking activities is unwise and puts a burden on the financial industry.
73	White, L.J.(2010)	Suffolk University Law Review	Article, Hein Online Law Library	Theoretical reasoning	USA, N/A	Recent financial crisis, Recent & future regulatory reforms	Argues that the GLBA was not responsible for or did not contribute significantly to the recent financial crisis.
74	Wheat, A. & Moeninghoff, J.C. (2011)	Review of Economic Finance	Article, Google	Theoretical reasoning	International, N/A	Too big to fail & Moral Hazard Harvard, Recent financial Crisis, Recent regulatory Reforms, Internationalization	Argues that there are huge problems with the TBTU doctrine.
75	The Financial Services Modernization Act: Evolution or revolution?	Journal of Economic and Business	Article, Science Direct (Elsevier)	Empirical	USA, 1996-2004	Diversification	Spargues between commercial banking, insurance underwriting and merchant banking are weak. Synergies between commercial and investment banking are much stronger but were most likely captured in the 1990s due to Section 20 affiliates.