

BASEL II AND THE PROTECTION OF CREDITORS IN COMPANY LAW

The Role of Banks as Financial Intermediaries
in the Protection of Third Creditors of Debtor Companies

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For Irmela and Marlene.

For my family.

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LIST OF ABBREVIATIONS

A-IRB	Advanced Internal Rating-Based Approach
AMA	Advanced Measurement Approach
BIA	Basic Indicator Approach
BIS	Bank for International Settlement
BCBS	Basel Committee on Banking Supervision
CAR	Capital Adequacy Ratio
EAD	Exposure at Default
EBA	European Banking Authority
ECA	Export Credit Agencies
ECB	European Central Bank
EL	Expected Losses
EU	European Union
F-IRB	Foundation Internal Rating-Based Approach
FRBNY	Federal Reserve Bank of New York
FRBR	Federal Reserve Bank of Richmond
HQLA	High Quality Liquidity Assets
IRB	Internal Rating-Based Approach
LCR	Liquidity Coverage Ratio
LGD	Loss Given Default
M	Maturity
NSFR	Net Stable Funding Ratio
OECD	Organisation for Economic Cooperation and Development
OJ	Official Journal
PD	Probability of Default
RWA	Risk Weighted Assets
QIS	Quantitative Impact Studies
SA	Standardised Approach
SME	Small and Medium Enterprises
UL	Unexpected Losses
VAR	Value-at-Risk
WM	Wertpapier-Mitteilungen

PART I

SCOPE AND PURPOSE OF PAPER

“Loans and debts make worry and frets”

Proverb

“Always borrow money from a pessimist; he does not expect to be paid back”

Unknown

§ 1. Introduction

What is a good and effective creditor protection system? Can a creditor protection system, understood as a variety of mechanisms employed jointly or individually to protect the interests of creditors, deliver for all creditors, or are there different systems of creditor protection needed for different types of creditor? Is one system of creditor protection better than another, or is their efficacy in protecting creditors dependent on a number of external factors, such as the nature of the problem the system is supposed to address, the legal environment in which the system is operating, or the incentives of the parties making use of the system? Is the protection of creditors' interest achieved better by using one particular set of mechanisms pertaining to one system, or does the combination of various systems of creditor protection deliver better results? These and other related questions on creditor protection have occupied legal literature for a long time. It seems that it will continue to do so for as long as the dynamic creditor-debtor relationship brings up new challenges for the legal profession and there is a need to address these challenges in order to ensure a fair and balanced distribution of business risk among the parties involved in the relationship.

The challenge is the old one: the creditor faces the risk that it will not be repaid by the debtor due to her opportunistic behaviour to the disadvantage of the creditor.¹ The stream of legal research on creditor protection deals with the question how to provide the incentives as well as the enforcement mechanisms that align debtor's behaviour ex-post with what was agreed with the creditor ex-ante.²

1 Hansmann/Kraakman, in: Kraakman et al. (Hrsg.), *The Anatomy of Corporate Law. A comparative and functional approach*, 2. ed. 2009 (hereinafter “Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*”).

2 Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, 1.

A closer relationship between creditor and debtor can mitigate the negative effects from the debtor's opportunistic behaviour by minimizing information asymmetries and increasing trust between the two parties. This logic, when transposed into a lender – borrower relationship, it implies benefits for both parties in the form of a stable and continuous source of business as well as lower default risk and thus also lower costs for the lender, long-term lending relationship with funds provided at more favourable terms and liquidity assistance in times of financial distress for the borrower.

Moreover, the benefits spill over to other creditors, known as “third party” creditors, which include both secured and non-secured, or voluntary and non-voluntary, since a more financially stable borrower with a lower insolvency risk is able to meet current and future financial obligations toward its creditors. The ability of the creditor and debtor to build such a lending relationship depends among others on the creditor protection framework within which the relationship is built.³ What rights the creditor has during the relationship, and especially when the relationship is entering a ‘stormy weather’ determines considerably the humour of the creditor at the beginning of the relationship, i.e. how generous or tight will the terms and conditions of the credit agreement be. For some types of creditor – debtor relationships, such as those between lenders (understand a bank) and borrowers the kind of lending relationship they build depends also on the banking specific regulation, the aim of which is limit systemic risk and protect depositors. These industry-specific regulations affect directly the depth and width of a bank's relationship to the borrower, and with it also a bank's incentives and approach when dealing ex-ante and ex-post with the borrower. When the lender and borrower maintain a close relationship, characterised by an intensive flow of information before and during the lending relationship, the lender tends to be better informed and therefore more effective in monitoring debtor's quality and intentions ex-ante and her behaviour ex-post. A qualitative screening and monitoring should ensure better creditor protection, and this is a desirable result.

In the pool of various types of creditors, banks are considered to be strong and sophisticated creditors, possessing the ability and the expertise to obtain important and relevant information about the quality of the borrower and of the borrower's investment projects and to asses this information accurately. Further, such creditors possess also the leverage to impose on borrowers through contractual agreements measures that ensure the fulfilment of the creditor's claims. In legal literature⁴, these creditors are presumed to perform a very important monitoring role also

3 Davydenko/Franks, *Journal of Finance*, 2008, 565; Armour, Center for Business Research Working Papers, 2008, 1.

4 See e.g. Enriques/Macey, *Cornell Law Review*, 2001, 1165.

on the behalf of non-sophisticated, weak, voluntary as well as non-voluntary creditors. However, banks are not only sophisticated strong creditors, but they are also debtors vis-à-vis bank depositors. Banking law theory assigns banks the role of delegated monitors on behalf of bank depositors.⁵ Moreover, due to their nature and role in the financial system, banks serve as important information, reputation and financial intermediaries.⁶ One talks of a gatekeeping function. Banks are thus considered as gatekeepers in the financial system. As gatekeepers, banks perform an important ex-ante and ex-post selection process through screening and monitoring.⁷ In the financial system, banks as gatekeepers of public interest sort out potential borrowers with low creditworthiness, by preventing them from passing the ‘gate’ that allows them to access capital for their investment projects. Alternatively, the role of banks as ‘delegated monitors’ is understood also in forcing defaulting borrowers with no or low chances of survival out of the financial system as a way to minimize further losses and risks. Thus gatekeeping, as a third-party enforcement mechanism can play an important role in ensuring creditor protection.

The activity of banks, among others also the lending activity as one of the crucial and most risky banking activities, is carried out within a framework of bank-specific regulation that considers the special nature of banks as financial intermediaries.⁸ One of the most industry-specific influential regulations for banks is the Revised Framework of the International Convergence of Capital Measurement and Capital Standards, known as Basel II,⁹ as well as the revised requirements of Basel II, summarized under the name ‘Basel III’.¹⁰ The purpose of the Revised Basel Framework was to establish a more risk-sensitive approach by banks toward borrowers.¹¹

5 Diamond, *Review of Economic Studies*, 1984, 393.

6 Hellwig, in: Giovannini/Mayer (Hrsg.), *European financial integration*, 1991 (hereinafter “Hellwig, in: Giovannini/Mayer, *Financial Integration*”); Chemmanur/Fulghieri, *Review of Financial Studies*, 1994, 475, and Boot, *Journal of Financial Intermediation*, 2000, 7.

7 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53; Oh, *Journal of Corporation Law*, 2004, 735; Coffee, *Gatekeepers. The professions and corporate governance*, 2006 (hereinafter “Coffee, *Gatekeepers*”).

8 Hartmann-Wendels/Pfingsten/Weber, *Bankbetriebslehre*, 5. Aufl., 2010 (hereinafter “Hartmann-Wendels et al., *Bankbetriebslehre*”); Gleeson, *International regulation of banking. Basel II; capital and risk requirements*, 2010 (hereinafter “Gleeson, *International regulation of banking*”); and Tarullo, *Banking on Basel. The future of international financial regulation*, 2008 (hereinafter “Tarullo, *Banking on Basel*”).

9 Basel Committee on Banking Supervision, *International convergence of capital measurement and capital standards. A revised framework*, 2004 (hereinafter “Basel II Accord”).

10 Basel Committee on Banking Supervision, *Basel III. A global regulatory framework for more resilient banks and banking systems*, 2011 (hereinafter “Basel III Accord”), and Basel Committee on Banking Supervision, *Basel III. International framework for liquidity risk measurement, standards and monitoring*, 2010 (hereinafter “Basel III Liquidity Risk”).

11 Deutsche Bundesbank, *Die neue Baseler Eigenkapitalvereinbarung (Basel II)*, 2001 (hereinafter “Deutsche Bundesbank, *Basel II*”).

This was to be achieved among others through rating, either externally through a rating agency, or internally through bank-developed rating systems.¹² Increased risk-sensitivity would be achieved through the tying of the rating result with the amount of capital banks would be required to hold to counter credit risk, which in turn would directly impact the level of interest banks would charge to borrowers. The requirement to not only rate the borrower ex-ante, but also on a continuous basis should a lending relationship take place, would encourage a more intensive flow of information from the borrower to the lending bank. The bank would get to know the borrower better, the borrower would get to know better how the bank ticks, through mutual intensive communication trust would increase, and with it all the benefits associated with trust. Thus, a more risk-sensitive approach by the bank would imply that banks do not use a “one-size-fits-all” approach, but would distinguish between the “good” and the “bad” borrowers and therefore treat them accordingly.¹³ The good borrowers would normally be further supported, whereas the bad ones would be kept out of the system or be forced to exit. Therefore it is assumed that banks would play in this way their gatekeeping role.

A. Research questions

Following the arguments above, it is the purpose of the paper to investigate more closely the performance of banks as gatekeepers in the financial system in protecting third party creditors of borrowers. Moreover, the paper attempts to answer the question of the kind of influence that Basel II requirements exert on bank’s performance of the gatekeeping role.

However, before addressing the questions comprising the prime research focus, the paper attempts to shed some light on issues, such as why are banks considered to be gatekeepers in the financial system. Of importance in this discussion is the also the issue of the public interest in the bank’s performance of the gatekeeping role.

A further complementing issue that the paper attempts to address are the circumstances under which banks perform more efficiently their gatekeeping role to protect third party creditors. The special focus here will be on the type of lending technology known as “relationship lending”. The assumption is that relationship lending strengthens the gatekeeping capacities of banks, since it provides sufficient incentives to screen ex-ante and monitor ex-post. One could even say and that relationship lending is a strong form of gatekeeping. For the matter of addressing the

12 Fees/Hege, Center for Financial Studies Working Papers, No. 2004/25, 1, and Gleeson, *International regulation of banking*.

13 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1504, and Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563.

main research question of the paper, it is important to investigate whether banks engaged in relationship lending can be better gatekeepers.

Finally, since the Revised Basel Framework requirements influence bank's lending activities and thus also the way how they relate to borrowers, it is expected that these requirements influence also bank's performance of the gatekeeping role. Therefore, it is considered necessary to investigate this claim as well as to determine whether these requirements strengthen or weaken banks' performance of the gatekeeping role. Hence, the question, does Basel II contribute to a more effective and better creditor protection through bank gatekeeping?

B. Basic terms and concepts

Before starting an elaborate discussion on the mechanisms of creditor protection, it is necessary to briefly define some basic terms, which stand at the heart of the creditor protection discussion. A deepened analysis of the concepts and terms used follows however in the coming chapter.

To begin with, it is necessary to define who is considered a *creditor* and what is implied with *creditor protection*. For the purposes of this dissertation, the term creditor generally includes any third party who has a payable or in-the-future-to-become payable claim against a debtor.¹⁴ This definition includes not only incumbent creditors who knowingly and willingly are in a credit relationship with the debtor, but also persons who are to become creditors and against whom the debtor could become liable for other reasons. When a party accepts voluntarily a claim, either current or future, against a debtor one talks of a 'voluntary' creditor. When a third party did not choose nor could have chosen to accept a claim against a debtor, one talks of a 'non-voluntary' creditor. This type of third parties becomes creditor and thus becomes aware of the status only after the claim has arisen due to a certain occurrence. A typical example of this kind of creditors is tort creditors. Within these two major groups of creditors, one can differentiate the creditors further according to, for example, their nature (e.g. institutional or non-institutional), time span of their relationship to the debtor (short-term or long-term creditors), or ability to enforce their claims (strong or weak creditors). However, as a matter of legal principle, for the purposes of protecting creditors it is irrelevant whether they are voluntary or non-voluntary, or any other type of creditors within these two major groups.¹⁵ All of them have a claim to satisfy against the

14 See also the definition by Wiedemann, *Gesellschaftsrecht: ein Lehrbuch des Unternehmens- und Verbandsrechts*. Band I. Grundlagen, 1980 (hereinafter "Wiedemann, *Gesellschaftsrecht*"), p. 514.

15 The principle of co-equality (in German company law literature „*Gleichrangigkeit*“). *Ibid.*, p. 515. However, this is not to imply that creditors do not compete among themselves for priority in right of payment, especially when the debtor does not sufficient assets to repay the claims.

debtor. Due to the fact that creditors are typically outsiders,¹⁶ namely they do not participate in the day-to-day management of the debtor's works, the claims of the creditors have priority¹⁷ compared to the claims of the debtor herself.¹⁸ According to this description, as regards a debtor being a business firm, creditors include trade creditors, such as suppliers of goods, employees, lenders of capital, tort creditors, and even firm owners¹⁹ when they have extended credit to their firm. When the term 'debtor' is used in this paper, it is implied a business firm, and more specifically a limited liability company.

'Creditor protection' is used in this paper to mean the individual as well as the pool of mechanisms, the aim of which is to protect the interests of persons known as creditors. Under this definition fall not only statutory mechanisms or instruments, provided typically in company law or insolvency law, but also contractual as well as other mechanisms the operation of which serves to ensure that the debtor satisfies the claims of creditors. The second type of mechanisms are also called as 'self-help' mechanisms, since their activation depends on the will of the parties to make use of them, whereas statutory mechanisms, as the name denotes are activated by operation of the law. The paper focuses primarily on the self-help mechanisms of creditor protection.

Last but not least, as to the question why do we need protection for creditors, it suffices at this place to answer shortly that they need to be protected against those persons, who in company law language are called the company's "controllers".²⁰ These are typically the directors or managers of the firm who run the day-to-day business of the firm and have the power to decide on the firm's actions. Being in such a position, the controllers may use the firm and her assets to serve the controllers' personal financial interests and thus prejudice the legitimate interests of the firm's creditors. A thorough analysis of the need for protection and the risks faced by creditors follows in the next chapter.

16 Bachner, *Creditor protection in private companies. Anglo-German perspectives for a European legal discourse*, 2009 (hereinafter "Bachner, *Creditor protection*"), p. 21.

17 Priority in terms of hierarchy and not of time. See Wiedemann, *Gesellschaftsrecht*, p. 515 and Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p.6.

