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**“Ring- Fencing of Investment Banking –
Consequences and Critical Evaluation of the k ı Proposal”**

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Summary

The recent financial crisis triggered by the subprime crisis in the US is the heaviest financial crisis since the dot-com crisis in 2000. The financial sector evolved significantly in the years leading up to the crisis and the regulatory framework did not keep up with this changes. Therefore, a considerable number of reforms were put in place.

While regulatory reforms show a great progress towards a more stable financial system, the risks that systemically important financial institutions entail are far from being stemmed. Against this background a debate on structural reform erupted and the European Commission mandated a high-level Expert Group to consider whether there is a need for structural reforms of the EU banking sector or not.

The Expert Group chaired by Erkki Liikanen recommended further reforms targeting especially the structure of European banks. While necessary reforms were already implemented and important initiatives were set up, the Expert Group proposed to ring-fence the investment banking activities within a banking group.

Ring-fencing of investment banking has implications that contribute to financial stability. However, it is important to assess in-depth the consequences of this proposal and a stand-alone basis and its cumulative impact with other reforms. There are no impact assessments available which makes it highly challengeable to evaluate the Expert Group proposal. Using the data and analysis that are currently available, this paper argues that ring-fencing of investment banking may deliver few net benefits that may contribute to a more stable and resilient financial system. The reason is that in particular bank structure is not the main driver of the financial crisis and therefore overregulation through structural reform may harm the real economy and lead to stagnation.

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II List of Abbreviations

ABS	Asset-backed securities
CCP	Central Counterparty
CDS	Credit default swap
CRD	Capital Requirements Directive
CSFI	Centre for the Study of Financial Innovation
ECB	European Central Bank
EMU	European Monetary Union
FSA	Financial Services Authority
GDP	Gross domestic product
IMF	International Monetary Fund
LTRO	Longer term refinancing operations
NOHC	Non-operating holding company
OTC	Over-the-Counter
RMBS	Residential mortgage-backed securities
SIFI	Systemically important financial institution
SIV	Structured investment vehicle
SME	Small and medium-sized enterprises
SPV	Special purpose vehicle
TBTF	Too-big-to-fail
TITF	Too-important-to-fail

1 Introduction

1.1 Research problem

The U.S. subprime crisis in 2007 was the starting point in a series of different interlinked financial shock waves that resulted in a substantial political and economic confidence crisis in Europe.[1] The banking sector and in particular global financial institutions are playing a key role in these financial troubles. Business activities of banks and other financial institutions evolved significantly. There are four key developments leading up to this crisis, namely 1) changes in growth and size of the banking sector, 2) changes in structure of aggregate banks' balance sheets, 3) increase of international business activity, and 4) sector consolidation and the emergence of universal banks.[2] These pre-crisis developments in the European banking sector were significant and ended up creating financial institutions that are too-big-to-fail (TBTF). The TBTF issue describes the fact that governments committed to bailout large and complex financial institutions if their failure would cause higher economic costs than their bailout.[3] To address this problem a considerable number of regulatory reforms was put in place.

The reforms pursued to date focused on risk identification, measuring and countering as well as on optimization of banks risk management. The objective of further reforms is to establish a safe, stable, and efficient banking system serving the needs of the citizens, the EU economy and the internal financial market.[4] In other words, the European Commission seeks to build up a banking system that represents financial stability and resilience. Therefore the Commission mandated a high-level Expert Group to identify the need for structural reforms. In order to articulate appropriate recommendations, the Group was asked to pay special attention to certain specifications defined by the European Commission including the reduction of moral hazard and risks of the banking system as a whole.[5] "*Moral hazard is where one party is responsible for the interests of another, but has an incentive to put his or her own interests first*." [6] Moral hazard arises when a financial institution becomes TBTF and consequently its failure can threaten the stability of the entire financial system. This is the

[1] See ECB: Monthly Bulletin May 2010, 2010, p. 95
[2] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp. 11-19.
[3] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p. 3.
[4] See "High-level Expert Group on reforming the structure of the EU banking sector – mandate", 2011.
[5] Ibid.
[6] See Dowed: Moral Hazard and the Financial Crisis, 2009, p. 142.

case when financial institutions misuse their TBTF status taking higher risks and profiting from creditors and credit agencies that may not price the full risk of lending. The reason is that if these financial institutions get into trouble, governments often provide funds to prevent a failure or guarantees to protect uninsured creditors, which validates the perceptions of their TITF status.[7]

While deleveraging and risk reduction was the major focus of regulatory reforms so far the Expert Group proposed further actions in five areas, including structural reform. A mandatory separation of investment banking of commercial and retail banking is focused in this paper. The separation aims to establish banking groups, especially their deposit-taking and hence most socially vital parts, that are safer and less connected to high-risk trading activities.[8] The idea behind it is to make banks easier to break up and consequently to limit the burden for governments. By splitting these activities into separate legal entities, the Group expects to significantly decrease banks' complexity and interconnectedness. Consequently, market discipline and supervision would be facilitated which applies to recovery and resolution as well.[9]

While the recommendation sounds promising to me the Group seems to have disregarded past lessons and left out some essential aspects. The Group identified specific trading activities as riskiest parts of banks which have to be separated from supposedly safer deposit-taking parts of banks, forgetting that even plain investment banks (e.g. Lehman Brothers) or plain retail banks (e.g. Northern Rock) failed as well.[10]

This raises the question of whether the separation of the investment banking on its own is an effective measure to establish a resilient banking system in the European Union or if it will not contribute to financial stability in any significantly better way than the reforms already put in place.

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[7] See Ötker-Robe et al.: The Too-Important-to-Fail Conundrum: Impossible to Ignore and Difficult to Resolve, 2011, p.3.
[8] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. i.
[9] Ibid, p. ii.
[10] See THE ECONOMIST: The Liikanen review - Into the ring, October 6th 2012.

1.2 Course of investigation

This paper is structured as follows.

Chapter 2 provides an insight into the context by demonstrating developments in the European banking system leading up to the crisis. This section also gives a brief summary of the different interconnected crisis and deals with current bank restructuring going forward in the EU to minimize risks on financial system stability. Chapter 2 closes with a brief summary of the remaining structural weaknesses of the European banking sector and gives an insight into the universal banking model.

Chapter 3 deals with the proposal made by the Expert Group. It starts with the mandate awarded by the European Commission and briefly describes the recommended five action areas. This paper focuses on the proposal of a mandatory separation of proprietary trading and other significant trading activities. Therefore, this section specifies banking activities that have to be operated inside and outside the ring-fence, and highlights the specific objectives of a mandatory separation.

Chapter 4 assesses the effectiveness of the proposal and reviews it. It deals with the some main consequences of a legal separation. This section also discusses five aspects of the proposal that I think are questionable. Firstly, the risk identification issue which deals with the approach of separating the riskiest parts of a bank. Secondly, the definition issue that deals with the challenge of drawing a clear line between permitted and prohibited activities. Thirdly, the misleading issue discusses the limitation of the market mechanism and assesses the reforms' encouraging effect on banks to keep some risky businesses in the retail entity. And finally, the last two sections assess the competition issue and the challenges of implementation.

Chapter 5 draws together the key aspects of the previous sections and offers a brief answer to the research problem. This paper closes with a critical reflection.

2 Developments in the European Banking Sector

2.1 Developments leading up to the crisis

Particularly after 2000, the financial landscape and financial business models changed significantly leading up to the crisis. The banking sector has significantly grown during the last decade. Progress in technology and reduction of regulatory and legal barriers caused operational efficiencies and consequently led to increased cross-border activities of banks.[11] The rapid growth was fueled by low interest rates and highly complex financial products. The latter allowed banks to expand their on- and off-balance sheet activities without equally increasing deposits.[12] In 2010 the European banking sector assets made up 349% of EU GDP whereas US banking sector assets accounted for only 80% of US GDP. By international comparison the European banking sector is large which consequently shows the greater dependence on bank intermediation within the European economy.[13]

During the financial globalization a large number of international financial groups emerged. These Universal banks have globally built branches and subsidiaries allocating centralized funds within the financial group.[14] But, the recent crisis challenged this concept of centralized capital and liquidity management of internationally active banks and led to discussions regarding the structural and regulatory framework of the European banking system.[15]

Besides extending international activities banks also expanded their business fields turning away from traditional banking to high-risk trading activities. The typical intermediation process of banks consisting of deposit-taking and granting loans, underwriting stocks and bonds, providing advisory services as well as asset and wealth management services became less important. While these activities faded from banks focus, trading activities took on greater significance, such as dealer and market making activities, broker activities for professional investors and hedge funds, and proprietary trading.[16] Banks pooled, underwrote and sold issued loans as asset backed securities (ABS), rather than fund and hold until maturity. Consequently,

[11] See de la Mata Muñoz: The future of cross-border banking after the crisis, 2010, p. 5.
[12] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 13.
[13] Ibid, p. 12.
[14] See de la Mata Muñoz: The future of cross-border banking after the crisis, 2010, p. 6.
[15] See Cerutti et al.: Bankers without Borders? Implications of Ring-Fencing for European Cross-Border Banks, 2010, p. 4.
[16] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 13.

there was a shift from an originate-to-hold to an originate-to-distribute business model.[17]

The increasing importance of the securitization market led up to a shadow banking system created by special purpose vehicles (SPVs) and structured investment vehicles (SIVs). While the shadow market stayed largely outside the scope of bank regulation different types of ABS were used for intermediation of credit outside the strict bank regulation.[18] Today these ABS positions with subprime underlings are known as "toxic assets" which have appeared in the exposures of most banks.[19]