18 *Ibid.*, p. 5.

19 Although the law recognises the right of the firm owners as creditors to be paid just as the other creditors, in practice, the claims of the firm owners towards the firm are often subordinated to those of other creditors.

20 Bachner, *Creditor protection*, p. 21.

C. Structure of the paper

Part II of the paper deals in more detail with the question why there is a need to protect creditors and who do they need to be protected from. Further, the prevailing mechanisms of creditor protection are analysed by considering their advantages and disadvantages to creditors. The focus is put on the so called ‘self-help’ mechanism of creditor protection, mechanisms that are often contractual in nature²¹ and presume the ability of the creditors to accurately assess the expropriation risk they are facing as well the ability to work out and enforce the necessary measure to ensure their protection. Some of the self-help mechanisms of creditor protection addressed in this part include covenants, security (collateral), personal guarantees and mandatory disclosure.

Part III focuses the discussion regarding creditor protection on the role of banks as gatekeepers in the financial system. Therefore, Part III contains apart from an analysis of the concept of gatekeeping as a third party enforcing mechanism, also a discussion on the special nature of banks as financial intermediaries, as well as a discussion on bank’s incentives as financial intermediaries to monitor borrower’s performance in their role as gatekeepers. An important aspect of this part is also the analysis of the concept of ‘relationship lending’ and how this type of lending technology strengthens the efficiency of bank’s gatekeeping role.

Part IV addresses the impact of one of the most essential pieces of international banking regulation, namely of the Revised Basel Framework, on bank’s performance of the gatekeeping function. Since Basel II and Basel III set rules and standards regarding bank’s capital adequacy and risk management, they influence directly bank lending activity. Therefore, Part IV contains an analysis of the most important requirements of Basel II and Basel III with regard to Pillar I, namely the requirements on the minimum regulatory capital for banks. The findings of this analysis are then used to address the question whether the requirements of the Revised Basel Framework support bank’s gatekeeping role in providing third party creditor protection during the lending activity.

Part V concludes in the form of a summary of the essential findings of the paper and an assessment of how these findings bear of bank’s performance of the gatekeeping function as sophisticated and strong creditors monitoring borrower’s also on behalf of third party creditors.

21 E.g. covenants and collaterals.

PART II

THE CONCEPT AND ALTERNATIVES OF CREDITOR PROTECTION

§ 2. The need for creditor protection

A. Economic analysis of the firm

I. The role of price mechanism

Firms constitute crucial undertaking constructions in our modern economic system. They are the most widespread type of economic organisations employed to conduct business. The theory of the firm and why did they come to emerge finds its roots on the methods of production organising, which deals with the question how are resources allocated to adjust supply to demand and production to consumption so that the market can produce an efficient outcome.

Economists identify two alternative methods of production organising.²² In the first method, the entrepreneur contracts with different parties who provide different services and products needed by the entrepreneur to produce in the end the demanded product. The process how supply and demand are adjusted to one another to define levels of production is automatic, elastic and responsive.²³ This economic theory of production organising assumes that the whole economic system, including the direction of resources, is coordinated by the *price mechanism*. In this process the price of goods serves as an optimal mechanism that decides consumption, hence production.²⁴ Thus, outside the firm, the direction of the production is coordinated through a series of exchange transactions in the market.²⁵ However, *Coase* considers this method as an incomplete picture of the economic system, since it argues how co-ordination among the different participants in the market is done, but not why an organisation, such as a firm, is necessary.²⁶ He introduces a new institutional analysis of the firm by pointing out to the ‘co-ordinating function’²⁷ of the entrepreneur. This method removes some of the transactions from the system based on the *price mechanism* and internalises these transactions within an economic organisation called ‘firm’. In his article “The Nature of the Firm”, which marks also the

22 van der Elst, Financial Law Institute Working Paper Series, 2002, p. 2.

23 Coase, *Economica*, 1937, 386, p. 387.

24 *Ibid.*, p. 387.

25 *Ibid.*, p. 388.

26 *Ibid.*, p. 388.

27 *Ibid.*, p. 389.

beginning of the new institutional analysis of the firm,²⁸ *Coase* suggests that the benefits of establishing a firm relate to the “cost of using the price mechanism”²⁹. The cost of negotiating and concluding a separate contract for each transaction that takes place in the market could be reduced through the establishment of a firm. Thus, within the firm, the series of exchange market transactions is substituted by the entrepreneur’s co-ordination who directs levels of production. The contracts are not eliminated completely but they are substantially reduced through the firm, as *Coase* puts it:

*“We may sum up this section of the argument by saying that the operation of a market costs something and by forming an organisation and allowing some authority (an entrepreneur) to direct the resources, certain marketing costs are saved. The entrepreneur has to carry out his function at less cost, taking into account that he may get factors of production at a lower price than the market transactions which he supersedes, because it is always possible to revert to the open market if he fails to do this.”*³⁰

Therefore, *Coase* suggests that the choice between the two methods and the reason for choosing the one method rather than the other may explain why firms exist. Thus, he implies that firms will substitute the market when the transaction costs³¹ are lower than they would be if these transactions were performed using the market and its price mechanism.³² Economizing on the transaction costs is therefore, according to *Coase*, the reason for the existence of the firm.³³

II. Transaction costs theory

The transaction costs³⁴ theory is a fundamental part of the research focus of the *New Institutional Economics* tradition, a term coined by Oliver Williamson.³⁵ *Williamson* explained that

28 The discipline of research that derived from the economic analysis of law and that attempts to evaluate the impact of legal rules through economic methods. Well-known representatives of the economic analysis of law discipline are Posner, *Economic analysis of law*, 5th ed., 1998, (English literature); Schäfer/Ott, *Lehrbuch der ökonomischen Analyse des Zivilrechts*, 4. Aufl., 2005 (hereinafter “Schäfer/Ott, *Ökonomischen Analyse des Zivilrechts*”); Eidenmüller and Schön, *The Law and Economics of Creditor Protection. A Transatlantic Perspective*, 2008 (German literature).

29 *Coase* *Economica*, 1937, 386), p. 390.

30 *Ibid.*, p. 392.

31 Richter/Furubotn, *Neue Institutionenökonomik. Eine Einführung und kritische Würdigung*, 3. Aufl. 2003 (hereinafter “Richter/Furubotn, *Neue Institutionenökonomik*”), p. 41 categorizes these costs into costs for searching and finding information, costs for negotiating and entering into contracts, as well as costs for monitoring and enforcing contracts between the contracting parties.

32 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, p. 308.

33 See also Eidenmüller, *Effizienz als Rechtsprinzip. Möglichkeiten und Grenzen der ökonomischen Analyse des Rechts*, 1995, p. 94.

34 The term “transaction costs” lacks a clear and accepted definition by both lawyers and economists. Cooter/Marks/Mnookin, *Journal of Legal Studies*, 1982, 225, p. 242 state that a precise definition of “transaction costs” “has never been pinned down”, although some writers define transaction costs to mean the cost of communicating and policing agreements.

35 Williamson, *The economic institutions of capitalism. Firms, markets, relational contracting*, 1985

transaction³⁶ costs occur when goods or services are transferred across a technologically separable interface. As long as the interface is working well, the transfer occurs smoothly. When frictions appear, causing the transfer process to slow down or to be suboptimal, then transaction costs arise.³⁷ He compared the transfer of goods and services in the market with the mechanical systems, where the transaction costs are the equivalent of frictions in the physical systems:

*“With a well-working interface, as with a well-working machine, these transfers occur smoothly. In mechanical systems we look for frictions: Do the gears mesh, are the parts lubricated, is there needless slippage or other loss of energy? The economic counterpart of friction is transaction cost: Do the parties to the exchange operate harmoniously, or are there frequent misunderstandings and conflicts that lead to delays, breakdowns, and other malfunctions?”*³⁸

Further, *Williamson* views bounded rationality and opportunism as the source for the transaction costs.³⁹ Under the bounded rationality proposition, people have limited information as well as limited ability to process this information. Because the information is incomplete, people have only a limited ability to predict the future and derive implications from these predictions. Therefore, due to this limitation people make mistakes in their decision-making.⁴⁰ The existence of bounded rationality leads to another problem, namely to opportunism.

III. Opportunism as a cost

When one of the parties to the contract needs to make transaction-specific investments to fulfil the contract, and when these costs cannot be shifted to third parties in the market, then there is a danger that the other party to the contract will behave opportunistically and use this situation for self-enrichment (hold-up situation).⁴¹ *Williamson* defined opportunism as the ‘incomplete or distorted disclosure of information, especially to calculated efforts to mislead, distort, disguise,

(hereinafter “*Williamson, The economic institutions of capitalism*”). For a detailed account of the history of development of the New Institutional Economics tradition as well as for presentation of the main assumptions and proposals of the New Institutional Economics regarding transaction costs theory, opportunism and principal-agent theory see Erlei/Leschke/Sauerland, *Neue Institutionenökonomik*, 1999, and Richter/Furubotn, *Neue Institutionenökonomik*. Some of the most well-known authors who have written on this mode of analysis to explain models of organisation are Alchian, Coase, North and *Williamson*.

36 Includes both, contracts and exchanges.

37 *Williamson, The economic institutions of capitalism*, pp. 1-2.

38 *Ibid.*, pp. 1-2.

39 Alchian/Woodward, *Journal of Economic Literature*, 1988, 65, p. 66. See also Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, p. 3.

40 *Williamson, The economic institutions of capitalism*, pp. 44-7. See also Alchian/Woodward, *Journal of Economic Literature*, 1988, 65, p. 66.

41 *Ibid.*, p. 47 ff. See also Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, p. 3.

obfuscate, or otherwise confuse'.⁴² Because of the limited ability to obtain and process information regarding a transaction, the one party to the transaction will have more information or a different kind of information than the other party has, which creates for this party incentives to pursue own interests to the disadvantage of the other party to the transaction. Opportunism is the strongest form of pursuing own interests.⁴³ *Williamson* differentiated, although not in detail, between two forms of opportunism: adverse selection referred to as ex-ante opportunism, and moral hazard referred to as ex-post opportunism⁴⁴.

Thus opportunism revolves around asymmetric information. The rational party to a transaction will attempt to take measures, for example, expend money and time to collect information about the other party, monitor the performance of the contract, and apply incentivising as well as threatening mechanisms to avert or at least reduce opportunistic behaviour of the other party.⁴⁵

The assumption of opportunism and of the transaction costs related to it, which is a basic assumption of the new institutional economic,⁴⁶ finds application in the contractual theory of the firm, which defines the firm as a “nexus of contracts”.

B. The contractual view of the firm: The firm as a nexus of contracts

With the view to reduce transactions costs, parties agree to replace the individual contracts for each transaction with a bundle of relational contracts. This is the core of the contractual view of the firm. *Jensen/Meckling*, well-known representatives of the contractual theory of the firm, in their seminal work “Theory of the firm: Managerial behaviour, agency costs and ownership structure”⁴⁷ emphasised the contractual nature of the firm, by defining the firm as a nexus of contracts that regulate the non-market and long-term transactions between owners of resources who form a private firm under conditions of asymmetric information and imperfect foresight.⁴⁸ The firm enables thus the carrying out of complex processes, in which conflicting objectives of the different parties participating in the transactions are brought into equilibrium.⁴⁹ These

42 *Ibid.*, p. 47.

43 *Ibid.*, p. 47.

44 *Ibid.*, p. 47. See also Richter/Furubotn, *Neue Institutionenökonomik*, p. 216. However, not all agree with this form of categorization. See e.g. Alchian/Woodward, *Journal of Economic Literature*, 1988, 65, p. 66.

45 Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, p. 3.

46 Williamson, *Journal of Law and Economics*, 1979, 233, p. 234.

47 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, 305.

48 *Ibid.*, p. 311 ff. See also Richter/Furubotn, *Neue Institutionenökonomik*. Eine Einführung und kritische Würdigung, 3. Aufl. 2003, p. 400 and Schäfer/Ott, *Ökonomischen Analyse des Zivilrechts*.

49 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, p. 311.

contractual relations, which constitute the essence of the firm,⁵⁰ occur not only between the firm and the employees, but also between the firm and the suppliers, the customers, the creditors, and so on.⁵¹ Thus, the firm becomes an instrument of long-term cooperation between the various constituents within a hierarchical structure.⁵²

As contractual in nature, the most important relationships within a firm are thus based on consent and not in some form of extra-contractual command-and-control authority.⁵³ Although the emergence of the firm it is said to have lowered certain transaction costs, as it was explained above, because of all the contractual relations between the different entities in the firm, new types of costs related to the firm transactions arise, which are no longer disciplined through the market price mechanism.⁵⁴ *Jensen/Meckling* define them as costs arising from an agency relationship, hence agency costs.⁵⁵

C. The effects of the agency theory in a firm context

Agency relationship, also a crucial concept of in modern institutional economics, is defined as “a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some services on their behalf which involves delegating some decision-making authority to the agent.”⁵⁶ The basic idea is very simple: the agent acts on behalf of the principal, but because of information asymmetry, the principal faces difficulties to monitor the actions of his agent. Potential conflicts of interest may arise out of these relationships if both parties to the

50 For a critical appraisal of the “nexus of contracts” theory of the firm see Bratton, *Cornell Law Review*, 1989, 407.

51 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, p. 310.

52 Schäfer/Ott, *Ökonomischen Analyse des Zivilrechts*, p. 645.

53 Armour/Hansmann/Kraakman, in: Kraakman et al. (Hrsg.), *The Anatomy of Corporate Law. A comparative and functional approach*, 2. ed. 2009 (hereinafter “Armour/Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*”), p. 7. Armour, Hansmann and Kraakman explain that the term “nexus of contracts” is somewhat ambiguous, as it does not distinguish firms from other networks of contractual relationships. They suggest that “nexus for contracts” would be a more accurate term to describe a firm, in the sense that a firm serves as a common counterparty in numerous contracts with the different constituents (suppliers, employees, customers, etc.) coordinating the actions of these multiple constituents through the exercise of its contractual rights. Thus the firm can act as a single contracting party, distinct from its owners or managers, and thus enabling the contracting parties to lower their transaction costs.

54 Hirte, *Kapitalgesellschaftsrecht*, 6., neu bearb. Aufl. 2009 (hereinafter „Hirte, *Kapitalgesellschaftsrecht*“), p. 12.

55 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, p. 308 ff.

56 *Ibid.*, p. 308.

relationship tend to maximize their own profits or when the agent will not always act in the best interest of the principal.⁵⁷ Opportunism comes back into the play again.⁵⁸

The core of the conflict as explained by *Hansmann/Kraakman*. is that because the agent usually is better informed than the principal about the relevant facts,⁵⁹ the principal cannot, without incurring costs, make sure that the agent's performance is precisely what was promised.⁶⁰ In the absence of perfect contracting, which is difficult and costly to design due to imperfect foresight,⁶¹ the principal will find himself in danger of opportunism.⁶²

As a result of this ex-post opportunistic behaviour on the side of the agent, which might result in some value diverted to the agent from what was already promised to the principal, the overall value that the principal receives will be lowered.

These losses are also considered as costs occurring because of the agency problem.⁶³ The principal therefore, to minimize the loss resulting from the divergences between the sub-optimal decisions of the agents and those decisions, which would maximise the welfare of the principal (had the principal taken these decisions himself) needs to incur monitoring costs. These monitoring costs are in the form of appropriate incentives (pecuniary as well as non-pecuniary) to minimise the aberrant activities of the agent, which damage the maximisation of the principal's welfare.⁶⁴ Additionally, the agent needs as well to expend some resources to guarantee that his behaviour will not harm the interests of the principal or that compensation to the principal is available should his actions run contrary to the principal's interests.⁶⁵ Thus the overall agency costs are defined as the sum of the monitoring costs (incurred by the principal), the bonding costs (incurred by the agent), and the residual loss (value not returned to principal).⁶⁶

57 *Ibid.*, p. 308.

58 Williamson considered opportunism, either in a lighter or heavier form, as a characteristic trait of human behaviour. Williamson, *Die ökonomischen Institutionen des Kapitalismus. Unternehmen, Märkte, Kooperationen*, 1990, p. 73.

59 Asymmetric information is the basic assumption of the principal-agent theory approach. Richter/Furubotn, *Neue Institutionenökonomik*, p. 216.

60 Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 21.

61 Richter/Furubotn, *Neue Institutionenökonomik*, p. 216. Imperfect foresight makes it impossible for parties to enumerate and contract upon all possible contingencies that the future will bring during the duration of the contractual relation.

62 Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, p. 5.

63 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305, p. 308 call this type of costs "residual losses".

64 *Ibid.*, p. 308.

65 *Ibid.*, p. 308 this type of costs are called 'bonding costs'.

66 *Ibid.*, p. 305.

I. The principal-agent problem

From a company law point of view, the principal-agent theory can shed light into the potential conflicts arising between the various constituents of a firm. More specifically, *Hansmann/Kraakman* suggest that within a firm, conflicts of interests between ‘corporate insiders’, implying controlling shareholders and top managers, and ‘corporate outsiders’, implying minority shareholders⁶⁷ and creditors have the characteristics of agency conflicts, as these relations are principal-agent type of relations.⁶⁸

Within a firm, three main types of agency conflicts are observed, namely the agency conflict between (i) owners of the firm and managers (vertical principal-agent conflict);⁶⁹ (ii) owners possessing minority interests in the firm and owners possessing majority interests (horizontal principal-agent conflict);⁷⁰ and (iii) the firm itself, including primarily its managers and owners on one side, and the external parties to the contractual relationship, which includes mainly creditors of the firm, on the other side.⁷¹ The focal problem in an agency conflict lies in motivating the agent to act in the principal’s interests, rather than simply its own interest.⁷² The principal cannot assure at zero costs that the agent will not misbehave by behaving opportunistically. The larger the complexity of the tasks which the agent is required to perform, the larger the costs of opportunism will be.⁷³

1. The vertical principal-agent problem

The ‘separation of ownership and control’, a concept coined by *Berle/Means*,⁷⁴ where the management of a firm is performed by persons other than those who own the firm, may result in an exacerbation of the agency conflicts between the owners of the firm as principals and the managers as agents. Faced with a widely dispersed shareholder base, where control is reduced,⁷⁵ managers face the incentive to behave opportunistically and appropriate company value, thus

67 Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, p. 5.

68 Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 21.

69 Hirte, *Kapitalgesellschaftsrecht*, p. 12.

70 *Ibid.*, p. 12.

71 Armour et al. in Kraakman et al., *The Anatomy of Corporate Law*, p. 2.

72 Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 21. Posner, *Economic analysis of law*, 5th ed., 1998, p. 126: “The agent is paid to treat the principal as he would treat himself; to be his alter ego.”

73 Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 22.

74 Berle/Means, *The Modern Corporation and the Private Property*, 1932, p. 5.

75 For single shareholders with minority shareholding it is too costly to get involved in management control, as the cost of obtaining information and exercising monitoring would exceed the value of shareholding.

decreasing shareholder value.⁷⁶ In such a situation, a typical minority shareholder faces difficulties, primarily due to cost reasons, to monitor the behaviour of the agent to curb opportunism. Therefore, he might choose apathy⁷⁷ instead of activism.

2. The horizontal principal-agent conflict

However, the repercussions of the “separation of ownership and control” approach resulting in vertical agency conflicts are typical in larger corporations with dispersed ownership. In company law environments, such as, for example in Germany, where share ownership is concentrated rather than dispersed, the controlling shareholder faces less cost barriers and *collective action* or *free-rider* problems to monitor the behaviour of the company’s manager. In such cases, the benefits from monitoring will exceed its costs and therefore it pays off for the controlling shareholder to monitor. Further, the controlling shareholder may use its position and influence in the company for its own benefit without his actions resulting necessarily in value maximisation for all the shareholders. The controlling shareholder might thus choose to behave opportunistically and expropriate the minority shareholders. Therefore, in this kind of share ownership constellation, the dominant agency conflict within a firm is the horizontal agency conflict,⁷⁸ namely that between the majority and the minority shareholders, where the majority or controlling shareholder is the agent, and the minority shareholder is the principal.

II. Firm versus creditors principal-agent conflict

The third type of agency conflict is that between the firm, including primarily the controlling shareholders and the managers on the one side, and the external parties to the contractual relationship, including primarily creditors on the other.⁷⁹ While it is necessary to state that the concept of firm does not imply the company as a legal person but rather a form of production organising,⁸⁰ the word ‘firm’ will be used throughout this text to imply a company or a corporation, as a form of legal vehicle employed to attract capital into the firm⁸¹ and carry out the business related to it.

76 Hirte, *Kapitalgesellschaftsrecht*, p. 13. See also Posner, *Economic Analysis of Law*, 2nd ed. 1977, p. 301: “The typical shareholder (except in the closely held corporation or where one shareholder owns a very large percentage of the shares of the corporation is not knowledgeable about the business of the firm ... His interest like that of a creditor is a financial rather than managerial interest.”

77 Hirte, *Kapitalgesellschaftsrecht*, p. 13.

78 *Ibid.*, p.14; Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 22.

79 In this sense, creditors include not only suppliers but also employees, as well as any other person who holds a claim against the company.

80 Posner, *Economic Analysis of Law*, 2nd ed. 1977, p. 301.

81 *Ibid.*, p. 301.

As already noted above, the generic principal-agent conflict characterizes typically any contractual relation, and therefore also the relations between the firm and the third party creditors. Additionally, the firm-creditor agency conflict is present on all types of business organisations.⁸² However, it is in the corporate form of the firm that this problem is at its strongest form.⁸³ The reason for that rests in some features of the corporate form, especially in the limited liability and legal personality features.

1. The meaning of legal personality in company law

Corporate firms are legal entities, and therefore they are distinct from natural persons. A typical feature of legal persons that distinguishes them from natural persons is the availability (or the setting apart) of a pool of assets distinct from the personal assets of the firm's owners or managers. This separate pool of assets is needed for the firm to bond itself credibly to fulfil the contracts the firm is party to.⁸⁴ The separation of the pool of assets owned solely by the firm from the pool of assets owned by the firm's owners or managers constitutes an essential element of the corporate firm as a legal entity. Firms are able to own property, which they can use for the purposes of business, including pledging it to the creditors. What derives from this concept is the rule that assigns to the claims of the firm's creditors on the firm's assets priority over the claims of the personal creditors of the firm's owners.⁸⁵ Although the firm's owners own the capital of the corporate firm, which they have contributed by way of securities purchase, this is not to be understood as implying ownership of the firm's assets. The firm alone is considered to own its assets.⁸⁶ This means in turn that the firm's assets may not be committed to meet liabilities other than those of the firm itself. Hence, personal creditors of the firm's owners may not rely on the firm's assets to satisfy their claims against the firm's owners. This separation (pool) of firm's assets has been also termed 'entity shielding' to emphasize that it involves shielding the assets of the firm from the personal creditors of the firm's owners.⁸⁷

82 Armour et al. in Kraakman et al., *The Anatomy of Corporate Law*, p. 4 state that in any form of jointly-owned enterprise conflicts between owners, managers and third party contractual partners are expected to occur.

83 Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law. A comparative and functional approach*, 2004 (hereinafter "Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law*"), p. 3 and p. 7.

84 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 392. Also Armour/Whincop, *Oxford Journal of Legal Studies*, 2007, 429, p. 441-2.

85 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 393. Also Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law*, p.7; Armour et al. in Kraakman et al., *The Anatomy of Corporate Law*, p. 8.

86 *Ibid.*, p. 7.

87 Hansmann/Kraakman/Squire, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 2 'entity shielding' refer to rules thprotect a firm's assets from the personal creditors of the

Additionally, the second rule that derives from the legal personality concept is what is termed as the ‘liquidation protection’ rule.⁸⁸ It was mentioned above that owning the shares of the firm should be understood to imply an ownership of the firm’s assets. Therefore, shareholders cannot withdraw their share of the assets of the firm and thus force the firm to insolvency. The ‘liquidation protection’ rule performs exactly this function and protects in this way the going-concern value of the firm. The assets of the firms serve to the satisfaction of the firm’s creditors, and therefore, neither the firm’s owners, nor their personal creditors can liquidate the firm’s assets.⁸⁹

a) *Upside effects of the legal personality principle*

The legal personality principle has the upside effect that it reduces the cost of credit to the company by lowering monitoring costs. Creditors would not need to monitor the personal assets of a changing number of firm owners, but only (the fluctuations in) the pool of assets of the firm against which they seek to satisfy their claims. Thus the amount of efforts spent by creditors to monitor the company reduces substantially. Additionally, the legal personality principle provides a risk-sharing mechanism by allowing the firm’s owners and creditors to apportion risk among them in various patterns according to the costs they are willing to pay for bearing that risk.⁹⁰ Nevertheless, ‘entity shielding’ rules constitute also a reason for concern to the creditors of the firm.

b) *Downside effects of the legal personality principle*

The downside effect of entity shielding rules relates to the fact that when coupled with owner shielding rules, they leave firm’s creditors with only a limited pool of assets to satisfy their claims. As long as the firm holds enough assets to satisfy the outstanding liabilities, the creditor does not need to worry. However, in the event of insolvency, should the firm have insufficient assets to meet its liabilities and in the absence of personal guaranties by the firm owners, the

owners. Also Hansmann/Kraakman/Squire, *European Business Organization Law Review*, 2007, 59, p. 66 ff. Additionally, Armour et al. in Kraakman et al., *The Anatomy of Corporate Law*, p. 8 call this the ‘priority rule’ and explain that through this rule firm’s assets, as a default rule of law, are automatically made available to satisfy contractual liabilities that are entered into in the name of the firm.

88 Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law*, p. 8.

89 *Ibid.*, p. 7. Also Armour et al. in Kraakman et al., *The Anatomy of Corporate Law*, p. 8; Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 10. Hansmann/Kraakman/Squire, *European Corporate Governance Institute Working Paper Series in Law*, 2006, describe this as a strong form of “entity shielding” p. 3 ff.

90 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 404. Additionally, the AAP element of asset partitioning protects the firm’s going-concern value by not allowing the personal creditors of the firm’s owners to liquidate the owner’s share in the firm, in case the owner goes insolvent. For more benefits of the AAP see Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, pp. 309-405.

creditor is left only with the assets owned by the firm and may not make avail of the assets belonging to the firm owners.⁹¹ Additionally, although the firm owners are willing to accept the seniority of the firm's creditors' claims over their own claims in return for capital,⁹² they tend, in the same time, to seek distributions⁹³ by the firm and do not want to wait until all creditors' claims have been satisfied. By doing so, firm's owners will reduce the amount of assets available for the satisfaction of creditor's claims, thus prejudicing the interests of the firm's creditors. Thus entity shielding rules reveal the potential agency conflict between the firm owners and the firm creditors.

2. The meaning of the limited liability principle in company law

The limited liability principle or the 'owner shielding' rule assigns to the claims of owners' personal creditors on the owners' personal assets priority over the claims of the firm's creditors. The 'owner shielding' rules refer thus "to rules that protect the assets of a firm's owners from the firm's creditors".⁹⁴ In the case of the insolvency of a firm, creditors of the firm may not, as a rule of thumb, draw on the firm's owners' pool of assets to satisfy their claims. Therefore, the liability of the firm's owners for the debts of the firm is limited to the amount of assets or capital they have contributed into the firm's coffers.⁹⁵ In this sense, one could reasonably state that the ending 'Ltd'⁹⁶ in England or 'GmbH'⁹⁷ in Germany attached to the name of a private company limited by shares is somewhat misleading, because the limited liability does not attach to the firm, but to the firm's owners. The firm itself bears unlimited liability, i.e. is liable with all its assets, for debts incurred by and in the name of the firm.⁹⁸ As a rule of thumb, the creditors of a

91 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 11.

92 The term 'capital' is used here in a general sense to mean goods and services extended to the firm by creditors.

93 The term 'distributions' is used here to include all types of distributions to firm's owners, either in the form of dividends or in other forms, which return the firm's assets to its owners.

94 Hansmann/Kraakman/Squire, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 3; Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 393.

95 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 90 ff. describe the corporation as an unreal thing, as a name for a complex set of contracts among managers, workers and contributors of capital, without whom the corporation would have no independent existence. Therefore, limited liability rules imply simply that the investors of the company are not liable for more than what they invest. Additionally, the managers or the workers of the corporation are not vicariously liable for the firm's action. Thus, no one risks more than one invests. On the same issue see Posner, *University of Chicago Law Review*, 1976, 499, p. 502. In German literature on the same issue see Hirte, *Kapitalgesellschaftsrecht*, p. 15 and Adams, *Ökonomische Theorie des Rechts. Konzepte und Anwendungen*, 2002 (hereinafter "Adams, *Ökonomische Theorie des Rechts*"), p.232.

96 Short for "limited".

97 Short for Gesellschaft mit beschränkter Haftung (in German language) or company with limited liability (in English language).