Additionally, banks successfully avoided regulation by building up significantly large derivative positions using the over-the-counter (OTC) market instead of the regulated exchange-traded market which resulted in increasing counterparty risk and interconnectedness of the banking system.[20] In August 2007, when such off-balance vehicles ran into liquidity problems, the financial crisis erupted and quickly spread internationally.[21]

The shifting of activities was also reflected on banks' balance sheets. On the asset side there were decreased customer loans and increased interbank lending. Consequently banks earned lower net interest income and higher non-interest income, such as fees and commissions. On the capital side there were increasingly thin equity and rising debt showing highly leveraged banks with lower resilience and reduced ability to withstand shocks and absorb losses.[22] These balance sheet mismatches combined with high leverage and very rapid growth of financial institutions are proven indicators for financial instability.[23]

These pre-crisis developments created financial institutions that are too-big-to-fail and too-interconnected-to-fail involving a high risk of contagion and leaded up to interconnected crisis waves.[24] The ensuing financial crisis revealed that financial sector

[17] See Poschmann: The Shadow Banking System - Survey and Typological Framework, 2012, p.3.
[18] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 14.
[19] See ECB: The Great Financial Crisis, 2010, p. 7.
[20] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 14.
[21] See ECB: The Great Financial Crisis, 2010, p. 7.
[22] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp. 14-16.
[23] See ECB: The Great Financial Crisis, 2010, p. 8.
[24] See Krahnen: Comment on the European Parliament Draft Report on the proposal for a recovery and resolution directive, 2012, p.1.

regulations, risk assessments, and resolution authority did not keep up with these changes.[25]

2.2 Interconnected Crisis Waves

The U.S. subprime crisis in 2007 was the starting point in a series of interlinked financial shock waves that reached the level of a substantial confidence crisis in Europe.[26] This global financial crisis has undergone five different stages: 1) the subprime crisis, 2) the systemic crisis, 3) the economic crisis, 4) the sovereign crisis, and 5) the crisis of confidence in Europe.[27]

The entire ABS market across the globe collapsed during the subprime crisis. The Underlying of these investments were in particular subprime mortgages, which were pooled, packaged, and sold as highly rated residential mortgage-backed securities (RMBS). Credit default swaps (CDS) helped to spread RMBS globally. When borrowers became unable to repay their mortgages and the US house prices dropped, a widespread weakness of the credit default swaps were triggered.[28] The consequences for banks were significant write-downs and a liquidity squeeze caused by the loss of trust between financial institutions and consequently stagnation in the interbank market.[29]

In September 2008, the collapse of the US investment bank Lehman Brothers triggered the second stage of the global financial crisis. After investors lost their trust in banks, prices of bank stocks and hybrid capital fell significantly and the liquidity shortage intensified. The US government became the lender of last resort as banks could not access either short- or long-term funding.[30] This systemic crisis caused central banks to provide large liquidity injections to keep the financial system afloat. Governments had to take equity stakes in failing banks and provide guarantees for newly issued debt to prevent any further collapse in the banking sector. The systemic crisis helped to expose weaknesses of international payment systems, as well as the lack of sufficient deposit guarantee schemes. Furthermore, modern risk management

[25] See Ötker-Robe et al.: Impact of Regulatory Reforms on Large and Complex Financial Institutions, 2010, p. 7.
[26] See ECB: Monthly Bulletin May 2010, 2010, p. 95.
[27] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 4.
[28] See Markose: Systemic Risk from Global Financial Derivatives, 2012, p. 4.
[29] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 5.
[30] Ibid, p. 6.

tools turned out to be pro-cyclical and hence in times when basis risk went up sharply the hedging strategy of many investment banks did not come off.[31]

2009 turned out to be a better year for banks. The price rebound on financial markets helped banks to recover and many of them even started to make high profits again. This positive development, however, did not reflect the situation of the real economy and public finances. The troubles in financial intermediation during the systemic crisis had a massive negative effect on the global economy, in particular on world trade and led to overall decreasing global economic growth. Against this background governments pursued a Keynesian economic approach by increasing government spending to support the economy and consequently avoid a global depression.[32] The bail out of financial institutions, stimulus spending and the automatic stabilizers contributed to a significant increase in public debt levels.[33]

As of 2010 high sovereign debt levels became a serious problem in Europe. The next crucial event of the global financial crisis took place when the Greek government had to be rescued by the EU and its other Member States, as well as the International Monetary Fund (IMF). Combined these organizations lent Greece 110bn Euro to refinance their massive sovereign debt levels.[34] Mistrust started to spread in the financial markets when investors assumed that most of the sovereign debt was held in the portfolios of European banks and disinvested from European financial stocks. Rating agencies downgraded a number of EU Member States (see Figure 1).[35] Consequently the share prices declined and again debt capital markets closed for most of the European banks. Many banks responded by deleveraging their balance sheets and restricting credit supply. The tension in the European financial markets were eased through the European Financial Stability Fund, increased capital requirements, and the European Central Banks (ECB) three-year long term refinancing operation (LTRO) measures. The sovereign debt crisis revealed the linkage between governmental debt and bank solvency.[36] Within the European Monetary Union (EMU) sov-

[31] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 7.
[32] See Smeets: Zum Stand der Staatsschuldenkrise in Europa, 2012, p. 6.
[33] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp. 7-8.
[34] See Smeets: Zum Stand der Staatsschuldenkrise in Europa, 2012, p. 6.
[35] See Deutsche Bundesbank: Schulden drohen Finanzstabilität, 2012, p. 18.
[36] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp. 9-10.

ereign risk is directly transferred to European banks through public sector receivables cross-border interbank markets.[37]

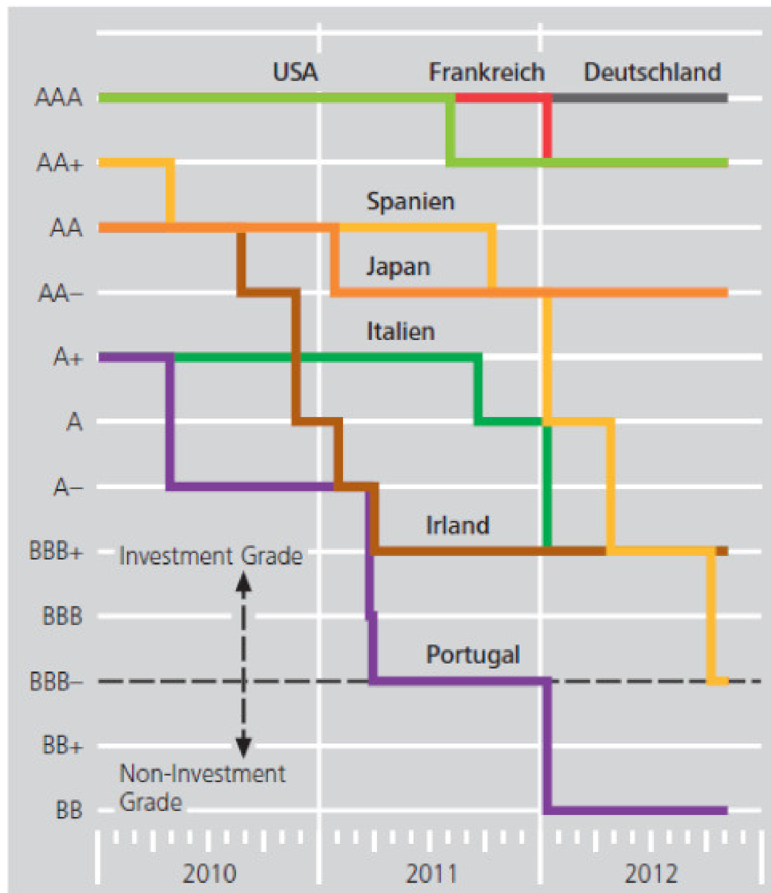

Figure 1: Long-term Credit Ratings

Source: Deutsche Bundesbank, Finanzstabilitätsbericht, 2012, p. 19.

Today increasing sovereign debt levels are still one of the main risk factors for financial stability. Further rescue packages for European banks led to higher debt levels of governments. Discussions about further fragmentation of the EMU came up and a crisis of confidence in Europe broke out. [38] Decreased cross-border credit flows, banks returning their focus on home markets and domestic lending, as well as regulators focusing on national financial stability are indicators declining trust and confidence within Europe. In order to bring back trust and confidence in the EMU policymaker set out further steps towards a single European economic and monetary union. The latest developments improved the financial market sentiment but a number

[37] See Deutsche Bundesbank: Finanzstabilität 2012 im Überblick, 2012, p. 11.
[38] See Deutsche Bundesbank: Schulden drohen Finanzstabilität, 2012, p. 20.

of key weaknesses of the European banking sector remained and endanger EU financial system stability.[39]

2.3 Reforms and Structural Weaknesses of the Financial Sector

The global financial crisis revealed deep structural weaknesses of the European financial system. Up to now regulatory approaches were mainly from a micro-prudential perspective, whereas a macro-prudential view was largely left out of consideration. If financial institutions are large enough and significantly interconnected they may become systemically important and may cause micro-prudential concerns that can have macro-prudential consequences. [40] Therefore, the latest regulatory initiatives focused on systemic risks and aimed at minimizing three main risks to financial system stability.[41]

One of the main risks is the pro-cyclicality of the current financial system. The introduction of Basel III into European law (the so-called CRD IV package) enabled national authorities to restrict pro-cyclical risk taking.[42] The financial crisis showed that the Basel II requirements were insufficient thus new rules, requiring banks to hold more of high quality capital, were set up. With the CRD IV package a common definition for own funds of banks was specified. Furthermore, capital requirements were increased from 2.0% to 7.5% and a conservation and countercyclical buffer were implemented (see Figure 2).[43] The latter is considered to be one of the most important instruments to soften the pro-cyclicality of the former capital regulation.[44] Consequently, financial institutions have to maintain roughly four times higher common capital as before Basel III.

[39] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 11.
[40] See Lumpkin: Risks in Financial Group Structures, 2011, p. 14.
[41] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 82.
[42] Ibid.
[43] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp.68-69.
[44] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 82.

Basel III changes on common capital requirements		
	Before	After
Minimum common equity	2.0%	4.5%
+		
Capital conversation buffer	0.0%	2.5%
Total	2.0%	7.5%
+		
Countercyclical buffer	0.0%	2.5%

Figure 2: Basel III changes on common capital requirements

Source: Compiled by author based on Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.69.

The increased over-the-counter (OTC) derivative positions of banks were one of the factors influencing the emergence and scope of the financial crisis and are another major risk to financial system stability.[45] In order to limit the risk of contagion emanated from OTC derivatives the European Market Infrastructure Regulation (EMIR) was implemented.[46] OTC transactions were unregulated so far and mostly unsecured. [47] With EMIR OTC derivatives have to be collateralized and standardized transactions cleared by Central Counterparties (CCPs). CCPs interject themselves between the trading parties and assume the counterparty risk. Information on non-standardized derivatives will be collected by trade repositories to increase transparency for regulators.[48]

The third focus of regulators is the too-big-to-fail issue which describes the problem with failing systemically important financial institutions (SIFIs) which had to be bailed out by governments to avoid a possible collapse of the whole financial system (also

[45] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 82.
[46] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.74.
[47] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 82.
[48] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.74.

see Chapter 2.4 for a short definition of SIFIs).[49] During the financial crisis large-scale government support provided to SIFIs has been costly and increased moral hazard. To protect governments from bearing further burden various reform initiatives have been undertaken expanding resolution powers and tools. [50] Beyond the Basel III requirements there will be additional loss-absorbency requirements for both global and domestic systemically important banks. Europe’s SIFIs have already built up an additional temporary capital buffer reaching a Core Tier 1 capital ratio of 9% by the end of June 2012.[51]

The banking sector has undergone significant changes since the beginning of the crisis, in response to regulatory and market pressure. Nevertheless, several weaknesses in a number of areas remain.[52]

The incentive for excessive risk taking caused by funding benefits through intra-group subsidies is one of the weaknesses that have not been prevented so far. The size and high complexity of financial institutions are still making it more difficult for bank management and the board of directors, as well as investors or supervisors to exercise control throughout the organization. The heavy interconnectedness facilitates contagion of the shocks across the banking system, domestically and globally, and hence entails systemic risks.[53] The inter-linkages of these highly complex financial institutions also limited their resolvability.

In the EU, nearly all failing banks have been supported by public funds in the form of capital injections, guarantees, and liquidity support.[54] The result is not only an uneven playing field with competitive distortions and concerns about the solvency of sovereigns, but a heavily increased burden for governments. The European Union’s long-standing plan to create a single financial market with a wholly integrated banking system has not yet been adapted with a single legal and prudential framework. While banking activities grew increasingly cross- border and became more and more international, the institutional governance arrangements remained largely national.[55]

[49] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 82.
[50] See Zhou et al.: From Bail-out to Bail-in: Mandatory Debt Restructuring of Systemic Financial Institutions, 2012, p .3.
[51] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.70.
[52] Ibid, p.89.
[53] See Ötker-Robe et al.: Impact of Regulatory Reforms on Large and Complex Financial Institutions, 2012, p.7.
[54] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.90.
[55] Ibid, p.91.

2.4 Universal Banking Model

One of the main structural weaknesses of the European Union is the too-big-to-fail (TBTF) and too-interconnected-to-fail (TITF) issue of systematically financial institutions. Most often the main criteria for identifying SIFIs are their size, concentration, interconnectedness, performance of systemically important functions (such as financial intermediation), and complexity. SIFIs can be both banks and non-banks whose imminent failure, inability to operate, and disorderly wind-down could cause significant systemic effects.[56]

In the EU large banks are typically universal banks offering the full array of banking services.[57] The universal banking model has a relatively long history in Europe. These universal banks combine commercial, retail, and investment banking under the same roof.[58]

From a customer's perspective this structure affords the opportunity of "one-stop shopping" providing the full range of banking services. However, these demand side economies of scope depend on both the type of customer and their different needs.[59] From the banks perspective such corporate structure provides the opportunity to use the capacity for extra leverage ("spare capital") of the deposit taking commercial and retail banking to expand the investment banking activities. Universal banks usually have a centralized capital and liquidity management facilitating intra-group capital transfers.[60] On the EU level there are no restrictions on intra-group transfers so far. Furthermore, the universal banking model enables banks to diversify their sources of income and to generate economies of scale and scope. [61]

Leading up to the crisis, Universal banks chose to over-allocate capital to the investment banking not only because of the growing demand of non-financial firms for risk management products but also because of attractive short-term double digit returns of the investment banking.[62] [63] Over time, some of these large universal EU banks

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[56] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p.17.
[57] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.42.
[58] Ibid, p.89.
[59] Ibid, p. 42.
[60] See BIS: The Joint Forum- Report on intra-group support measures, 2012, p. 5.
[61] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.89.
[62] See Boot et al.: Banking and Trading, 2012, p. 6.
[63] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.89.

have become banking groups with significant exposure to the global capital market and large trading operations.[64]

Since universal banks are allowed and not bound to provide a broad range of banking services, there are a variety of European universal banks with different corporate structures. Figure 3 shows one possible structure of a universal bank combining investment and deposit banking in one legal entity with no restrictions on intra-group capital and liquidity transfers.

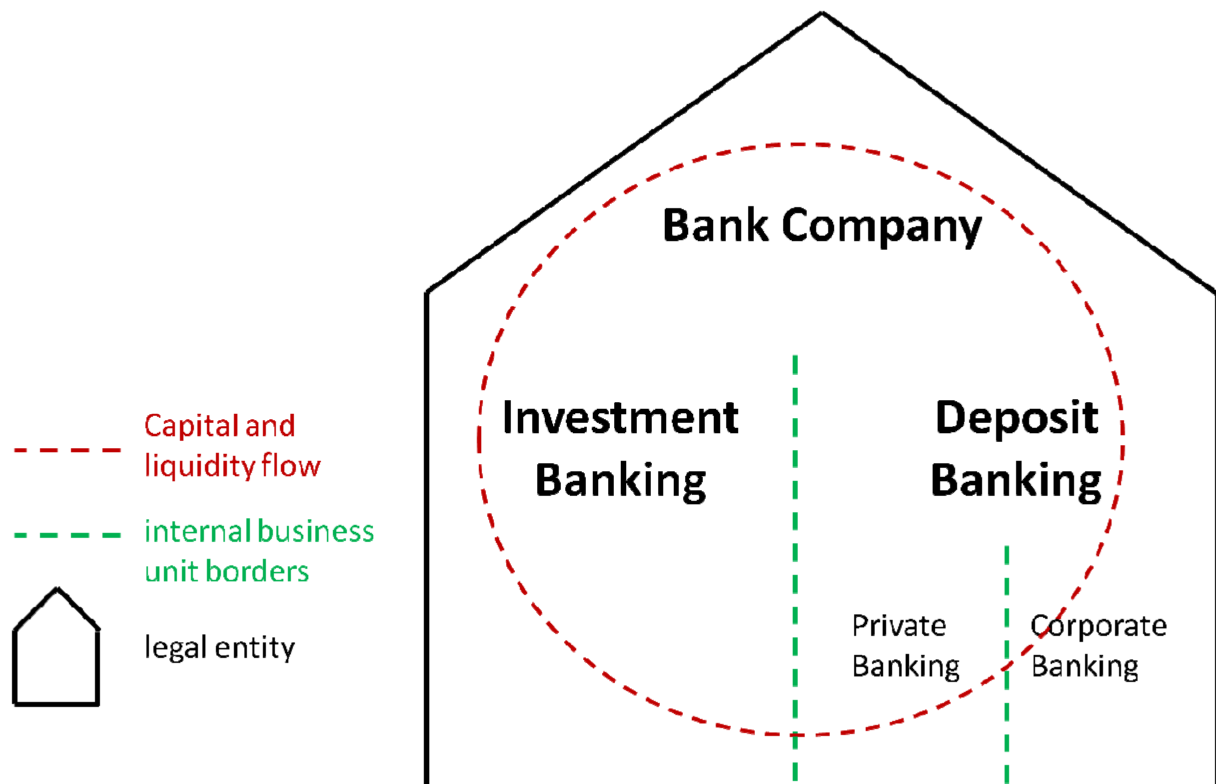

Figure 3: Simplified Structure of a Universal Bank

Source: Compiled by Author

[64] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp. 42-43.

3 Proposal for Structural Reform

3.1 European Commission Mandate

While regulatory reforms show a great progress towards a more stable financial system, the risks that systemically important financial institutions entail are far from being stemmed.[65] Against this background a debate on structural reform erupted and the European Commission mandated a high-level Expert Group to consider whether there is a need for structural reforms of the EU banking sector or not.