98 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 10 ff; Hirt, *European Company and Financial*

firm have only the firm's assets to satisfy their claims. The principle of the separation of the firm's assets from those of the shareholders is crucial for ensuring the implementation of limited liability and for shielding the shareholders' assets. Failure to respect this principle, where the firm's assets are treated by the shareholders as own assets, can lead to personal liability for the latter.⁹⁹ This type of shielding, also named 'complete owner shielding',¹⁰⁰ has become nearly a universal feature for corporate form provided by the most advanced corporate legislations, although its introduction was not without troubles and criticism.¹⁰¹

a) *Upside effects of the limited liability principle*

Despite the criticism surrounding the introduction of the limited liability principle, several authors¹⁰² have continuously drawn attention to the positive effects of this principle. Thus, limited liability has been granted the merit for facilitating the raising of capital for capital-intensive business enterprises¹⁰³ and to a deeper level for facilitating investment and

Law Review, 2004, 71, p. 72. See also Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz. Grund und Grenzen der Haftungsbeschränkung nach Kapitaldebatte, MoMiG und Trihotel*, 2009 (hereinafter "Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*"), p. 290 ff. where the limited liability covers not only the owners of the firm, but also the firm managers, although this limitation of liability is not unlimited (e.g. where the managers act ultra vires in exceeding the authority granted to them by law or by contract, in cases of wrongful trading, etc.).

- 99 In Germany for example known under the concept of "Vermögensvermischungshaftung". See e.g. Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 240 ff.; Baumbach/Hueck, § 13 Rn. 45 *GmbHG*, 19. Aufl, 2010.
- 100 Hansmann/Kraakman/Squire, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 4 differ between 'complete owner shielding' and 'weak owner shielding' with the later rules giving to personal creditors of the firm's owner a claim to personal assets that is prior to the claim of firm's creditors.
- 101 In Khan-Freund, *Modern Law Review*, 1944, 54, Prof. Khan-Freund characterised the decision of the House of Lords in *Salomon v Salomon & Co*, where the main shareholder of the 'one-man' company was able to avoid personal unlimited liability for the debts of the company by converting from an unincorporated sole trader into an incorporated company with limited liability, as 'calamitous' because "the company has often become a means of evading liabilities and of concealing the real interests behind the business". Also, Adams, *Ökonomische Theorie des Rechts*, pp. 232 – 233 asks the question whether the creation of limited liability gave to the investors and managers the possibility to avoid the negative consequences and costs related to the system which they created.
- 102 See eg. Manne, *Virginia Law Review*, 1967, 259; Posner, *University of Chicago Law Review*, 1976, 499; Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117; Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89. For a summary of arguments in favour of limited liability see Bratton, *Cornell Law Review*, 1989, 407, p. 328. For literature in German language see e.g. Lehmann, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 1986, 345, and Roth, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 1986, 371, and Grigoleit, *Gesellschafterhaftung für interne Einflussnahme im Recht der GmbH*, 2006 (hereinafter „Grigoleit, *Gesellschafterhaftung*“), for a critical appraisal of the limited liability concept. Additionally see Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, 1; Adams, *Ökonomische Theorie des Rechts*; Hirte, *Kapitalgesellschaftsrecht*; Cahn/Donald, *Comparative company law. Text and cases on the laws governing corporations in Germany, the UK and the USA*, 2010.
- 103 Adams, *Ökonomische Theorie des Rechts*, p. 234; Hirte, *Kapitalgesellschaftsrecht*, p. 15.

entrepreneurship in the first place. Limitation of liability is an effective mechanism to provide investment incentives. A reduction of these incentives by denying investors the limitation of their liability or by allowing limited liability only for some business sectors and not for all would be socially more damaging (because it would inhibit investment) than the risks faced from guaranteeing limited liability to all investors.¹⁰⁴ This is the case not only for public but also for private companies, irrelevant whether big or small companies. The offer of limited liability serves as an incentive for the smaller entrepreneur to engage in business and take over entrepreneurial risk. This incentive is especially important in time of economic stagnation, since it encourages entrepreneurship. For this reason, there is an argument of public interest in allowing limited liability¹⁰⁵. Additionally, by allowing small investors to invest in small portfolios without risking incurring disastrous losses if the firm becomes insolvent, limited liability has enabled the raising of capital by a large number of smaller investors.¹⁰⁶ Further, major investors have the possibility, through limited liability, to diversify their investment by holding equity portfolios in different firms without having to worry that a failed investment in one of the firms would endanger his entire personal wealth, as it would be the case with investments in unlimited liability firms.¹⁰⁷ Because the investors would be liable up to the amount of their investment in the firm, and thus limit the risk they are willing to bear, they would try to avoid incurring costs to monitor the actions of the firm's agents or the actions of the other investors of the firm that would not justify their investment in the firm. This would result in better investment risk management¹⁰⁸ through investment diversification and will potentially

104 Grigoleit, *Gesellschafterhaftung*, p. 53 ff.; Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 290 ff.

105 *Ibid.*, p. 295. However, Schall argues also that a support of public economic interest through the facilitation of business through limited liability for entrepreneurs serves also to the protection of creditors. The strengthening of the entrepreneurs through limited liability is also accompanied with more protection for creditors, since they are important for the success of the business, and therefore for the development of the economy, and thus of public interests.

106 See Manne, *Virginia Law Review*, 1967, p. 259, 262; Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 90 ff; Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes. Gutachten E für den 66. Deutschen Juristentag*, 2006, (hereinafter "Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*") p. E 11.

107 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 94 ff.; Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, state in p. 136 that an unlimited liability regime would discourage investment portfolio diversification because investors, in order to have control over the actions of the management or of the other investors in the firm, would have to build a large enough portfolio that would give the desired control. This would in turn result in a few larger investors holding rather few big equity portfolios in a limited number of firms; Manne, *Virginia Law Review*, 1967, 259, p. 262 argues that "limited liability is probably an essential aspect of a large corporate system with widespread public participation."

108 Hirte, *Kapitalgesellschaftsrecht*, p. 15; Grigoleit, *Gesellschafterhaftung*, p. 32. Also in p. 38, the facilitation of entrepreneurship or of entrepreneurial initiatives is considered as the central advantage of limited liability. Limited liability helps investors to tame their entrepreneurial fears due the "risk

attract more investors, which in turn would result in more capital available for investment in projects and would also lower the cost of raising capital.¹⁰⁹ The limitation of controlling costs, as much as it concerns other investors in the firm, could also be achieved through a better selection and examination of new investors joining the firm.¹¹⁰ This would be especially important for business vehicles where investors are personally jointly and severably liable for the debts of the firm. The same mechanism could also be applied for smaller closed companies, where the shareholders can basically control who buys the company's shares. But the same thing cannot be said for larger listed companies, where it is basically impossible to select and examine beforehand every shareholder that buys company shares. Therefore, limited liability provides an effective mechanism to limit investment risk by keeping controlling costs limited.

Further, because liability is limited to the invested amount in the firm and unrelated to the amount of personal assets of the firm's owners,¹¹¹ the identity of the firm's owners becomes irrelevant, and thus also the transaction costs¹¹² for monitoring the actions as well as the assets of the firm's owners are as a result reduced.¹¹³ However, not only firm's owners, but also creditors of the firm would have to incur less monitoring costs, because in a limited liability regime, creditors would have to monitor only the assets of the firm, and not the assets of an always changing body of shareholders.¹¹⁴

The separation of the firm's assets from those of owner's personal assets, enabled through limited liability, allows not only shareowners and creditors, but also the capital markets to assess at low costs the value of each share, and thus of the firm, increasing in this way the transferability of the shares. As the value of owners' personal assets is irrelevant with regard to the value of the firm, investors face lower transaction costs when deciding on the terms for the provision of

aversion" nature intrinsic in every man.

109 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 94 and p. 97. On the same line of argument, see also Armour/Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 10.

110 Grigoleit, *Gesellschafterhaftung*, p. 32.

111 Should the liability be unlimited, each investor would be concerned about a reduction in the amount or value of personal assets of the other investors in the firm, because in the case of the firm's default, the investors would have to incur higher costs to pay for the losses. See Adams, *Ökonomische Theorie des Rechts*, p. 234; Schäfer, *Gesellschaftsrecht*, 2010, p. 131; Erle/Ring, in: Müller/Hense/Ahrenkiel (Hrsg.), *Beck'sches Handbuch der GmbH. Gesellschaftsrecht, Steuerrecht*, 3rd. Aufl. 2002, p. 7.

112 In the form of information gathering and controlling by monitoring. Adams, *Ökonomische Theorie des Rechts*, p. 234.

113 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 95; Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 117 ff; Adams, *Ökonomische Theorie des Rechts*, p. 235.

114 Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 133 ff; See also Adams, *Ökonomische Theorie des Rechts*, pp. 234 – 238; Hirte, *Kapitalgesellschaftsrecht*, p. 15.

capital, because the only relevant information for the investor would be the value of the company¹¹⁵. In the absence of limited liability, the value of the share, and as a result also the value of the company, would depend on the creditworthiness of the shareholders.¹¹⁶

Furthermore, the free transferability of shares has also been credited to the principle of limited liability.¹¹⁷ When shareholders perceive that the costs for monitoring and disciplining the firm's agents are becoming prohibitively high they may decide to "vote with their feet" by leaving the firm and selling their shares. Because the identity of new investors under a limited liability regime becomes irrelevant for reasons explained above, active free transferability of shares among investors is thus encouraged.

Free transferability of shares may also lead to more effective disciplining of a firm's agents, i.e. managers or directors. The simple evaluation of a company's share may also serve as a basis for the evaluation of the quality of the company's management.¹¹⁸ When individual investors disinvest, this gives an opportunity to other investors to increase their participation in the share capital of a firm to the point that it would enable them to replace the management of the firm at discounted costs.¹¹⁹ This creates the possibility for the so-called "market for corporate control" as a monitoring mechanism to increase managers' efficiency.¹²⁰

Limited liability is thus one of the main building blocks of modern incorporated firms.¹²¹ As a matter of fact, it is a defining element of incorporated firms¹²² and has become a valuable principle in firm contracting and financing relations.¹²³ According to some authors, the justification for the limited liability is based on two fundamental tenets or principles: first, the principle of the self-responsibility of contractual creditors, who are free to enter into an

115 Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 117 ff; Adams, *Ökonomische Theorie des Rechts*, p. 236.

116 Grigoleit, *Gesellschafterhaftung*, p. 32.

117 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 95.

118 Grigoleit, *Gesellschafterhaftung*, p. 33.

119 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 95.

120 Jensen, *Journal of Economic Perspectives*, 1988, 21, p. 21 ff; Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 95; Adams, *Ökonomische Theorie des Rechts*, p. 236; Flassak, *Der Markt für Unternehmenskontrolle. Eine ökonomische Analyse vor dem Hintergrund des deutschen Gesellschaftsrechts*, 1995, p. 158 ff; Hirte, *Kapitalgesellschaftsrecht*, p. 17; Grigoleit, *Gesellschafterhaftung*, p. 458. However, is effective when the decision for accepting or refusing the takeover offer is made by the shareholders rather than by the management.

121 Manne, *Virginia Law Review*, 1967, 259, states that the modern public corporation with many small shareholders could not even exist without limited liability.

122 Although this has not always been the case. See e.g. Davies, *Gower and Davies' Principles of Modern Company Law*, 7. ed., 2. impr. 2003, (hereinafter "Davies, *Principles of Modern Company Law*).

123 Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law*, p. 9.

agreement with the company and contract the risk they are willing to take, and second, the principle of the promotion of entrepreneurial initiative through the limitation of risk that investors are required to bear for their investment.¹²⁴ Some other authors differentiate between the public and the private company concerning the justification for the limited liability. Whereas for the public companies, the justification for the limited liability rests in the separation of ownership from control, where the shareholders are mere investors and have no influence in the daily management of the company (typical example is here the listed company); in private companies, the separation of ownership from control does barely or not at all exist, and therefore limited liability, called also the “right to harming the creditor” needs another justification.¹²⁵ While the encouragement of entrepreneurial behaviour due to economic public interests is certainly a reason for limited liability, the key reason rests on the private law principle of the *negligence rule*.¹²⁶ Because profit and loss (risk) in a private company affect(s) all stakeholders, since all benefit from profit and that profit depends on the taking over of entrepreneurial risk, therefore, limited liability is justified for the entrepreneur taking that risk. It serves as a correcting mechanism for the unlimited liability of the entrepreneur in case the entrepreneurial risk materializes.¹²⁷ However, limited liability is a privilege and not a right. It is granted to entrepreneurs under the condition that they follow the rules of the game.¹²⁸ The rules of the game can be summarised into a general statement that the privilege of limited liability shall not be used by the company controllers as a means of expropriating third parties to the controllers’ interest, extracting in this way unlawful benefits which otherwise they would not be entitled to. Thus, the defining line is the line that divides the use from the misuse of limited liability.¹²⁹ Unfortunately, limited liability does not come without costs. The application of limited liability gives rise to a firm external principal-agent type of problem between the firm’s owners and the firm’s creditors: the firms’ owners, as represented by the managers, face an incentive to engage in risky but high yield businesses. The reason is obvious: through limited liability, firms’ owners would obtain

124 See e.g. Grigoleit, *Gesellschafterhaftung*, p. 458.

125 Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 297 ff.

126 *Ibid.*, pp. 298 – 305 for a thorough discussion on the justification of limited liability based on the private law principle of negligence rule (*Verschuldenshaftung*).

127 *Ibid.*, p. 303.

128 The rules of the games include also several mechanisms that aim at ensuring the compliance with the rules. See e.g. Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 312; Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, pp. 789-791; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, 126, pp. 128-9; Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 101.

129 *Ibid.*, p. 303.

the increased benefits if the business succeeds, while the creditors would suffer the increased losses when the business fails.¹³⁰

b) *Downside effects of the limited liability principle*

The carrying out of a business activity by making use of the limited liability privilege causes costs.¹³¹ The benefit of firm's owners is offset by the costs to third parties, especially creditors, although in this case one would have to differentiate between contractual and non-contractual creditors, or between secured and unsecured creditors. This differentiation is addressed in the sections below.¹³² Creditors share in the business risks and costs of a firm, but they would normally have no possibility to participate in the business decision-making of the firm.¹³³ The risks that creditors face are exacerbated in the case of small firms or private limited companies or one-man companies. As *Schall* rightly points out, in these firms, the business owner has maximum flexibility and freedom to act as sole trader without the risk of personal liability. Because in private companies there is no such thing in place as a system of *checks and balances*, as it is the case in public limited companies, where the ownership and control is clearly separated, to limit the ability of the firm owner to get hold of the firm's owners in an unlawful way, by internalizing profit and externalizing costs.¹³⁴ Additionally, creditors of such companies have less opportunities to defend themselves due to lacking information rights towards the company. Thus, limited liability is accompanied by an externalisation of costs,¹³⁵ although they are not externalised completely to the third parties.¹³⁶ This shifting of costs and disadvantages from the firm's owners to the firm's creditors is often quoted as one of the main downsides of limited liability. *Manne* states that "limited liability (...) shifts an easily recognisable risk to the corporation's creditors"¹³⁷ when it allows shareholders to be liable for up to their investment in the firm. *Landers* puts the risk-shifting issue of limited liability in the backdrop of parent-

130 Adams, *Ökonomische Theorie des Rechts*, p. 238 ff; Hirte, *Kapitalgesellschaftsrecht*, p. 16.

131 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1170 argue that however plausible it may be the theoretical assumption that shareholders will benefit themselves at the expense of the firm's creditors, "in practice the risk is far less significant."