The high-level Expert Group chaired by Erkki Liikanen, the Governor of the Bank of Finland, is a conglomerate of finance professionals from different countries in Europe. The Group was requested to assess a possible need for reforming the structure of the EU banking sector and to make any appropriate proposals helping to establish a safe, stable and efficient banking system. The Groups' recommendations were supposed to target the following five goals defined by the European Commission:

- Reduce the risks of the banking system as a whole (macro-prudential perspective),
- Reduce the risks that individual firms pose to the financial system (microprudential perspective),
- Reduce moral hazard by making market exit also for SIFIs a viable option and consequently reduce government guarantees,
- Promote competition, and
- Maintain the integrity of the internal market.[66]

3.2 Liikanen Proposal

While necessary reforms were already implemented and important initiatives were set up, the Expert Group recommended further reforms targeting especially the structure of European banks.

Under the guidance of Erkki Liikanen, the Expert Group proposed to ring-fence the investment banking activities within a banking group. More specifically, high-risk trading activities (henceforth the "investment banking") shall be separated from the deposit taking commercial and retail banking (henceforth the "deposit banking") and shall be assigned to a separate legal entity (see Chapters 3.3 and 3.4). Ring-fencing

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[65] See Deutsche Bundesbank: Fortschritte bei der Reform der Finanzmarktregulierung, 2012, p. 98.
[66] See "High-level Expert Group on reforming the structure of the EU banking sector – mandate", 2011.

the investment banking would only be mandatory if the bank's assets held for trading exceed a threshold of 15-25% of the bank's total assets, or an absolute threshold of EUR 100bn, or if supervisors assess that the volume of trading activities endanger financial stability.[67] The ring-fencing requirements apply on the consolidated level and the level of subsidiaries.

While the legally separated deposit and investment bank are allowed to operate within a bank holding, the transfer of risks or funds between them is only allowed on market-based terms and restricted to 25% of the institution's funds according to the large exposure rule on interbank exposures.[68] [69] Both the investment bank and deposit bank will each individually be subject to all regulatory requirements pertaining to EU financial institutions. Consequently both entities have to maintain the required minimum capital requirements and additional capital buffers.[70] In other words, the proposal includes not only the measure to place a fence between investment banking and deposit banking but also defines the height of the fence by limiting and restricting intra-group transactions (see Figure 4).[71]

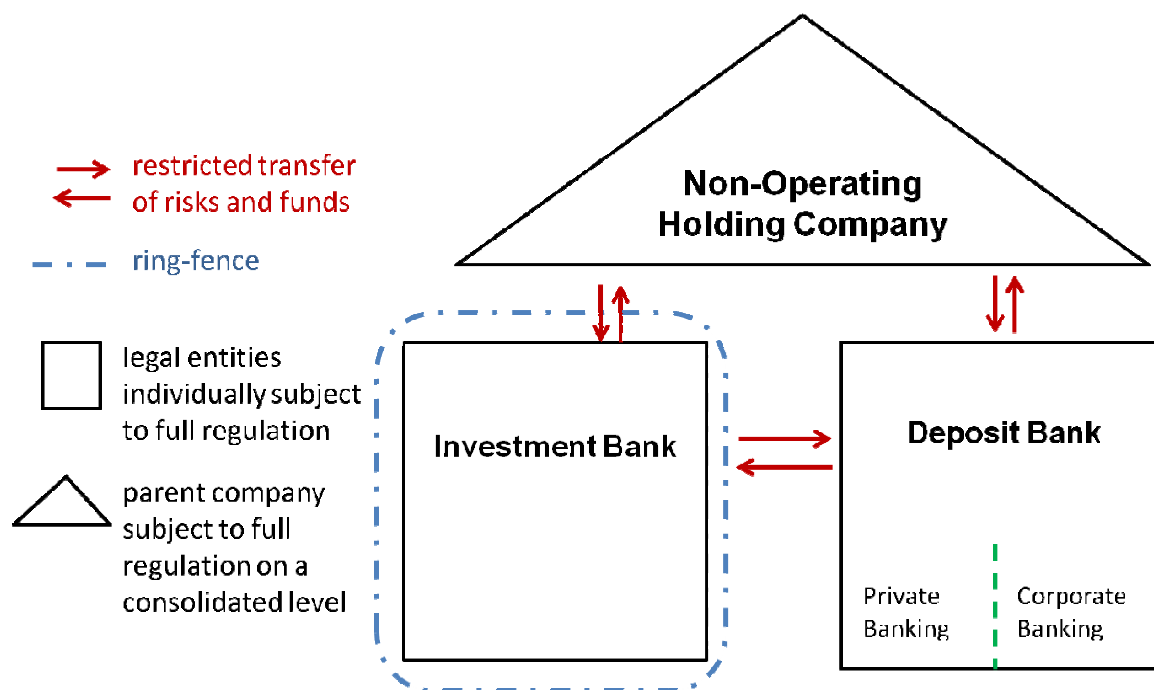

Figure 4: Simplified Structure of a Ring-Fenced Universal Bank

Source: Compiled by Author based on Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp.101-102.

[67] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.101.
[68] Ibid, p.102.
[69] See Official Journal of the European Union, Directive 2006/48/EC, Article 111 § 1 (a)
[70] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.102.
[71] See Chow et al.: Making Banks Safer: Can Volcker and Vickers do it?, 2011, p. 23.

The proposal to ring-fence the investment banking activities of European banks is a reform targeting directly the structure of individual financial institutions and hence is a micro-prudential instrument. The specific objectives of this instrument are to *"1) limit a banking group's incentives and ability to take excessive risks with insured deposits; 2) prevent the coverage of losses incurred in the trading entity by the funds of the deposit bank, and hence limit the liability of taxpayer and the deposit insurance system; 3) avoid the excessive allocation of lending from the deposit bank to other financial activities, thereby to the detriment of the non-financial sectors of the economy; 4) reduce the interconnectedness between banks and the shadow banking system, which has been a source of contagion in a system-wide banking crisis; and 5) level the playing field in investment banking activities between banking groups and stand-alone investment banks, as it would improve the risk-sensitivity of the funding cost of trading operations by limiting the market expectations of public protection of such activities."* [72]

3.3 Investment Banking Inside the Ring-Fence

According to the Liikanen proposal investment banking activities should only be permitted inside the ring-fence, thus within an individual legal entity separated from the deposit banking. More specifically, this regulation applies to proprietary trading and all assets or derivative positions incurred in the process of market-making. Furthermore, *"any loans, loan commitments or unsecured credit exposures to hedge funds (including prime brokerage for hedge funds), SIVs and other such entities of comparable nature, as well as private equity investments, should also be assigned to"* the investment banking entity.[73]

Unlike the US Volker Rule, the Expert Group proposed to ring-fence both proprietary trading and market-making in order to avoid the ambiguity of defining these two activities separately. It is a major challenge to draw a clear line between proprietary trading and market-making.[74] In general, a market maker tries to earn a return by participating in the flow of trading. The market maker intermediates between clients who want to buy financial assets or other forms of risk and those that want to sell them. A proprietary trader invests the bank's own capital with the intention of benefiting from

[72] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.102.
[73] Ibid, p.101.
[74] Ibid, p.102.

an expected appreciation in the value of such investments. [75] Proprietary trading is highly speculative and is carried out by banks in order to profit from near-term price movements.[76] Proprietary traders act on the behalf of the bank and market makers on customer demand. But, banks also acquire inventory and maintain risk exposures to meet the current or expected customer demand, and hence combine market-making and proprietary trading activities.[77] However, there are permitted activities that are closely connected with both market-making and proprietary trading which makes it still challenging to separate these activities (see 4.4.2).

Furthermore, any loan, loan commitments or unsecured credit exposures to hedge funds, SIVs and other such entities of comparable nature, as well as private equity investments, are also only permitted within the ring-fence.[78] Under certain circumstances, the sponsorship of hedge funds and private equity funds may be a potential source of risk and liquidity stress to banks. Banks faced with the reputational risk associated with the failure of a sponsored or advised fund may have a strong incentive to provide support to investors in those funds. Such support occurred during the recent financial crisis. Additionally, the complexity of investments in such funds has made it more difficult for market participants and regulators to understand, properly value and manage the risks on banks.[79]

These investment banking activities, especially the proprietary trading and hedge fund and private equity fund businesses, were a source of significant losses during the financial crisis.[80] Therefore, according to the Liikanen proposal these activities are only be permitted within the ring-fence.

3.4 Deposit Banking Outside the Ring-Fence

The deposit banking entity combines commercial banking and retail banking services. The supply of retail payment services are only allowed within the deposit bank.[81] The Figure 5 gives an overview on permitted activities outside the ring-fence. The permitted activities of deposit banks are not limited to the activities listed in Figure 5.

[75] See Duncan et al.: Proprietary Trading and Investment Restrictions Under the Volcker Rule, 2011, p. 24.
[76] Ibid, pp. 1-2.
[77] Ibid, p. 25.
[78] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.101.
[79] See Duncan et al.: Proprietary Trading and Investment Restrictions Under the Volcker Rule, 2011, p. 62.
[80] Ibid, p. 2.
[81] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.101.