132 However, see also the treatment of this differentiation between the types of creditors at Grigoleit, *Gesellschafterhaftung*, p. 34 ff.

133 Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 12.

134 Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 295.

135 The pressure to externalise costs is even higher under the presence of strong competition. Adams, *Ökonomische Theorie des Rechts*, p. 238.

136 When a company goes bankrupt and suffers losses, the shareholders are the first to lose their investment in the firm, and afterwards the creditors bear the rest of the loss.

137 Manne, *Virginia Law Review*, 1967, 259, p. 262.

subsidiary company relationship when arguing that “... limited liability has often transferred the risk of business failure from shareholders to creditors without compensation”.¹³⁸ Too, *Easterbrook/Fischel* argue that limited liability does not eliminate the risk of business failure, because someone must bear that loss. As the loss is swallowed rather than shifted, firm’s owners stand first to lose their investment, and after them come the creditors.¹³⁹ Owners of firms engaging in risky activities with high returns will reap the benefits without fully carrying the corresponding costs, should the business fail, because a part of these costs will be borne by the firm’s creditors.¹⁴⁰ The existence of this agency conflict between firm’s owners and third creditors is responsible for the creation of a moral hazard: risks are limited in case of risky activities, whereas benefits not. Therefore, because risk can be shifted, one could engage continuously in risky activities without bearing the consequence of its decisions. This moral hazard aspect of limited liability has been compared to a ‘bankruptcy insurance’ against the risk of business failure provided by the creditors to the firm owners.¹⁴¹ This insurance is created by law¹⁴² rather than by the market. The risk of loss on default is shifted from the firm owners to the creditors, and thus the owners are insured without the necessity for the existence of a formal insurance market.¹⁴³ Firm owners obtain this insurance when firms issue contractual financial obligation to creditors. However, the costs of this insurance are reflected in the interest rates set by the creditors with respect to the debt purchased.¹⁴⁴ In the absence of limited liability, it would be the firm owners bearing all the risk of failure, and thus of bankruptcy when the firm hits stormy weather.¹⁴⁵ *Hansmann/Kraakman* summarize the costs related to limited liability as principally deriving from the possibilities it creates for the firms owners to act opportunistically

138 Landers, *University of Chicago Law Review*, 1975, 589, p. 599.

139 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 98.

140 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 104 ff; Lehmann, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 1986, 345, p. 350.

141 Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 126, 138 ff.

142 Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p.19: “Limited liability acts as a default rule for sharing the risk between creditors and shareholders that result from business misfortune.”

143 Grigoleit, *Gesellschafterhaftung*, p. 47 ff questions the effectiveness of the insurance that such a market would provide for investors as an alternative to mitigation of investment risk provided through limited liability. Such an insurance would most probably not cover all types of risks and not be unlimited in terms of the financial spectrum it covers. Additionally, it would be very difficult to calculate beforehand the premium that should be paid and the amount of monitoring it will require from the insurance company.

144 Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 129.

145 Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117. It is argued that had the limited liability not been provided by law, it would have probably been provided by the insurance market or more likely through contract.

toward firm's creditors. Especially when the credit extended by the creditors substantially exceeds the value of the assets owned by the firm, the limited liability regime creates an incentive for the firm's owners to divert value from the firm's creditors by a variety of means, which include shirking with respect to the efforts they promised to the creditors to make, investing in projects which carry a higher risk than what it was agreed with the creditors, or simply withdrawing assets from the firm, especially in anticipation of insolvency.¹⁴⁶

The two concepts described above, i.e. the concepts of separate legal personality of the firm and the limited liability of the firm's owners have both contributed to creating incentives for sharing the risk of failure from business transactions with the firm's creditors.¹⁴⁷ Business transactions are always subject to risks. These risks may be either unforeseeable (and thus are not regulated) or foreseeing and regulating them would be too expensive. Therefore, the creditor when making a loan to the firm "... has put its funds at the risk of the basic *commercial vicissitudes* of the debtor enterprise".¹⁴⁸ However, what disturbs the creditors the most are the not commercial uncertainties, but rather the actions of the firm's owners and managers that exacerbate the risks from these commercial uncertainties at the expense of creditors. Here is where the agency conflicts between the firm and the creditors are manifested at their strongest.

III. Forms of creditors' expropriation: reasons for concern?

Manning/Hanks, suggest that the ideal world as imagined by the firm's creditors is totally unacceptable to the firm's owners. Although they are both involved in the same economic activity, namely in that of making investment for profit, and are motivated by the same basic business objectives, their calculations about the way to make that profit differ from one another. The firm owners would like to receive some return on their investment should the firm make profit or not, whereas the creditors would like the firm to refrain from making any distributions to the firm owners before their claims have been fully satisfied at maturity date. Thus, although the firm owners have accepted the priority of firm's creditors' claims over their own claims, they

146 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 423. See also Hirt, *European Company and Financial Law Review*, 2004, 71, p. 75 who suggests that the risk of expropriation through opportunistic behaviour increases when the directors are also the shareholders, or where the directors are effectively controlled by them. Also Armour/Hertig/Kanda, in: Kraakman et al. (Hrsg.), *The Anatomy of Corporate Law. A comparative and functional approach*, 2. ed. 2009 (hereinafter "Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*"), p. 116 states that having a corporation as a debtor might exacerbate the risks faced by creditors.

147 Contractual creditors would typically address these risks through diversification and/or through various information and control mechanisms that allow them some sort of monitoring and control over the business of the company. However, these mechanisms are applicable for non-contractual creditors, including tort creditors. Grigoleit, *Gesellschafterhaftung*, p. 458.

148 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 12.

are nevertheless not always willing to wait to receive their return on the investment until all outstanding creditors have been paid in full.¹⁴⁹ As a consequence, firms' owners or managers usually engage in activities that divert value or assets away from the company's coffers to the hands of the firm's owners despite the outstanding claims of the creditors against the company. This diversion or return of value and assets away from the company to the shareholders takes a variety of forms,¹⁵⁰ starting with what is often referred to as 'asset dilution',¹⁵¹ which includes the payment of dividends, excessive salary payments, or share buy-backs. Further, firm's owners may also engage in 'debt dilution'¹⁵², which includes the issuing of additional debt of equal or higher priority (thus diluting the amount of assets available to old creditors to satisfy their claims),¹⁵³ use of leverage to finance projects,¹⁵⁴ as well as investing in projects that carry more risk than what the creditors had first contracted for. In this latter case, the most benefits from a successful investment would accrue to the equity investors, whereas the losses would be swallowed by the creditors should the investment fail. Thus, it becomes obvious that there is a potential conflict every time a decision is made on how to allocate the capital of the company, namely whether assets should be dedicated to the firm or should be returned to the firm's owners.¹⁵⁵

Smith/Warner suggest that some types of stockholders' opportunistic behaviour, such as those related to dividend and financing policy incur lower monitoring costs compared to production and investment policy, and thus are easily detectable.¹⁵⁶ Nevertheless they go on arguing that with "more fixed claims in the capital structure, the benefits to the stockholders from the asset

149 *Ibid.*, pp. 13-4.

150 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, describe basically four major ways how value or assets are returned to shareholders, thus creating a conflict between the stockholders and the bondholders. These four ways include dividend payment, asset substitution, claim dilution and underinvestment. For more see pp. 118-19.

151 Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 116; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1168 names it 'asset diversion'.

152 Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 117; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1169 names it 'claim dilution'.

153 The firm has the benefit of acquiring new capital without making more assets available. The old creditors see their claim toward the company diluted as the firm's asset buffer grows thinner.

154 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1169 and Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p.15. Creditors prefer to have more equity the debt in the company capitalization, whereas the firm's owners want the opposite. The benefit from the investment accrues to the owners, but the losses to the lenders. See also Bratton, in: Eidenmüller/Schön (Hrsg.), *The Law and Economics of Creditor Protection. A Transatlantic Perspective*, 2008 (hereinafter "Bratton, *The Law and Economics of Creditor Protection*"), p. 44 ff.

155 Hirt, *European Company and Financial Law Review*, 2004, 71, p. 76.

156 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 153.

substitution, claim dilution, underinvestment and dividend pay-out increase”¹⁵⁷ signalling in this way the existence of agency conflicts between firm owners and firm creditors, which constitute a reason for concern for the firm’s creditors.

Moreover, *Manning/Hanks*, point out to another reason for concern that, to put it in their own words, “... disturbs the sweet slumber of the creditor”.¹⁵⁸ This is namely the fact that managers or members of the board of directors of the company, who have almost all responsibility for managing and conducting the business of the firm, are elected by the firm’s owners and represent mainly their interests.¹⁵⁹ The concern of the creditors does not relate to the fact that firm’s managers might not be able to foresee difficult business situations that might deplete the capital of the company, but rather to the fact that these managers, who control the business of the firm, have also the authority “to determine whether indebtedness or distributions occur.”¹⁶⁰ In such a context, the limited liability concept provides an incentive to the managers of the firm to act opportunistically to divert value and assets of the firm to themselves or to the firm’s owners prejudicing in this way the interests of the creditors of the firm.

IV. Risk situations for creditors

Costs arising from agency conflicts as described above are typically externalised on three types of creditors: secured contractual creditors, non-secured contractual creditors and non-contractual creditors. Secured contractual creditors, generally well-informed creditors, as the term denotes, are aware of the transaction in which they are taking part and are also able to estimate the risks they are taking over. Due to this awareness and willingness to enter into such a transaction, this type of creditors are also able to provide, contractually, for the level of protection they consider appropriate. They are able to co-design the terms of the contract and the level of risk they are willing to pay for under the specific terms. Because this kind of creditors relies on their ability to collect information about the debtor in order to accurately assess the probability of the debtor to repay its debts, and thus obtain the appropriate security, the risk these creditors face is the risk of failure to obtain adequate information about the debtor and to accurately assess that information.¹⁶¹

157 *Ibid.*, p. 153.

158 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 16.

159 This suggestion however does not take into consideration that also between the managers of the firm and the firm owners electing these managers exist sharp agency conflicts deriving from the separation of ownership and control theory.

160 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 12.

161 Information and assessment risk. Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 15; Adams, *Ökonomische Theorie des Rechts*, p. 245.

Non-secured contractual creditors, who are typically less informed¹⁶² and possess little leverage to dictate or co-design the terms of the contract, face the risk that the firm owner and managers will behave opportunistically ex-post without respecting the terms of the contract they agreed ex-ante, risking in this way also to cause the firm to go insolvent.¹⁶³ Eventually, these creditors face the risk that the firm would not be able to fulfil its debts, leading in this way into insolvency, with the creditors bearing the risk of default.¹⁶⁴

The non-contractual creditor, who is typically a non-informed, non-secured, and usually tort creditor, faces the risk of default because he is not aware of his claim against the company until that claim arises. This type of creditor has no possibility to avoid the risk or take measures against it.¹⁶⁵ A more detailed explanation of the kind of risks that each creditor type faces follows in the next section.

V. An analysis of risks faced by various creditor types

As already explained above, the creditors of a firm incorporated with limited liability find themselves in a risky position because there is always a possibility that the debtor will not make good on its promise to pay. However, creditors who enter into a business relationship with a corporate firm, in the usual case they expect to be paid, because otherwise they would have avoided any relationship with the firm in the first place.¹⁶⁶ Nevertheless, not all types of creditors have the same level of assurance that they will be repaid by the debtor in due time or at all. This assurance or the lack of it is responsible for the different levels of attention intensity or of incentives on the side of creditors regarding the amount of monitoring they are willing to expend to ensure that the debtor will perform. The amount of monitoring that creditors are willing to provide is strongly correlated with how much that monitoring would cost ex-ante as well as ex-post.¹⁶⁷

162 Information about the debtor could be difficult or costly to obtain. See *Ibid.*, p. 244 ff.

163 Risk of causing the insolvency of the firm. Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 15.

164 Risk of default. Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 15.

165 Fleischer, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2001, 1, p. 19.

166 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 18 compare the situation that a creditor expects to be paid with the parallels between a train wreck and a train trip. “It could happen; one may do well to carry some travel insurance against it, perhaps even sit in the middle of the car; but if one knows or seriously suspects, that a train may wreck, he does not usually take extra protective precautions – he stays off the train”.

167 Posner, *University of Chicago Law Review*, 1976, 499, pp. 507 – 508 names them: problem of information and problem of supervision.

Ex-ante because the creditor, before providing the loan to the debtor, would need to determine the yield on the loan he will ask for based on the probability of the risk of default. If he is not a specialized¹⁶⁸ creditor, he may have to expend more on ex-ante monitoring than a specialized creditor. The creditor would also need to incur ex-post monitoring costs because of potential debtor misbehaviour,¹⁶⁹ which would affect the risk a creditor will face regarding the payment of his loan. Can then a creditor hedge sufficiently enough against risk of default by the debtor? *Posner* argues that lenders are compensated for the risk they face when dealing with a firm having limited liability. The required rate of return they will charge on the debtor will also compensate for the misbehaviour of the debtor.¹⁷⁰ In the same line, *Halpern/Trebilcock/Turnbull* suggest that a voluntary creditor will consider the probabilities of the risk of default and will determine the expected yield at which he will lend funds to the debtor. This yield, which will compensate for the risk of default, for bondholders, it will be reflected in the promised yield on debt, for labour, in the promised wage rate and for trade creditors, in the term at which they will sell the product to the company.¹⁷¹ Yet, not all risks are obvious and easily traceable to creditors.¹⁷² Additionally, some types of creditors are better placed to cope with difficulties related to gathering information for ex-ante as well as ex-post monitoring than others. Thus, some specialised creditors might find themselves in a position to make use of their abilities and advantages with respect to monitoring in a way that might be to the disadvantage of some non-specialised creditors. For example, some creditors are able to bargain for more assurance for the repayment of their credit than are some others. In such a context, the prospect of a creditor-creditor conflict of interests becomes obvious.¹⁷³ As a result, the level and the types of risks

168 A 'specialized creditor' is a creditor who is well informed about the industry where the debtor asking for a loan operates.

169 Levmore, *Yale Law Journal*, 1982, 49, in his discussion focuses on what he calls the two most important types of misbehaviour, namely conversion and risk alteration. Thus conversion occurs when an individual or group that is involved in the management of a firm takes company assets and uses the proceeds for its own benefit. Risk alteration takes place when a debtor switches to riskier business strategy after loans from its creditor have been made final. *Enriques/Macey*, *Cornell Law Review*, 2001, 1165, and *Armour/Whincop*, *Oxford Journal of Legal Studies*, 2007, 429, go in the same line with Levmore, *Yale Law Journal*, 1982, 49, and mention three types of misbehaviours, name asset diversion or dilution, claim or debt dilution, and asset substitution or increasing the riskiness of the firm's business.

170 *Posner*, *University of Chicago Law Review*, 1976, 499, p. 503.

171 *Halpern/Trebilcock/Turnbull*, *University of Toronto Law Journal*, 1980, 117, p. 128.

172 *Smith Jr./Warner*, *Journal of Financial Economics*, 1979, 117, p. 153 conclude that "dividend policy and financing policy [to the disadvantage of creditors] involve lower monitoring costs" and are "readily observable". On the other hand "production/investment policy is very expensive to monitor" as they are "difficult to observe".

173 *Armour et al.* in: *Kraakman et al., The Anatomy of Corporate Law*, p. 121 calls this conflict 'a coordination problem'.

faced by the different types of creditors of a corporate firm are also varied. This variety in the risks faced by the creditors might even exacerbate the situation of creditors in general vis-à-vis the debtor firm in particular situations,¹⁷⁴ and thus make their appropriate protection more demanding. Additionally, the creditor-creditor conflicts have an important bearing on the (in)adequate monitoring of the debtor's performance. This coordination problem tends to exacerbate when the firm is approaching insolvency. Each creditor has an incentive to enforce individually her claim against the company in order to make sure that she is paid in full.¹⁷⁵ However, if each creditor acts individually to enforce her claim against the company, this could lead to a break-up of the company's business, bringing about an inefficient outcome for all creditors.¹⁷⁶ The following creditor-creditor conflicts are typically observed in a corporate firm context:

1. Secured *versus* unsecured creditors

As already explained above, a creditor of a debtor firm has a claim on the assets of the firm that ranks higher than the claims of the firm's owners or of the firm itself. The hierarchy of claims relates to the priority of the claims, i.e. whose claims are paid first. In this sense, a secured creditor "... is a creditor who, in addition to his creditor's claim, has "collateral" – a mortgage or other security interest in particular assets of the debtor."¹⁷⁷ The security interest provides the secured creditor with a preferred position vis-à-vis other creditors, which are usually general creditors.¹⁷⁸ Should the debtor firm face insolvency, the secured creditors stand first in line to obtain payment, even if that would mean that the general creditors or the firm's owners as residual claimants will receive nothing.¹⁷⁹ Hence, the dictum of LoPoucki, "Security is an agreement between A and B that C takes nothing".¹⁸⁰ The converse of the secured creditor is the general creditor, whose claims to the assets of the debtor firm rank lower than those of the secured creditor, but higher than those of the debtor firm itself.

174 When the firm approaches insolvency and the firm's assets are worth more kept together than broken up.

175 Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 122.

176 Especially when the assets of the firm are worth more when kept together than broken up. *Ibid.*, p. 121.

177 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 6.

178 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 6. The claims of all the creditors to the assets of a debtor firm have in any case priority over the debtor's claims, and therefore a secured creditor by way of a security interest does not obtain any priority vis-à-vis the debtor.

179 Armour, Center for Business Research Working Papers, 2008, 1, p. 2.

180 LoPoucki, *Virginia Law Review*, 1994, 1887, p. 1899.

When dealing with a debtor firm, creditors face the general agency conflict that the firm, as the agent, will not act in the best interest of the principal, i.e. the creditor. Therefore, monitoring the activity of the agent is necessary. Monitors, though, experience freeriding problems.¹⁸¹ Further, the amount of monitoring they would be willing to expend will be directly related to the size of the loan.¹⁸² Monitoring will be exercised as long as the benefit from it exceeds its costs. Thus, creditors, whose size of the loan is not large, will tend to reduce their own monitoring costs and may attempt to rely or freeride on the monitoring performed by other larger creditors. When such freeriding phenomenon becomes widespread, there is a risk of undermonitoring, which in turn might exacerbate the agency conflicts that creditors face with the firm.¹⁸³ Considering that secured credit may avoid freeriding problems with respect to monitoring,¹⁸⁴ could one say that unsecured creditors can rely on the monitoring by secured creditors? Do secured creditors have an incentive to expend sufficient monitoring efforts that would detect debtor misbehaviour and reduce the probability of default?

It is suggested that the existence of the security interest significantly influences the decision about how much monitoring efforts to expend.¹⁸⁵ According to the *Jackson/Kronman* model, a secured creditor will expend significantly less in monitoring the debtor firm because he can focus "... his attention on the continued availability of his collateral and is largely free to disregard what the debtor does with the remained of his estate."¹⁸⁶ *Levmore* suggests that secured creditors, despite their limited¹⁸⁷ monitoring, could provide important signals to the shareholders about the financial stability of the firm.¹⁸⁸ A better informed shareholder is also more able to act on time and adequately to prevent managerial misbehaviour that could reduce the value of the firm, and thus the value of the shareholder's investment in the firm. One could conclude that this in turn would prevent the debtor firm from going insolvent and thus also the interests of the unsecured creditors are protected. Nevertheless, it is argued that the monitoring by the secured creditors is usually effective when the 'focal points' of their monitoring transmit useful information about

181 *Levmore*, Yale Law Journal, 1982, 49, p. 49.

182 *Jackson/Kronman*, Yale Law Journal, 1979, 1143, p. 1158.

183 *Ibid.*, p. 49.

184 *Ibid*, p. 56.

185 *Ibid*, p. 52 states that debtor misbehaviour is a concern to every creditor and therefore monitoring is needed.

186 *Jackson/Kronman*, Yale Law Journal, 1979, 1143, p. 1153.

187 Note by the author of the dissertation to mean the monitoring by the secured creditors only of the continuity and availability of the asset of the debtor firm that secures the interest of the creditor.

188 *Levmore*, Yale Law Journal, 1982, 49, p. 70 suggests that because of their right to execute the collateral when the firm fails to make the payment of the loan when due, and by publicly exercising this right, creditors send important monitoring information to the firm's owners about the default of the firm.

the debtor, that is when by monitoring the assets securing their interest misbehaviour by the debtor firm would be detected.¹⁸⁹ Therefore, the effectiveness of this monitoring system seems to be limited subject to the usefulness of the ‘focal points’ to provide important monitoring information.

Jackson/Kronman argue that although the mere existence of the collateral does not necessarily eliminate the risk of debtor misbehaviour and thus of default,¹⁹⁰ as long as the collateral securing his interest remains intact, the secured creditor will be fairly immunized by the debtor misbehaviour.¹⁹¹ Additionally, usually the value of the collateral securing the interest is well beyond the value of debt, thus protecting the secured creditor from asset depreciation or debtor misbehaviour.¹⁹² Bearing these arguments in mind, it is difficult to see why the secured creditor should expend more efforts and funds to engage in more monitoring than is necessary to ensure the continuity of the collateral securing his interest in the firm.¹⁹³

Putting aside any academic discussion about the benefits of secured crediting, a topic on which there is abundant literature in favour of it, it is suggested that as far as monitoring the firm is concerned, secured crediting does not produce adequate incentives to detect firm misbehaviour. As such, the interests of unsecured creditors might not be best represented by the monitoring of secured creditors, who also may not necessarily be the most specialised creditors.¹⁹⁴ Additionally, the secured and unsecured creditors might experience conflicts of interests in a situation when the secured creditor, being in possession of information about debtor misbehaviour refuses ‘to blow the whistle’ if he judges that exercising active monitoring would dissipate the value of his collateral, while preserving the other assets of the debtor that serve as guarantee for unsecured creditors’ claims.¹⁹⁵

189 Levmore, *Yale Law Journal*, 1982, 49, p. 69.

190 Since the debtor might be able to dissipate the collateral without being detected by the creditor.

191 *Jackson/Kronman*, *Yale Law Journal*, 1979, 1143, p. 1153.

192 Levmore, *Yale Law Journal*, 1982, 49, p. 57.

193 However, Levmore, *Yale Law Journal*, 1982, 49, p. 72 puts forth the argument that the existence of the unsecured creditors in a firm provides additional incentives to the secured creditors to step up their monitoring efforts. The unsecured creditors might be regarded as critical “filler material”. Thus, if there were only a few unsecured creditors and the value of the collateralized assets was much smaller than the total value of the firm’s assets, the secured creditors would enjoy too thick of an asset cushion beneath their exclusive claims and would feel comfortable enough to dilute their incentive to monitor the debtor.

194 *Ibid*, p. 58 suggests that less talented creditors (namely unspecialised) will tend to acquire collateral.

195 *Ibid*, p. 58.

2. Voluntary versus non-voluntary Creditors

Probably the broadest classification of creditors would be to divide them into voluntary and non-voluntary creditors. The basic premise upon which this classification is made refers, as the terms denote, to the fact whether the creditor willingly and consciously entered into a relationship with the debtor, or whether such a relationship was imposed on her through circumstances she neither consented nor was able to control.¹⁹⁶ The most typical creditors of the latter group are the tort creditors. These two groups of creditors face basically same risks with respect to the opportunistic behaviour on the side of the shareholders and directors of the company, namely a devaluation of their claims against the company as a result of the firm's inability to pay because of insolvency.¹⁹⁷ However, the rationale for protecting them has a somewhat different foundation.¹⁹⁸ Further, whether the corporate creditor decided to enter a contract with the corporate debtor on his free will or whether this contract was imposed on him by circumstances he neither chose nor could control¹⁹⁹ has a bearing on the instruments available for creditor protection, either through mandatory protection rules or self-help mechanism. The way how these mechanisms operate to protect the different types of creditors could lead to conflicts between them, as the interests of one party may be prejudiced to the benefit of the other. As *Grigoleit* rightly puts it, voluntary creditors are better placed to distribute credit risk more effectively and thus optimize the level of risk they take over, because the crediting relationship they enter into is a voluntary one. They enter freely into this relationship and can therefore optimally contract the amount and type of risk they are willing to bear.²⁰⁰ The same thing cannot be said for non-voluntary (or tort) creditors. Because this second group of creditors does not voluntarily enter into a transaction with the company, and therefore cannot directly or preemptively protect itself, they will bear a disproportionate part of the costs in company's insolvency. Through limited liability, the shareholders of company will externalize business risks and the costs related thereof, since their liability will be limited to the amount of their investment in the company's capital.²⁰¹

196 LoPucki, *Virginia Law Review*, 1994, 1887, p. 1896.

197 Mülberr/Birke, *European Business Organization Law Review*, 2002, 695, p. 14.

198 The possible causes for initial inappropriateness are different, namely when the non-voluntary creditor becomes aware of a claim against the firm, the firm is experiencing financial difficulties or is already insolvent. Mülberr/Birke, *European Business Organization Law Review*, 2002, 695, p. 14.

199 Adams, *Ökonomische Theorie des Rechts*, p. 242.

200 Grigoleit, *Gesellschafterhaftung*, p. 36.

201 The so called "moral hazard" is not seldomly manifested through the lower capitalisation of companies that work in high-risk business sectors or in companies that maintain a lower equity capital, but realizes large investments through debt capital. *Ibid*, p. 37.

a) Strong voluntary creditors versus weak voluntary creditors

Within the group of voluntary creditors, there are subgroups of creditors who find themselves in different positions with respect to their dealings with the corporate debtor. Thus, voluntary creditors include ‘strong’ voluntary creditors, namely those creditors who are able and also in a position to negotiate the terms of the contract on which credit is extended to the corporate debtor because they have the bargaining power to do that. This type of creditors includes primarily financial creditors, also described as ‘sophisticated creditors’.²⁰² The other type of creditors within the group of voluntary creditors are the ‘weak’ voluntary creditors, who in contrast to the former, are creditors who lack the bargaining power to protect themselves by way of covenants, security and other instruments.²⁰³ This subgroup of creditors includes primarily trade creditors, such as suppliers, and employees.²⁰⁴

Both subgroups of creditors face the risks that they would not be able to satisfy their contractual claims against the corporate debtor. The mechanisms they employ to protect themselves are different though, and this difference could also lead to conflicts of interests among the two. Some authors suggest that the weaker creditors can free-ride on the contracts of sophisticated creditors who impose restrictions on managerial actions, especially with respect to returning assets to shareholders through unlawful distributions, via bond indenture and loan covenants. The benefits from these restrictions and from the monitoring of the borrowers compliance with the terms of the covenants spill over to all creditors of the company.²⁰⁵ Thus, the sophisticated creditors are better equipped to exercise monitoring to ensure compliance and also bear the respective costs for such monitoring. Yet, this argument has been opposed. *Mülbert* draws attention to the shifting interests of creditors when the debtor firm approaches insolvency. While it may be true that from the compliance of the debtor firm with the restrictions imposed by the bond indentures and loan covenants, all creditors stand to benefit from the reduced risk of insolvency, when the corporate debtor violates the terms of the covenant, this picture changes as some of the clauses of these covenants, by necessity, work to the benefit of ‘strong’ and ‘sophisticated’ creditors.²⁰⁶ The covenants typically provide that debt owed to the contracting creditor matures in an accelerated

202 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1183.

203 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 10.

204 Adams, *Ökonomische Theorie des Rechts*, p.247. These creditors are also known as ‘non-adjusting creditors’. See e.g. Brinkmann, *European Company and Financial Law Review*, 2008, 249, p. 260.

205 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1172. From the covenants imposed by the stronger sophisticated creditors to deter wrongdoing by debtor will benefit all creditors and not only those imposing these covenants.

206 Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 21; See also Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 724.

way and the creditor is entitled to the whole amount immediately when the corporate debtor violates the terms of the covenant. When the creditor chooses to enforce this clause, it risks deteriorating the financial position of the firm by draining the company's liquidity and thus endangering the interests of weaker and smaller creditors who are not in a position to impose covenants or ask for collateral.²⁰⁷ This however seems to be a logical consequence of the fact that covenants are designed to protect the individual interests of the creditor party to the covenant, and not the interests of all the creditors. When the corporate debtor starts to experience financial stress, the contractually protected creditor will make sure to have her claims satisfied, even if that would mean that her actions could trigger a cash flow crisis leading to the insolvency of the borrower.²⁰⁸ After all, she did not spend her own funds to carefully negotiate the contract and her energies to monitor the borrower compliance just to sit back and see her claims devaluating so that the other creditors can also get to satisfy some, if not all, of their claims. Moreover, covenants can sometimes be overly restrictive²⁰⁹ with respect to the allowable operations by the debtor, so that in extreme cases the ability of a debtor to meet her obligations under the loan comes under threat. As a result of that, the financial situation of the debtor firm is undermined rather than preserved,²¹⁰ thus endangering also the ability of the firm to make good on its promise to pay back the weaker creditors. Further, contractual negotiations are not perfect²¹¹ and creditor monitoring is not always effective. Sophisticated financial creditors, such as banks, may apply lax monitoring practices as a matter of policy choice which relies more on loan portfolio diversification strategies rather than active monitoring to manage risks.²¹² There is another reason why it is suggested that sophisticated creditors might not be willing to get too much involved in monitoring and controlling the corporate debtor to ensure compliance

207 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 21 and Mülbert/Birke, European Business Organization Law Review, 2002, 695, p. 724 add that the sophisticated creditor, in case of violation of the covenant terms by the corporate debtor, may also negotiate for collateral, in which case the asset pool of the debtor would shrink, and thus constitute a disadvantage to the interests of the unsecured, 'weak' or 'non-adjusting' creditors. See also Krolak, *Der Betrieb*, 2009, 1417, p. 1419.