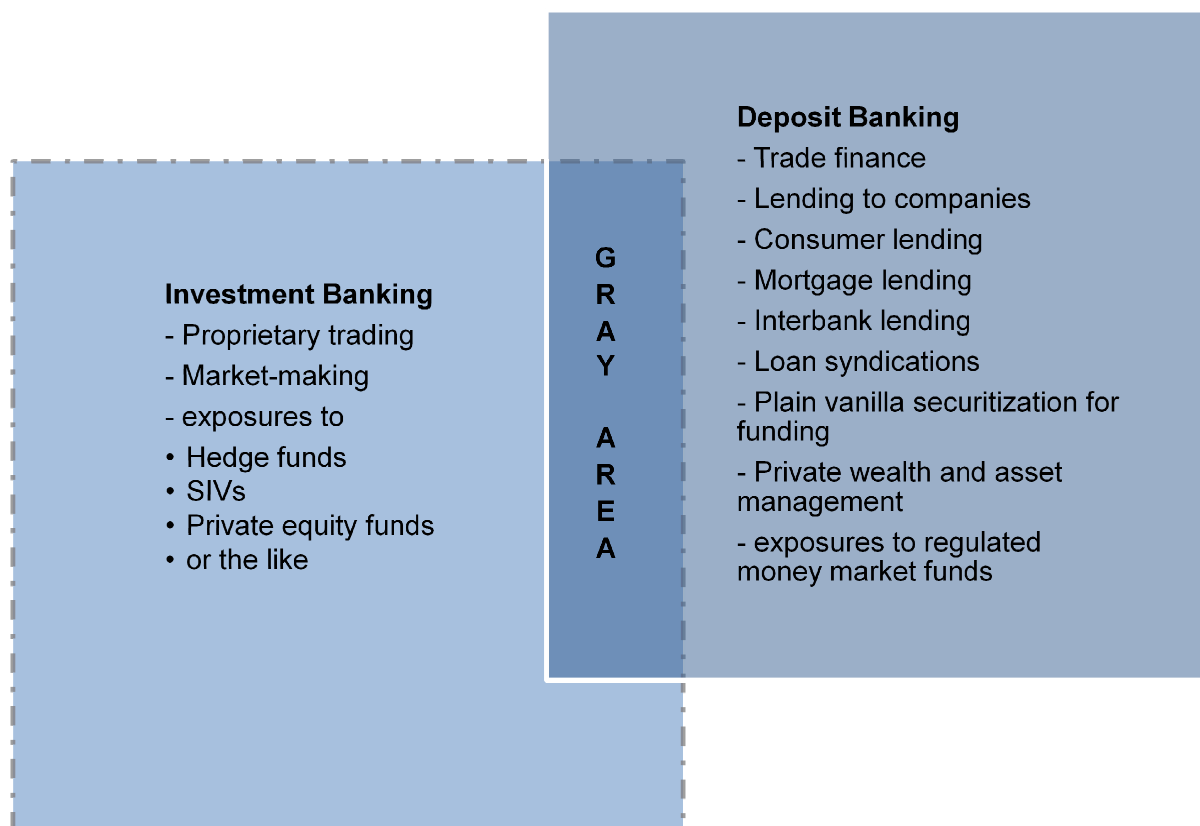

Figure 5: Prohibited and Permitted Bank Activities

Source: Compiled by Author based on Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, pp.101-102.

Furthermore, the use of derivatives for the bank's own asset and liability management purposes, as well as sales and purchases of assets to manage the assets in the liquidity portfolio, would also be permitted outside the ring-fence.[82]

Providing hedging services to non-banking clients (e.g. using foreign exchange and interest rate options and swaps) and securities underwriting and related activities fall within the gray area but do not have to be separated in order to leave sufficient room and flexibility for deposit banks to service corporate customers and thus fulfill their role in financing the real economy. But the Expert Group pointed out the risks inherent in these activities and suggests that regulators should pay particular attention to risks resolving of both of them. [83]

[82] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.101.
[83] Ibid.

4 Critical Evaluation of the Liikanen Proposal

4.1 Consequences of Ring-Fencing

The Expert Group recommendation to ring-fence the investment banking of large European banks has several implications not only for individual financial institutions but also for all other market participants such as their customers and regulators. The Liikanen Report does not provide an implication analysis which is necessary to evaluate the effectiveness of this measure and the degree of its contribution to enhance financial system stability. Therefore, raising no claim to completeness, this paper draws together several consequences of legally separating the investment banking of universal banks.

One main consequence is that the separation would raise the cost of banking services. Each affiliate has to be independently and separately capitalized meeting minimum regulatory requirements assessed on an individual and consolidated basis. Cerutti et al. demonstrated in their analysis that banks' capital needs resulting from a simulated credit shock are 1.5–3 times higher in the ring-fencing or SAS scenario than those under no ring-fencing.[84] Another cost-pusher is that each subsidiary needs an operationally independent management and board. Without an own management and board continuity of business operations when the rest of the group is in distress or under resolution may be difficult to ensure.[85] Furthermore, the large exposure rule would also apply to affiliates limiting the transfer of capital and liquidity from the deposit bank to the investment bank, but the scope for transfers in the opposite direction is not explicitly constrained. The latter is allowed unless capital adequacy would be endangered.[86] There are no further restrictions on inter-group transactions because the focus is on ensuring appropriate risk pricing of such transactions instead of placement of tougher quantitative limits thereon. Accordingly, such businesses necessarily have to be transacted on market-based terms.[87] These restrictions on intra-group transactions (see 3.2) not only raise the capital costs but also protect the deposit bank from contagion.[88] Additionally, intra-group transfer restrictions could lead banks to refocus the commercial and retail banking serving the real economy. If

[84] See Cerutti et al.: Bankers Without Borders? Implications of Ring-Fencing for European Cross-Border Banks, 2010, p.7.
[85] See Chow et al.: Making Banks Safer: Can Volcker and Vickers do it?, 2011, p. 25.
[86] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.102.
[87] See Chow et al.: Making Banks Safer: Can Volcker and Vickers do it?, 2011, p. 25.
[88] Ibid, p. 27.

the terms for intra-group transactions are clearly specified under company law and regulation, the cost of capital for any given subsidiary should better reflect the risks it undertakes. However, in practice matching a subsidiary's own risks with own capital is less clear-cut.[89]

A legal separation of the banking activities limits the cover of bank deposit guarantee schemes to the deposit bank.[90] Consequently, the investment banking entity neither would have access to cheap funding directly through the deposit banking entity nor to central bank liquidity. The Management of the investment bank would have to become more risk-averse and face a higher cost of capital.[91] The incentive for excessive risk-taking may have been reduced but not completely removed due to the affiliation.[92]

Due to higher costs and consequently lower margins the investment banking activities may become less attractive. The investment banking would be a smaller business that is less levered and less important for banks than it was the case in the past.[93] Depending on to which degree the investment banking activities decrease in profitability Investments into the real economy would rise further.[94]

A non-operating holding company (NOHC) structure, combining stand- alone subsidiaries with own management, accounting and balance sheet under one roof, may increase transparency, which should facilitate monitoring and regulatory compliance (also see Figure 4). Such a company structure may reduce the complex interconnections and risks between investment banking and deposit banking.[95] [96] In the event of a crisis, the transparent holding structure would facilitate a sale or resolution of the struggling entity. Bundell-Wignall and Atkinson (2012) stated that a separated deposit bank could go on lending to households and to non-financial companies regardless of what happens to the investment banking affiliate in the capital markets. The Management of the investment bank, on the other hand, would have to earn a profit with clients aware of a possible total loss of capital in the event of a failure, and that a fail-

[89] See Lumpkin: Risks in Financial Group Structures, 2011, p. 19.
[90] See Chow et al.: Making Banks Safer: Can Volcker and Vickers do it?, 2011, p. 27.
[91] See Blundell- Wignall et al.: Deleveraging, Traditional versus Capital Markets Banking and the Urgent Need to Separate and Recapitalize G-SIFI Banks, 2012, p.38.
[92] See Steinberg at al.: Wege zur stärkeren Trennung von Investment- und Geschäftsbanking, 2012, p.388.
[93] See Blundell- Wignall et al.: Deleveraging, Traditional versus Capital Markets Banking and the Urgent Need to Separate and Recapitalize G-SIFI Banks, 2012, p.38.
[94] See Steinberg at al.: Wege zur stärkeren Trennung von Investment- und Geschäftsbanking, 2012, p.388.
[95] Ibid.
[96] See Lumpkin: Risks in Financial Group Structures, 2011, p. 19.

ure would be much less likely to result in a bail-out though state aid and consequently the socialization of losses.[97] I think that de facto selling or winding down a subsidiary is not as simple as the author states. Indeed, a legal separation of investment banking might facilitate resolution of failing banks but requires a European cross-border resolution system providing mechanisms and plans for a controlled failure of banks as a whole and their individual entities to avoid spillovers. Without such a framework for resolution ring-fencing does not protect from reputational damages and bank runs affecting the deposit banking entity detrimentally.

Price Waterhouse Coopers argued that significant governance implications for ring-fenced banks are a critical issue that needs to be considered. It has been a challenging area to reconcile group and entity governance and ring-fencing will add a new dimension to the complexity of intra-group governance compensating partly the transparency advantages of this structural reform.[98]

Under the Expert Group proposal, ring-fencing of investment banking still allows banks to combine both entities within a banking group and continue to exploit some benefits resulting from their integrated business model.[99] Shareholders can continue to benefit from a diversified source of income and customers can still make use of a convenient one-stop-shopping possibility.[100] In general, structural separation is inconsistent with universal banking. The result will be not only higher funding costs but also the loss of economies of scale and scope for banks. Financial institutions will pass on the higher costs to private and corporate clients leading to higher costs of credit and reduced market liquidity, which could therefore harm the real economy.[101]

If banks become more constrained in the post-crisis environment, a key issue is who will provide the credit previously generated in the banking sector.[102] A conflict can arise between the objective to sustain a stable banking system and to ensure that banks are able to support growth of European economies through their lending especially to the corporate sectors. The former requires a rise in equity capital ratios while

[97] See Blundell- Wignall et al.: Deleveraging, Traditional versus Capital Markets Banking and the Urgent Need to Separate and Recapitalize G-SIFI Banks, 2012, p.38.
[98] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p. 2.
[99] See Chow et al.: Making Banks Safer: Can Volcker and Vickers do it?, 2011, pp. 22-23.
[100] See Steinberg at al.: Wege zur stärkeren Trennung von Investment- und Geschäftsbanking, 2012, p.388.
[101] See European Commission: Summary of the Replies to the Consultation of the Internal Market and Services Directorate General on the Recommendations of the High-Level Expert Group on Reforming the Structure of the EU Banking Sector, 2012, p. 3.
[102] See Llewellyn: The Evolution of Bank Business Models: Pre-and Post-Crisis, 2012, p.64.

the latter requires an expansion of bank lending and hence, stresses capital ratios. To avoid this conflict banks have to inject more equity capital. As the recent crisis has shown, this can be difficult and expensive. In this scenario, banks would need to build up equity ratios by deleveraging which is precisely the opposite of what is needed if banks are to support the economy leading to another major consequence.[103]

In this context the future role of securitization in bank business models is a problematic issue. If banks are unlikely to be able to hold the loans shifted from the securitization sector on their own balance sheets, due to higher capital requirements, a serious credit crunch could emerge. There are systemic advantages to securitization. The key to prevent a credit crunch is to develop a securitization model while avoiding some of the pitfalls. This could include a requirement for banks to keep some of the credit risk on their own balance sheets and not to require banks to keep all of the risk on their balance sheet.[104]

In a consultation of the European Commission on the Expert Group recommendations stakeholders expressed concerns about limited lending capacities of banks showing the significance of this issue. Representatives of corporate customers generally expressed strong reservations about mandatory separation and a split-up of the universal banking model in Europe. They expect a significant increase of costs and reduced access to bank finance. Therefore, they asked for policy measures to reduce the barriers to entry in the banking market and facilitate non-bank finance channels.[105]

4.2 Debatable Aspects of the Liikanen Proposal

4.2.1 Risk Identification

The Expert Group indentified investment banking activities, more specifically proprietary trading and market making, as particularly risky financial activities which have to be separated from other banking activities to make the deposit banking safer and

[103] See Llewellyn: The Evolution of Bank Business Models: Pre-and Post-Crisis, 2012, p.63.
[104] Ibid, p.65.
[105] See European Commission: Summary of the Replies to the Consultation of the Internal Market and Services Directorate General on the Recommendations of the High-Level Expert Group on Reforming the Structure of the EU Banking Sector, 2012, p. 3.

less connected to trading activities.[106] But Lehman Brothers was an investment bank without a retail banking entity, Northern Rock was a retail bank without an investment banking arm and both failed during the crisis. Consequently, ring-fencing would have had no effect on either. There appears to be an implicit assumption in the Liikanen report that retail banking is inherently less risky than investment banking. Whereas the Northern Rock example shows that retail banking is exposed to both asset price volatility and unstable deposit funding. Consequently, risk management is equally important for retail and investment banking.[107] Therefore, the focus should not only be on the investment banking activities but also on the deposit banking which could cause significant financial turmoil as well and ring-fencing is not a effective measure to manage the banks risks.

Moreover, ring-fencing of investment banking would only be mandatory if the investment banking activities exceed a threshold of 15 - 25% of the bank's total assets or an absolute threshold of EUR100bn. The Liikanen report does not include a derivation or rationale for the chosen threshold which is criticized by several analysts. Several banks argued in the consultation on the Commission that the proposed thresholds are deficient and appear to be chosen randomly.[108]

Due to the high threshold the mandatory separation would only be subject to SIFIs ignoring that interconnections between small banks also cause significant systemic risks.[109] Lumpkin argued that it is not at all obvious that large, integrated institutions have a greater risk of failure than smaller institutions. Quite the contrary, larger institutions might have a higher degree of stability because of the diversity of their activities and the diversity of their funding sources. However, once serious problems occur the systemic implications of bank failure grow as institutions become larger and more interconnected.[110]

Most analysts also recognize that the TBTF issue also has a time- or context-dependent dimension. The thresholds for financial institutions that are TBTF can be

[106] Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.100.
[107] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p.2.
[108] See European Commission: Summary of the Replies to the Consultation of the Internal Market and Services Directorate General on the Recommendations of the High-Level Expert Group on Reforming the Structure of the EU Banking Sector, 2012, p. 3.
[109] See Steinberg at al.: Wege zur stärkeren Trennung von Investment- und Geschäftsbanking, 2012, p.390.
[110] See Lumpkin: Risks in Financial Group Structures, 2011, p. 11.

much lower if their immanent failure takes place at a time in which the economy is instable and/or other financial institution failures have recently occurred.[111]Adair Turner, the chairman of the UK Financial Services Authority and a member of the House of Lords, has argued that *“there is a danger that an exclusive focus on institutions that are too big to fail could divert us from more fundamental issues”* of precarious credit supply. Low credit standards enabled banks to provide credit too easily and at a too low price and after the occurrence of the crisis severely restricted their credit supply leading to high macroeconomic volatility harming the real economy.[112]

Most importantly, SIFIs do not necessarily have to be at the same time institutions that are TBTF. A SIFI can fail if the regulatory and supervisory regime make resolution credible and orderly and do not make liquidation too expensive for the governments. Contrarily, the cases of IKB and Northern Rock in 2007 demonstrate that even institutions that would not have been included in an official list of SIFIs can be considered too important to fail.[113]

4.2.2 Location of the Ring-Fence

In order to avoid the loss of important economies of scale the Group suggested not separating banking activities which “*naturally belong together*”.[114] This expression leaves enough room for interpretation. Filtering prohibited activities from permitted activities, hence defining the location of the ring-fence is a major challenge. Not only hedging but also underwriting activities are difficult to distinguish from proprietary trading and market-making.[115]

Financial institutions utilize hedging as a risk mitigation instrument which is also an integral part of the market-making function. According to the Expert Group proposal securities underwriting and hedging services for non-financial clients such as foreign exchange swaps fall within the grey area and can be excluded from the mandatory separation. Furthermore, underwriting activities are an essential service to clients for facilitating equity and debt issuance for raising capital on capital markets. A common part of the underwriting process is that the underwriter makes commitments in advance to buy a fixed amount of the issued securities if they could not be sold to other market participants. Additionally, in order to support the offered securities during and

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[111] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p.17.
[112] See Turner: Too Much“ Too Big to Fail“?, 02 September 2010.
[113] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p.21.
[114] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p.102.
[115] See Duncan et al.: Proprietary Trading and Investment Restrictions Under the Volcker Rule, 2011, pp. 19-24.

after issuance institutions sometimes intervene in the market by selling or buying these securities. Consequently, these activities belong naturally together but may indicate impermissible proprietary trading and market-making activities which are prohibited activities for the deposit bank.[116] The interconnectedness of these banking services makes the identification of activities that are not necessary to adequately support the clients' equity and debt issuance challenging. Today's client needs have evolved and accordingly the scope of banking services provided by universal banks changed as well. Hence, separating these activities not only makes less sense from an economical perspective but is also challenging to implement under the vague definition of the Expert Group proposal.

In assessing and defining the rules for separation, it is also important to consider the infrastructure of banks. Some services are common to both retail and investment banking arms. A particular case in point is payment services that would have to be maintained within the investment banking entity. The Commission should consider if there should be service agreements between the investment and retail banking entities or a full separation.[117]

4.2.3 Misleading Effects

The proposal lacks preciseness providing banks the opportunity to avoid higher costs and consequently to keep high risks in the trading book of the deposit bank. These loopholes have to be closed by defining precisely the location and height of the ring-fence to avoid this misleading issue.

Since all intra-group transactions have to be conducted on arms-length banks will probably try to retain as much business activities on one side the ring-fence as possible to keep costs low and returns high. The appropriate risk-pricing of intra-group transactions itself is a problematic aspect because the restriction leaves room for interpretation and enough flexibility to avoid high costs. Banks could use the argument of lower counterparty risk due to the affiliation and higher transparency within a group compared to a non-affiliate company. Consequently, intra-group services could be kept on a low cost level missing the aim of reducing interconnections and an appro-

[116] See Duncan et al.: Proprietary Trading and Investment Restrictions Under the Volcker Rule, 2011, p. 23.
[117] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p. 16.

priate risk-pricing. Potential opportunities for regulatory arbitrage are created by varying standards applied by different jurisdictions to restrict intra-group exposures.[118]

Furthermore, bank structure is not seen as a main driver of the financial crisis. Structural separation may not actually help as much as expected to reduce the interconnections between deposit and investment banking activities, because these would still be conducted within the same group. Structural reform may indeed have misleading effect, by creating incentives for regulatory arbitrage and shifting activities to the shadow banking sector due the ambiguity and impreciseness of the proposal.[119]

Aizenman argued that a crisis that results with unanticipated high costs may lead policy-makers to over-regulate the financial market and consequently causing stagnation of the real economy.[120] Such hazardous over-regulation limits the market mechanism and overrides its functions (also see Chapter 4.2.4). The key to solve this problem is to find the equilibrium between under- and over-regulation. The main difference between over- and under-regulation is that in the first, the absence of crisis induces a drop of its probability to occur, leading overtime to under-regulation. In contrast, over-regulation aims to ban the channels leading to a crisis, at a cost of reducing the actual output of the economy below its potential. Over-regulation induces a static economy, where the benefit of crisis avoidance may come with a larger cost of stagnation.[121] Consequently, it is important 1) to assess in-depth the potential benefits and drawbacks of ring-fencing of investment banking and its contribution to financial stability, and 2) to find a trade-off between under- and over-regulation avoiding possible destabilizing effects of ring-fencing.