208 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 11.

209 On certain cases, when the terms of the loan covenant with a creditor cause the borrower to breach its contracts with other creditors, such as employees, suppliers as well as other creditors, the former creditor may also face legal liability towards the borrower as well as towards the damaged creditors. For more see Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 147.

210 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 11.

211 Bratton, *The Law and Economics of Creditor Protection*, p.43; Schmidt, *European Business Organization Law Review*, 2006, 89, p. 89.

212 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 11.

with the terms of the covenants. Sophisticated financial creditors, such as banks as well as other bondholders, may become liable to both the firm and the other creditors of the firm for losses incurred as a result of certain of their actions.²¹³ Thus liability may arise when a creditor who controls the firm is responsible for the mismanagement, as a result of which other creditors have incurred losses.²¹⁴ When sophisticated financial creditors get involved in the management of the debtor's entire business, this involvement might also be accompanied by an equivalent responsibility for their actions towards other creditors of the firm.²¹⁵ This potential liability towards other creditors of a debtor firm, might limit the ability of sophisticated financial creditors to exercise adequate monitoring, despite their informational advantage regarding the financial situation of the debtor.²¹⁶

It follows from the above discussion, that 'weak' creditors cannot simply free-ride on the contracts of sophisticated creditors or on their monitoring skills. Because the financial means of a debtor firm at insolvency are not sufficient to satisfy all the debtors' claims, creditors are prone to taking a 'me first' approach.²¹⁷ In these situations, 'strong' creditors are usually better placed to realise their claims, even if that would mean that the claims of 'weak' creditors would go unsatisfied.

b) *Non-voluntary creditors*

Non-voluntary creditors face the risk that they won't be able to satisfy their claims against the company when the claims come into existence. Because these creditors cannot adjust the terms on which credit is extended, firms' owners may benefit at the expense of non-voluntary creditors by externalising the costs for their activities and internalising the benefits.²¹⁸ In contrast to consensual or voluntary creditors who can decide²¹⁹ to lend or not to the corporate debtor, and if yes, how much and under what conditions, non-voluntary creditors find themselves in a position where they did not and could not decide either the terms of the credit or the time when the claim

213 The key concept for this kind of liability includes the shadow director's liability.

214 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117.

215 Note, *Yale Law Journal*, 1938, 1009, p.1014. See also, Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 401.

216 *Ibid.*, p. 402. Risk-averse creditors will avoid adopting strategies that would grant them too much influence over the debtor for fear of liability towards other creditors.

217 *Ibid.*, p. 401: "The dog race is on, and the professionals definitely bark louder."

218 Armour, *Modern Law Review*, 2000, 355, p. 363. E.g. through undercapitalisation of the firm or of its subsidiaries.

219 Adams, *Ökonomische Theorie des Rechts*, p. 241.

would be due.²²⁰ The problems that arise to non-voluntary creditors as a result of limited liability have been widely discussed in literature.²²¹

The existence of asymmetric information exacerbates the problems faced by this type of creditors. Although the problem of information asymmetry is not limited only to non-voluntary creditors,²²² because of the fact that they could not know in advance about the firm against which a claim would arise,²²³ they stand to experience major expropriation from the debtor, as the party which has an opportunity to redistribute wealth from the less informed party to itself.²²⁴ Usually, when the claims of non-voluntary creditors come into existence, the corporate debtor may already be insolvent and thus assets of the firm may be less than the value of an obligation that might be imposed on the firm. Further, the problem of information asymmetry, when coupled with the principle of limited liability and separate legal personality, may impair further the position of non-voluntary creditors vis-à-vis the debtor firm.

The corporate debtor could make use of the practice of ‘judgment proofing’, that is undercapitalising either the firm or the subsidiary conducting, for instance, high-risk activities against which third parties could file a claim. Thus firm’s owners may shift the assets to other persons so as to make them unavailable for the payment of claims in the event of default, or they may establish subsidiaries with limited assets and the costs of any harm it generates as a result of business failures are transferred uncompensated to this class of creditors.²²⁵ Limited liability provides an incentive for firm’s owners to engage in this kind of behaviour, because they can externalise the costs and internalise the benefits from this behaviour. Additionally, limited liability provides firm’s owners with the option to liquidate the firm and distribute its assets before the liability for the firm’s activities attaches. Because firm’s liability for tortuous acts may rise a long time after the acts have been committed, non-voluntary creditors, in this case

220 Hansmann/Kraakman, *Yale Law Journal*, 1991, 1879, p. 1991; Adams, *Ökonomische Theorie des Rechts*, p. 242; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 320; Wiedemann, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 240, p. 247.

221 See Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117; Hansmann/Kraakman, *Yale Law Journal*, 1991, 1879; Leebron, *Columbia Law Review*, 1991, 1565; Pettet, *Current Legal Problems*, 1995, 125; Bebchuk/Fried, *Yale Law Journal*, 1996, 857; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 396 ff; Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 116.

222 Because real credit markets are imperfect, information about borrowers cannot be obtained without costs, and therefore there will always be a class of creditors (even contractual ones) who remain “rationally ignorant” of relevant information. See Armour, *Modern Law Review*, 2000, 355, p. 359.

223 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 396.

224 Armour, *Modern Law Review*, 2000, 355, p. 359.

225 *Ibid.*, p. 363. Also Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 145.

tort creditors as long-term creditors, face the prospects that they will not be compensated for the losses incurred as a result of the firm's actions.²²⁶

Last but not least, the risk that claims of non-voluntary creditors against an insolvent corporate debtor might go unsatisfied increases when the debtor has secured creditors. Because the claims of non-voluntary creditors rank the same with those of general creditors of a company, namely lower in priority than the claims of secured creditors, non-voluntary creditors would have to share on a pro-rata basis with general creditors the remaining assets of the corporate debtor. Thus, the existence of secured creditors has the potential to reduce substantially, especially in the case of closely held firms, the ability of a firm to meet its obligations towards non-voluntary creditors.²²⁷

3. Short-term versus long-term creditors

Manning/Hanks, divide a firm's finance creditors into commercial or short-term creditors, and investment or long-term creditors.²²⁸ Typical representatives of the first type of creditors are banks²²⁹ and other institutional lenders that provide corporate debtors with revolving lines of short-term credit.²³⁰ Among the short-term creditors also the small trade creditor is counted, who as *Manning/Hanks*, put it, "... measures his world in days and hours".²³¹ Whereas with regard to long-term creditors, typical representatives are especially holders of bonds and debentures²³² as well as employees holding retirement deferred claims.

The kind of risks both types of creditors face are basically the same: they both face the prospect that their claims against the company would not be met either because of simply business misfortune, or because of the firm's owners' opportunistic behaviour resulting in creditor expropriation. These types of creditors are typically voluntary creditors who are also aware that they need to expend some resources, including time and efforts, to ensure the pre- and post-contractual monitoring of the debtor's (mis)behaviour. The amount of monitoring these creditors are willing to expend would be influenced among others by two factors: the size of the loan and

226 Hansmann/Kraakman, *Yale Law Journal*, 1991, 1879, p. 1884.

227 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 401.

228 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 101.

229 Although, in modern practice, banks may also represent long-term creditors through the granting of long-term loans. See Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 101.

230 *Ibid.*, p. 101.

231 *Ibid.*, p. 100 state: "The small creditor's real concerns are at very close range and in an immediate time frame. ... He wants cash, he wants it promptly..."

232 *Ibid.*, p. 101.

the duration of the loan.²³³ These two factors also influence the amount of risk that creditors face when dealing the corporate debtor. Short-term creditors tend to be small creditors, such as trade creditors, extending small amount of credits to the corporate debtor through a one-off or more supplies. Because of the small size of credit they extend, it might be economically unreasonable for small creditors to engage in monitoring the corporate debtor's performance.²³⁴ For the same reason, because these creditors lack bargaining power, they are not able to contract for collateral with the corporate debtor, and therefore they remain unsecured. If one adds also the fact that some trade creditors might depend on the corporate debtor for the purchase of larger or of all the amount of their products because the corporate debtor has monopsony for that product, these leave the short-term trade creditor with few options to protect himself against debtor's misbehaviour.²³⁵ Additionally, the fact that some other short-term creditors, such as banks, might be in a position to exercise a certain degree of pre-contractual monitoring by asking for full disclosure of information about the debtor's financial situation and/or by conducting own investigations about the firm's resources²³⁶ to service the debt, does not improve the chances of protection for short-term trade creditors. The reason for this is that banks, as already explained above, are generally secured creditors,²³⁷ and the interests of unsecured creditors do not necessarily align with those of secured creditors.²³⁸ The only circumstance that might improve the position of short-term trade creditors is the fact that because of the short-term range of the loan, behaving opportunistically becomes costly and difficult to conceal for the debtor.²³⁹ Therefore, as *Manning/Hanks*, put it, the price of successful credit management for the general trade creditor is 'eternal vigilance'.²⁴⁰

233 Jackson/Kronman, *Yale Law Journal*, 1979, 1143, pp. 1158-9.

234 *Ibid.*, p. 1158.

235 To the question regarding what the general trade creditor does to try to maximize the chances that his billings will be paid, *Manning/Hanks*, *Legal capital*, 3. ed., 1. reprint. 1990, p. 98 reply as follows: "The main answer is that he stays alert. Like the price of freedom (and the price of tyranny), the price of successful credit management is eternal vigilance. The credit manager's main protection is to stay close to the situation, to know his debtor, to spot the slow-downs in payment, the main telltale sign of drying up of working capital, to put prudent limits on the amount of credit extended to each trade purchaser, to clear checks immediately, to take instantaneous action, perhaps legal action, when delinquency is spotted, to badger and cajole the delinquent debtor tirelessly, to see to it that when the next payment is made it does not go to other creditors, etc."

236 *Ibid.*, p. 101.

237 Either by way of collateral or by way of personal guarantees from company's shareholders and directors.

238 The claims of secured creditors rank higher in priority in a bankruptcy proceeding and thus reduce the pool of assets available to unsecured creditors.

239 Jackson/Kronman, *Yale Law Journal*, 1979, 1143, p. 1159. "...an opportunistic debtor might find that the speed with which he must act makes it harder, and hence more costly, to conceal misbehaviour from his creditor."

240 *Manning/Hanks*, *Legal capital*, 3. ed., 1. reprint. 1990, p. 98.

The situation of long-term creditors, such as holders of bonds and debentures, appears to be the same with that of voluntary or sophisticated voluntary creditors. *Jackson/Kronman* suggest that the longer duration period of a loan may provide the debtor with more opportunities and simply more time to behave opportunistically and to make its detection by the creditor difficult.²⁴¹ Therefore, for this type of creditors, secured financing takes place more frequently than it does for short-term creditors.²⁴² Additionally, financing for this type of creditors takes the form of bond indentures or loan covenants that put restrictions on the firm's distribution of own assets. A detailed discussion on the advantages and disadvantages of covenants as means of private contracting to protect against debtor misbehaviour follows in the next chapter.²⁴³ To sum it up, it can be said that the position of long-term creditors is better protected than that of unsecured short-term creditors who also vis-à-vis long-term creditors stand to suffer higher losses should the company face insolvency.

4. Public company versus private company creditors

Voluntary creditors can be categorised also into public and private company creditors. From the viewpoint of the risk these types of creditors face, there is basically no difference: they both face the prospect of being expropriated by firm's shareholders behaving opportunistically by diverting value from the company to themselves, thus leaving the firm without the needed assets to satisfy the claims of its creditors. However, there are differences between the two types of creditors, with respect to the factors contributing to the amplification of risk. To put it more clearly, there are several factors that pertain to how public or private companies operate, which might serve to exacerbate the expropriation, especially of private company creditors. These factors include: the separation of ownership and control, the disclosure and transparency requirements, and last but not least, the size of legal capital.

The orthodox view on the benefits of limited liability deriving from the standard law and economics analysis of the value of limited liability holds true for public companies, but not necessarily for private ones.²⁴⁴ Thus, because of the separation of ownership and control in public companies, limited liability serves to lower monitoring costs.²⁴⁵ Through limited liability, diversification of investment is made easier, and this leads to a strengthening of the role of the

241 *Jackson/Kronman*, Yale Law Journal, 1979, 1143, p. 1159.

242 *Ibid.*, p. 1159.

243 However, some of the advantages and disadvantages were already mentioned in section V.a) "Strong voluntary creditors versus weak voluntary creditors" above.

244 Freedman, *Modern Law Review*, 2000, 317, p. 328.

245 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 110.

capital markets in facilitating altogether monitoring of the firm and efficient risk bearing.²⁴⁶ Thus, creditors of public companies can to a certain degree rely on the mechanisms of the capital markets to perform firm monitoring. Capital markets facilitate the role of takeover bids as a disciplining mechanism for managers' excessive risk-taking behaviour threatening prospects of the firm, and thus damaging creditor's interests.

In private companies there is typically less separation of ownership and control. Shareholders or investors are often also the managers of the firm, and therefore the decision-making and the risk-bearing functions are merged in one. Capital markets monitoring mechanisms are irrelevant for private companies and takeover bids are impossible, as there is typically no separation of management and risk-bearing functions.²⁴⁷ This results in lower transparency and disclosure standards for privately held companies,²⁴⁸ which restrict the transfer of their shares to ensure that those who invest will be compatible with existing decision-makers. Therefore, information to creditors of private companies on the financial situation of the enterprise is less readily available than to creditors of public companies.

Additionally it is also suggested that the fact that in privately held companies, the managers are often also shareholders or are effectively controlled by them, serves to increase the potential for opportunistic behaviour to the detriment of creditors' interests.²⁴⁹ Owner-managers have a stronger incentive to invest little own capital to support their ventures than do diversified shareholders and non-shareholding managers. In this situation, where the direct investment is small or negligible, the risk is shifted to creditors rather than shared with them.²⁵⁰ If one adds to this situation also the recent trends of legislative actions²⁵¹ to make the legal form of private

246 *Ibid.*, p. 110.

247 *Ibid.*, p. 110.