4.2.4 Competition

The Liikanen proposal has an impact on the competitiveness of EU banks compared to their non-EU peers. According to the Office of Fair Trading competition is an important economic policy objective: *“At their most basic, markets are a mechanism for allocating resources. Well-regulated, competitive markets can maximize consumer*

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[118] See Fiechter et al.: Subsidiaries or Branches: Does One Size Fit All?, 2011, p. 19.
[119] See European Commission: Summary of the Replies to the Consultation of the Internal Market and Services Directorate General on the Recommendations of the High-Level Expert Group on Reforming the Structure of the EU Banking Sector, 2012, p. 3.
[120] See Aizenmann: Financial Crisis and the Paradox of Under- and Over-Regulation, 2009, p. 6.
[121] Ibid, p. 18.

welfare, and, by raising economic growth, also increase total welfare."[122] But there are other important policy objectives such as ensuring the continuity and stability of the financial system which comes along with regulation that can negatively affect competition if not properly balanced against each other. Changes in the regulatory structure can enhance but also distort competition.

As previously discussed in chapter 4.1 ring-fencing of investment banking will raise the costs for large European banks to provide banking services. On the one hand, higher capital requirements for SIFIs make the playing field more level for smaller banks. On the other hand, the higher cost of entry will make it harder for new firms to enter the market.[123] Furthermore, a stand-alone investment bank has to compete for equity and debt in capital markets, whereas a ring-fenced investment bank might still benefit from higher credit ratings and cheaper funding due to the group affiliation with the deposit banking entity.

During the last decade the banking sector in the EU has undergone continuous consolidation.[124] Further market concentration might take place because only the very large trading houses would be able to continue to attract sufficient funding for trading activities and other trading operations would not be viable on a stand-alone basis (see 4.2.5).[125]

Another detrimental factor for competition is that consistency with other structural reform initiatives is not ensured. Structural reforms at EU level and what has already been proposed in the USA and the UK are inconsistent. Stakeholders argued that structural reform may harm the competitiveness of the EU banking sector, also depending on the geographic scope of the separation. There are for example no guidelines defining if incoming non-EU banks have to be subject to the same requirements and vice versa. [126]

Consequently, ring-fencing may reduce - rather than promote - competition in the European financial market as well as the global financial market. Therefore, it is important to weight up the benefits of ring-fencing against the loss of competition

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[122] See Office of Fair Trading: Government in markets, 2009, p.1.
[123] See Pryce: Regulation and Competition in the Financial System, 2012, p.42.
[124] See Liikanen et al.: High-level Expert Group on reforming the structure of the EU banking sector, 2012, p. 17.
[125] See European Commission: Summary of the Replies to the Consultation of the Internal Market and Services Directorate General on the Recommendations of the High-Level Expert Group on Reforming the Structure of the EU Banking Sector, 2012, p. 3.
[126] Ibid.

caused by stronger regulation to find the equilibrium between healthy competition and financial stability.

4.2.5 Challenges of Implementation

There are very few universal banks that have investment banking arms with enough scale to operate on a stand-alone basis. Most universal banks with subscale investment-banking arms will neither find buyers (due to the significant drop in earnings) nor will they be able to wind down these businesses without incurring big losses. Part of the problem is that investment banks may have entered contracts such as swaps or other derivatives that produce risks to the bank that can last 20 years or more. These positions are not easily sold therefore these banks are forced to maintain teams of skilled staff (e.g. traders and mathematicians) to keep hedging, or managing, the risks to the bank. Yet when a bank is winding down its business, it finds it harder to attract and retain people with the right skills.[127]

Furthermore, it is a major challenge "*to unscramble the eggs that have gone into making them*." [128] The affected financial institutions have a very high degree of complexity which makes it difficult to map lines of business into legal entities. Figure 6 lists the total amount of subsidiaries of SIFIs as an evidence for their complexity. For example Deutsche Bank AG has almost two thousand affiliates spread all over the world. Unwinding such complex financial institutions can be extremely difficult because SIFIs have operations in many countries and resolution regimes differ across countries in many respects. Up to date there is no agreement on a cross-border resolution plan.

Financial Institution	Total assets in bn USD (as of 12/2011)	Total subsidiaries (As of 12/2009)
Deutsche Bank AG	2,802	1,954
HSBC Holdings Plc	2,555	1,234
BNP Paribas	2,545	1,170
RBS Group Plc	2,342	1,161
Société Générale	1,530	844
UBS AG	1,510	417
Credit Suisse Group	1,117	290

Figure 6: List of Total Subsidiaries of Selected European Banks

[127] THE ECONOMIST: Universal Banking - Together, forever?, 18.08.2012.
[128] Ibid.

The recent crisis demonstrated that national approach is not only insufficient but is likely to be the default plan when an international bank fails without an agreed cross-border burden-sharing agreement between at least in Europe.[129]

4.3 Enhancing Financial Stability

The European Commission asked for a structural reform proposal which helps to enhance the financial stability and makes the European financial system more resilient. The Expert Group proposal to ring-fence the investment banking would force banks to operate their proprietary trading and market making activities in a legally separated entity, the so-called stand-alone subsidiarization, and restrict intra-group transactions of universal banks.[130] From the perspective of financial stability, the structural reform proposal of the Expert Group does have both increasing and decreasing effects on financial stability.

With financial institutions operating on both sides of the savings and investment business, the risk of potential conflicts of interest is more or less always present. Research indicates that these risk increases with the number of activities of a financial institution. [131] Therefore, ring-fencing may reduce these conflicts of interest due to the legal separation of the investment banking and deposit banking activities and restrictions on intra-group transactions.

The segregation of investment banking activities from the deposit banking business could contribute to reducing the complexity of large banks. Incentives for the banks to improve the transparency of their structures could also be created.[132] Consequently, management and supervision of ring-fenced financial institutions may facilitate and raise the trust in the European financial system and increase financial stability.

One common argument against ring-fencing is the loss of efficiencies. Economies of scale or economies of scope rise with a greater degree of integration within an organization. Integration could also be beneficial with regard to risk reduction because a greater geographic or product diversification. Especially in reference to the banking

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[129] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p.19.
[130] See Cerutti et al.: Bankers Without Borders? Implications of Ring-Fencing European Cross-Border Banks, 2010, p. 6.
[131] See Lumpkin: Risks in Financial Group Structures, 2011, pp. 4.
[132] See Rösler: Der Liikanen-Report verfolgt einen ganzheitlichen Ansatz, 2012, pp. 14-15.

sector, the arguments in favor of a beneficial relationship between cost and size or scope for financial firms have lead to many empirical research projects conducted to find an evidence for these scale effects. The general conclusion is that economies of scale exist in some segments of financial services, but not everywhere and not without limit which invalidates one of the main arguments against ring-fencing.[133]

However, neither a stand-alone-subsidiary nor branch structure reduces the probability of failure or the cost of failure of a banking group. On the one hand, the branch structure may provide an affiliate or parent with greater ability to withstand adverse shocks. Consequently, it may strengthen the group as a whole because mobilizing and redirecting funds in a branch structure is easier and enables the banking group to compensate losses in one division with profits in another division. On the other hand, the branch structure leads to the legal obligation of the group to fully cover all losses generated in branches with may facilitate contagion. Under the subsidiary structure, there is no legal obligation for the group to support its stressed affiliates but due to reputational risks there is often an expectation that the parent will do so anyway. Since the subsidiary approach require a network of independent subsidiaries it may also limit the overall cost of resolution in the event of a failure because healthy parts of the group may be easier spun off than in a fully integrated branch network. However, under both structures reputational risks and confidence effects that can lead to serious bank runs remain similarly in place.[134] Therefore, ring-fencing of investment banking may not change the contagion risks of universal banks.
Furthermore, placing a fence between investment and deposit banking does not eliminate risk. The ring-fencing proposal should rather be seen in the light of an instrument assisting successful resolution in the event of bank failure.[135] Therefore, the challenge is not to reduce the risk of bank failure to zero, but rather to minimize the external costs that arise from it. This would involve a bank resolution framework that minimizes these external costs while still imposing losses on some of the failing banks' stakeholders according to their seniority.[136] At the EU level there are two options to maintain financial stability, either to move towards national banking systems, with stand-alone, fire-walled subsidiaries or to move towards supra-national supervi-

[133] See Lumpkin: Risks in Financial Group Structures, 2011, p. 5.
[134] See Fiechter et al.: Subsidiaries or Branches: Does One Size Fit All?, 2011, p. 4.
[135] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p.1.
[136] See Beck: Concluding Observations, 2012, p. 74.

sion.[137] Since the EU confirmed its aim to build a single rulebook for an integrated financial framework that should have two central elements: a single European banking supervision and a common deposit insurance and resolution framework in June 2012, it is very unlikely that the Commission will revert its plan.[138] Most of all, a wholly integrated financial market is a big step towards a more stable and resilient financial system in the EU.
While financial intermediation is an important growth factor for the real economy, competition in the financial sector can increase these growth benefits. Overregulation constraints competition and can increase fragility. [139] Competition imposes both discipline on financial firms and deliberate risk taking. A bank failure can increase concentration or provide opportunities for new entrants.[140] Consequently, for a healthy financial system competition is an important factor that should be maintained. As discussed in Chapter 4.2.4 ring-fencing of investment banking may reduce rather than promote competition, hence it may have detrimental effects on the financial stability in the EU. Therefore, regulators have to take into account the wider costs of ring-fencing to the economy and costumers of financial services. Otherwise the EU may run the risk of paying too high a price for safety while achieving financial stability only in the limited sense with a stagnating financial system, rather than a financial system providing the flows of credit to households, SMEs and other corporates on whom economic growth depends.[141]

The recent Banking Banana Skins survey of the Center for the Study of Financial Innovation (CSFI) revealed that financial insiders are concerned about the harmful effects of excessive regulation. Even non-banking respondents (e.g. consultants, analysts, professional observers) share the opinion that macro-economic risk is the greatest threat facing the banking industry and overregulation may intensify this risk.[142] Against this background regulators and stakeholders should be aware that any regulatory reaction may trigger, in a worst case scenario, the next banking crisis. Moreover, in the current adverse macro-economic environment new regulations may encourage banks to find ways round the new rules and to take on new risks to sus-

[137] See Beck: Concluding Observations, 2012, p. 74.
[138] See Van Rompuy: Towards a Genuine Economic and Monetary Union, 2012, p. 4.
[139] See Beck: Concluding Observations, 2012, p. 74.
[140] See Goldstein et al.: Too Big to Fail: The Transatlantic Debate, 2011, p. 25.
[141] See Briault: Incentive Structures, 2012, p.18.
[142] See CSFI: Banking Banana Skins 2012 – The system in peril, 2012, p.4.

tain return on capital.[143] Consequently, ring-fencing of investment banking may cause regulatory arbitrage and may have a misleading function. While ring-fencing can help to isolate and limit risks, it is not a sufficient safeguard on its own.[144] As already mentioned in chapter 4.1ring-fencing can limit the cover of deposit guarantee schemes but do not limit further expensive state aid in the event of a crisis. Therefore, it is more important to build effective pan-European resolution mechanism to ensure that the burden on governments is limited.[145]

Lumpkin argued that what matters most is not the structure of banks per se, but also how the structure is managed. It is important to assess the existing risks of banks and check the adequateness of their internal control and risk-management systems.[146] The aim of further reforms should not be making institutions completely fail-safe because the threat of failure is a key driver of market discipline.[147] Therefore, further reforms should aim to make a controlled resolution of banks and other financial institutions possible.

Financial stability requires a holistic approach that combines transparency, governance, regulation and supervision. Especially for Europe, with politically independent and sovereign states, it is important to build a resolution framework for internationally active institutions.[148] Such a framework may significantly enhance the European financial stability and consequently increase the investors trust into the European Union which will have further stabilizing effects on the financial system.

Fiechter described that in the event of a banking group failure, a subsidiary structure would generally be less costly to resolve.[149] Therefore, under an effective resolution framework ring-fencing might be a helpful tool that complements such a framework. Additionally, banking groups consisting of separate legal subsidiaries may more easily implement recovery and resolution plans. These plans provide systematic and holistic blueprints to facilitate orderly wind-down of failing SIFIs. The idea of recovery and resolution plans or living wills, as also proposed by the Financial Services Au-

[143] See Lascelles: Banking Banana Skins- Brief Remarks, 2012, p.70.
[144] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p. 2.
[145] Ibid, p. 10.
[146] See Lumpkin: Risks in Financial Group Structures, 2011, p. 30.
[147] Ibid, p. 29.
[148] Ibid, p. 30.
[149] See Fiechter et al.: Subsidiaries or Branches: Does One Size Fit All?, 2011, p. 3.

thority (FSA) of the United Kingdom, are proposals targeted to preserve a firm as a going concern without public support, to promote resilience, and facilitate rapid resolution or wind-down.[150]

5 Conclusion

5.1 Summary

The larger the bank, the greater is the effect of its failure on the financial system. As evident in the recent financial crisis, several large European banks had to be bailed out by governments providing bailout funds to avoid a breakdown of the entire system or at least a substantial distress. The recent crisis management methods demonstrated that the EU needs to handle the TBTF and TITF issues caused by some European financial institutions.

The European Commission mandated an Expert Group chaired by Erkki Liikanen to analyze the need for structural reform and to make proposals to strengthen the stability of the European financial system. The Expert Group proposed to ring-fence the investment banking of universal banks.

In order to answer the research question outlined in chapter 1.1 the following draws together consequences of the Liikanen proposal and its contribution to a more stable financial system in the European Union.

On the one hand, ring-fencing of investment banking causes higher costs of banking services. These costs arise in particular from higher capital and liquidity requirements as well as from funding constraints. These additional costs will be translated into higher prices for credit and lower deposit rates, harming economy growth.

On the other hand, due to resulting higher costs and lower margins investment banking may become less attractive for banks and may decrease in size. While subsidizing limits the cover of bank deposit guarantee schemes to the deposit bank, it also may facilitate the resolution in combination with a cross-border resolution framework. Since investment banking and deposit banking are allowed to be operated under the same roof, shareholders are still able to benefit from a diversified source of income.

[150] See Fiechter et al.: Subsidiaries or Branches: Does One Size Fit All?, 2011, p. 19.

These are just few general implications of the Liikanen proposal and a necessary in-depth assessment of consequences will discover further important side effects of ring-fencing.

The Liikanen proposal contains debatable aspects that have to be considered and clarified before being implemented. The Expert Group identified investment banking as the riskiest parts of banks and focused on large institutions that rank among SIFIs, leaving out of consideration that even small banks without an investment banking arm endangered financial stability in the recent crisis. Also filtering prohibited activities from permitted activities, hence drawing the line of the ring-fence is a major challenge. Especially hedging and underwriting are activities that are difficult to distinguish from market-making and proprietary trading. Furthermore, the proposal lacks preciseness especially regarding intra-group transactions which may provide loopholes for regulatory arbitrage. Therefore, the proposal may provide misleading incentives for financial institutions.

Additionally, bank structure is not the main driver of the financial crisis and therefore overregulation through structural reform may harm the real economy and lead to stagnation. In the recent crisis, the problems experienced by cross-border financial institutions had little to do with whether they were legally organized as branches or subsidiaries. The crisis was much more caused by the underlying weaknesses in risk management, regulation and supervision, supervisory coordination, and crisis management tools. Indeed, a highly complex organizational structure of the banking group may make it difficult for senior management of the group to monitor and stay on top of what risks taken by the organization. But as experienced in the recent crisis, Lehman Brothers and some European banks showed that regardless of its structure an affiliate can take on excessive risks and incur losses threatening the stability of the entire group and as a consequence may create significant financial stability risks.[151]

Moreover, ring-fencing may reduce rather than promote competition. Therefore, it is important to weight up the benefits of ring-fencing against the loss of competition caused by stronger regulation. Even identifying properly the riskiest parts of banks, defining the optimal location of a ring-fence, plugging loopholes to avoid misleading

[151] See Fiechter et al.: Subsidiaries or Branches: Does One Size Fit All?, 2011, p. 18.

and leaving enough room for competition will not make the implementation of the proposal less challenging. The reason is that the affected financial institutions are highly complex and most of these universal banks do not have investment banking arms with enough scale to operate on a stand-alone basis.

On its own, ring-fencing of investment banking may deliver few net benefits that may contribute to a more stable and resilient financial system. However, the benefit of the ring-fencing may increase significantly if there are resolution mechanisms for both deposit and investment banking parts of the banks in place. [152] Especially with respect to the variety of goals presented in the Commissions mandate various mixes and matches of reform options are needed to enhance financial stability in the EU. Nevertheless, it is not clear how ring-fencing will contribute to financial stability in any significantly better way than the Commission’s proposal for a Bank Recovery and Resolution Directive.[153]

5.2 Critical Reflection

In the recent financial crisis, deficiencies in internal controls and risk management of financial institutions were one of the main contributing factors. Banks have relaxed their lending standards to gain or preserve market share. But low lending standards may lead creditworthy borrowers to take on too much debt or enable borrowers with less credit quality to gain access to credit. These borrowers may subsequently have difficulties to serve and repay their loans.[154] This was the case in the recent crisis triggering the heaviest financial crisis since the market crash in 2000 caused by the “dot-com” bubble.

Therefore, further banking sector reforms are definitely needed to strengthen financial stability, but are likely to create economic costs. These costs may come along with a limited availability of credit and both incurring a detrimental impact on economic growth. Consequently it is vital that the economic impact of these proposals is fully assessed.[155] In this context it is also important that the assessment include the impact on competition to ensure the international competitiveness of European banks beyond the EU borders. It is important to bear in mind that the quality and effectiveness of financial system regulation influences how banks behave in a competitive

[152] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p. 14.
[153] Ibid, p. 2.
[154] See Lumpkin: Risks in Financial Group Structures, 2011, p. 11.
[155] See PWC: Interim Report Feedback to Independent Commission on Banking, 2011, p. 3.

market.[156] But finding the perfect trade-off between competition and regulation is challenging. Furthermore, it is important to assess and carefully weight up economic benefits of increased financial stability against the resulting higher costs of regulation.

As of this writing, there is no impact assessment available for ring-fencing of investment banking which made it challengeable to evaluate the Liikanen proposal and find an answer for the research question.

Additionally, while this paper focuses ring-fencing of investment banking it is important to bear in mind that the Expert Group recommended further reforms. Therefore, it is necessary to consider that ring-fencing of investment banking is one of five tools proposed to enhance financial stability. Consequently, this paper contains a stand-alone evaluation of the ring-fencing proposal.

[156] See Pryce: Regulation and Competition in the Financial System, 2012, p.44.

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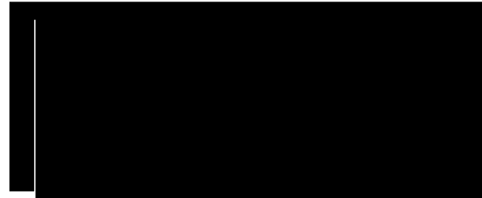

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