248 Miola, *European Company and Financial Law Review*, 2005, 413, p. 342 pointing out to the fact that EU company law provides a series of exceptions allowing smaller companies, under certain circumstances, to provide simplified financial disclosures. This simplification covers especially the field of limited liability companies. Additionally, particularly private limited companies may be exonerated from recourse to a professional auditor, nor are they bound to provide auditing standards.

249 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 110; See also Freedman, *Modern Law Review*, 2000, 317, p. 332 and Miola, *European Company and Financial Law Review*, 2005, 413, p. 432.

250 Freedman, *Modern Law Review*, 2000, 317, p. 332.

251 See eg. legislation passed in France abolishing the minimum capital requirement of 7.500 Euro for SARL (Loi No. 2003-721 of 1 August 2003); Legislation passed in 2008 in Germany, *Gesetz zur Modernisierung des GmbH-Rechts und zur Bekämpfung von Missbräuchen – MoMiG* (Law to Modernise the Law Governing Private Limited Companies and to Combat Abuses) allowing the establishment of limited liability entrepreneurial companies (Unternehmersgesellschaft mit beschränkter Haftung) without a minimum capital, requiring these companies not to distribute in full their profits before they have topped up their capital to the level of minimum capital mandated by statutory provisions, which currently stands at 25.000 Euros; Legislation passed recently in Albania, Ligji Nr. 9901, datë 14.04.2008 “*Për Tregtarët dhe Shoqëritë Tregtare*”, (Law on Entrepreneurs and Companies

limited companies more easily accessible, among others also by lowering legal capital barriers, it becomes clear that creditors of private companies need efficient protection from excessive risk-taking behaviour by the side of shareholders-managers who might have much to lose.²⁵²

The increased difficulties that creditors face with private limited companies might also explain the fact that courts are more willing to disregard the principle of limited liability and allow creditors to reach the assets of shareholders in cases involving close corporations than when public corporations are involved.²⁵³

D. The ‘right’ level of creditor protection

A separation of the advantages from the disadvantages that come with the limited liability would imply freedom without responsibility that leads to an internalisation of benefits and externalisation of costs. The benefits would be obtained by the entrepreneur, and the costs would be borne by third party creditors, some of whom have no relation whatsoever with the business.²⁵⁴ Therefore, if it is commonly agreed²⁵⁵ that there is a need to provide protection to creditors, then the ensuing question corollary to this statement is: what would the ‘right’ level of that protection be? Whatever the answer to this question, it is expected that it will not be completely satisfactory to the creditors, because the level of this protection is not and cannot be complete. The typical creditor is not willing to carry any risk. For him, if everyone was a creditor, there would be no unpaid debts. However, if everyone was a creditor, then there would be no debtor, and therefore, also creditors would not exist anymore. Therefore, creditors need debtors, and vice versa. The fact that creditors will carry some of the business failure risks is economically desired and inherent to the system of limited liability.²⁵⁶ There are even good reasons for allowing creditors to share some of the business failure risks.²⁵⁷ Providing full

providing for the establishment of private limited companies with a minimum capital of 100 Albanian Lek (approx. 0.7 Euro)

252 Whereas public companies are mandated by law to incorporate with a larger size of legal capital (and usually they do incorporate with a legal capital that is substantially higher than what the law requires), private companies the law requires a lower or no legal capital at all.

253 Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 110. Some authors have also proposed an unlimited or proportional personal liability of shareholders, especially in favour of tort creditors. See e.g. Hansmann/Kraakman, *Yale Law Journal*, 1991, 1879, and Leebron, *Columbia Law Review*, 1991, 1565.

254 E.g. tort or involuntary creditors.

255 Hirt, *European Company and Financial Law Review*, 2004, 71, p. 71 ff; Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 12 ff; Hirte, *Kapitalgesellschaftsrecht*, p. 16 ff; Adams, *Ökonomische Theorie des Rechts*, p. 238 ff.

256 Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, p. 790.

257 On the economic benefits of risk sharing by creditors see e.g. Hansmann/Kraakman, in: Kraakman (Hrsg.), *The Anatomy of Corporate Law*; Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*,

protection to creditors would create a moral hazard on the side of creditors who would not have any incentives to perform a very important function, namely that of monitoring the debtor's performance. Full creditor protection to ensure complete fulfilment of creditors' claims against the firm is thus not the goal of mandatory legislation.²⁵⁸ The question remains however, how much protection is the 'right' protection. A balance need to be struck between hindering an automatic application of the non-personal liability for shareholders and managers at the disadvantage of creditors and creating a legal framework of economic freedom for companies, which contains certain appropriate and necessary limits.²⁵⁹

As already explained above,²⁶⁰ the various groups of corporate creditors face the risk of being expropriated by the shareholders who face incentives to behave opportunistically ex-post, that is after a (contractual²⁶¹) relationship has been entered into by the firm and the creditors. It was also explained in the previous sections that shareholders' actions take usually the form of asset diversion, claim dilution, asset substitution and underinvestment.²⁶² These forms of opportunistic behaviour tend to exacerbate with the approach of insolvency,²⁶³ risking in this way to speed up the demise of the firm to the disadvantage of the company's creditors.

Enriques/Macey provocatively downplay the extent of risk faced by creditors as a result of shareholders' opportunistic behaviour by suggesting that it is in practice less significant than it is suggested in theory.²⁶⁴ The reason for that, they explain, is that usually companies need borrowing on a continuous basis, and therefore they will have no interest in fooling creditors more than once.²⁶⁵ However, this suggestion does not seem wholly convincing. The need for

2005, 788; Hirt, *European Company and Financial Law Review*, 2004, 71.

258 Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, p.790; Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006, pp. 15 ff; Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 13.

259 Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 14. See also Fastrich, *Deutsches Steuerrecht*, 2006, 656, p. 656 and Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, p. 791.

260 See Section V "An analysis of risks faced by various creditor types" above.

261 Reference is not made here to the extending of a loan through a loan agreement. Rather, the use of the term 'contractual' simply refers generally to the creditors who voluntary contract with the company.

262 For a longer discussion on these types of agency conflicts see Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 118-9; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1168-9; Bratton, *The Law and Economics of Creditor Protection*, p. 43; Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 116-7.

263 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 423. See Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1171.

264 *Ibid.*, p. 1170.

265 *Ibid.*, p. 1170. Moreover, they also suggest in p. 1171 that even when the company is on the verge of insolvency, the risk of opportunistic behaviour by shareholders is not as grave as it might first appear, since professionals run the company, and they will not to 'gamble the company back to success'.

creditor protection arises exactly to avoid this kind of fooling. Usually, if the company does well, it does not need to fool its creditors, because it would normally have enough funds to pay them back. Therefore, following this line of thought, a company would fool the creditors especially when it realizes that it won't have sufficient funds to satisfy their claims, that is when it is approaching insolvency. If the company reaches the point of no return, and it succeeds in fooling its creditors, then the company would go bankrupt and there will be anyway no more chance to fool the creditors again. She won't exist any longer.

Therefore, the need arises to protect creditors against the risk of insolvency. In this sense, creditor protection implies protection of creditors' economic interests.²⁶⁶ However, this statement needs further qualifications. Is it desirable and possible to protect creditors from all insolvency risk? With respect to the desirability of an 'all insolvency risk' protection mechanism, it is to be expected that creditors would be in favour of it. In their seminal work *Manning/Hanks*, point out that when creditors make funds available to a borrowing company, they expect the borrowing company to exist long enough to pay back the loan.²⁶⁷ They do not expect the borrower to become insolvent and they do not wish to be the victims of the borrower's insolvency, independent of the reasons that caused the borrower to become insolvent.²⁶⁸ If they knew that the borrower would become insolvent, they would not have lent him the funds at all. They compare the attitude of a creditor with that of a train passenger, who is concerned that the train may wreck.²⁶⁹

But such an 'all insolvency risk' protection could risk emphasizing the interests of creditors to the disadvantage of other company's constituencies.²⁷⁰ Additionally, creditor's monitoring of the firm is a desirable activity to ensure efficiency in the management of the firm, and therefore, providing an 'all insolvency risk' protection would remove any incentive from creditors to monitor the firm. This would create a moral hazard, which in any case is not desirable with respect to the encouraging of responsible investment of capital by investors. Therefore, a certain level of risk is an inevitable and also desirable part of every business activity.²⁷¹ As

266 Haaker, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2010, 1055, p. 1062. Protection of economic interests implies ensuring adequately the fulfilment of repayment claims, principal as well as interest included.

267 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 18.

268 Both, tort creditors and voluntary creditors are not willing to accept any risk of non-performance. Mülbart, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 15.

269 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 18. "It could happen; one may do well to carry some travel insurance against it, perhaps even sit in the middle of the car; but if one knows, or seriously suspects, that a train may wreck, he does not usually take extra protective precautions – he stays off the train."

270 Armour, *European Business Organization Law Review*, 2006, 5, p. 5 ff.

271 Rickford, in: Eidenmüller/Schön (Hrsg.), *The Law and Economics of Creditor Protection. A*

Manning/Hanks, put it, the creditor, by making the loan available to the company has “put his funds at the risk of basic commercial vicissitudes of the debtor enterprise.”²⁷² Against this risk, there can be no insolvency protection. Moreover, the risk of simple business misfortune, as *Mülbert* suggests, is the essence of the limited liability principle.²⁷³ It follows that creditors, which in this case include only voluntary creditors, need to be protected against all those *other* risks that they would not be willing to contract voluntarily, had they known about them ex-ante. These ‘other’ risks include, as explained above, the various types of behaviours that enable the imprudent distribution of assets to shareholders. If the managers of a company who control its affairs cannot influence or determine what will happen to the general market where also the company operates, they can certainly determine whether imprudent distributions occur.²⁷⁴ Therefore, creditors need protection to the extent that these risks can be avoided or remedied. Notwithstanding this agreement, the matter of the appropriate degree of protection, that takes into account the different interests of a company’s constituencies, is a contentious one.²⁷⁵

Transatlantic Perspective, 2008 (hereinafter “Rickford, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*”), p. 139.

272 *Manning/Hanks, Legal capital*, 3. ed., 1. reprint. 1990, p. 12.

273 *Mülbert*, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 15. See also Schall, *European Business Law Review*, 2005, 1534, p. 1539. Additionally Dine et al., *Company Law in the New Europe. The EU acquis, comparative methodology and model law*, 2007, p. 131 state that in a market economy, companies exist to encourage risk-taking behaviour by spreading the risk amongst a number of participants in a business enterprise who can decide how much funds to put at stake, while allowing the business enterprise to operate with limited liability. However, by the very existence of the limited liability, company creditors stand to carry a greater risk when contracting with the company.

274 *Manning/Hanks, Legal capital*, 3. ed., 1. reprint. 1990, p. 12; Rickford, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 139.

275 The decision regarding the allocation of default and business failure risks is also a legal policy decision of the legislative body. Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 14.

§ 3. The statutory protection of creditors

A. Introduction

Depending on the prevailing legal tradition, namely civil law or common law, creditor protection is usually provided either through statutory legal provisions incorporated in various laws,²⁷⁶ aimed at providing both ex-ante²⁷⁷ and ex-post²⁷⁸ protection, or through contract, aimed at allowing creditors to contract ex-ante for the level of protection they think necessary when transacting with a debtor by making use of certain mechanisms that ensure the fulfilment of obligations. Often, the preferred solution is a combination of both.

The different ways of creditor protection reflect not only two distinct legal traditions, but also two distinct approaches to regulating the transactions of corporate firms with third parties.²⁷⁹ By comparing the European and the US corporate laws, as representatives of the two distinct legal traditions, it is suggested that the corporate law in Europe has as its fundamental purpose the protection of creditors, whereas in the US, the fundamental purpose of corporate law is to provide maximum flexibility for private regulation through contracts, within a framework that seeks the maximisation of shareholders' value.²⁸⁰ Thus, whereas in civil law countries, law rather than contract serve to protect corporate creditors, in common law countries the reverse is true, namely that the protection of creditors' interests is moved out of the realm of company law into that of contract law.²⁸¹

The European approach to creditor protection builds primarily upon statutory protection as provided by legal capital rules, which include a whole array of rules starting from minimum capitalisation of companies, rules on raising as well as on increasing and/or decreasing of legal capital, rules on capital maintenances which deal primarily with valuation of company's assets, distribution of profits, acquisition of own shares and financial assistance for the acquisition of own shares.²⁸² Subject to these rules are primarily corporate firms enjoying limited liability.

276 Such as e.g. company law, insolvency law, accounting law, criminal law, etc.

277 E.g. rules of minimum capitalisation.

278 E.g. rules regarding the subordination of shareholders' loans.

279 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1166.

280 *Ibid.*, p. 1173.

281 *Ibid.*, p. 1173. See also Merkt, *European Business Law Review*, 2004, 1045, p. 1050.

282 Additional statutory protection mechanisms include among others also the liability of company's shareholders who act as shadow directors and the liability of directors for the late filing of insolvency (known in common law systems as wrongful trading). See Grigoleit, *Gesellschafterhaftung*, p. 461 ff. Additionally also Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz* and Hirte, *Kapitalgesellschaftsrecht*.

Under the European approach to creditor protection, limited liability is considered a ‘privilege’ which is granted to the benefit of shareholders, but which has also the potential to negatively impact the interests of firm’s creditors. Therefore, complying with the legal capital rules for the protection of creditors is the ‘price’ that a firm must pay to obtain in return the privilege of limited liability.²⁸³

The alternative to the creditor protection via statutory provisions, as is to be found primarily in the continental Europe, is the system of contractual mechanisms, summarized under the term ‘self-help mechanisms’. These contractual mechanisms allow the parties to a transaction to contract for the level of protection they think and believe to be adequate when taking into consideration a number of factors, the most important being the probability of default of the borrower. These mechanisms are geared towards preventing rather than curing the problem of creditor expropriation and protect the creditor against concluding a contract that from the outset does not adequately reflect the risk of non-performance by the debtor. The liability of the corporate debtor toward its creditor is thus regulated among the parties through contractual provisions.²⁸⁴

Some legal scholars contemplate that the contractual mechanisms provide more flexibility not only to the debtor by taking into consideration her financing needs, but also to the creditor by allowing her to tailor the protection she needs by charging the interest rate she considers appropriate to hedge against the risk of default on the side of the debtor.²⁸⁵ These suggestions should, however, be taken with some reservation, because, as it is explained below, not all types of creditors stand to benefit from or can make use of the contractual mechanisms. In some cases, some of these mechanisms such as, for example financial covenants, might also result counterproductive for the interests of the company or for particular types of creditors.²⁸⁶

283 In their seminal work Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, describe the asset partitioning concept, one component of which is limited liability. Additionally see Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1773; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 407.

284 Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p.119 ff. E.g. such as bond indentures and loans covenants. For an elaboration on the content of such instruments see e.g. Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p.104 ff; Mülberr/Birke, *European Business Organization Law Review*, 2002, 695, p. 723 ff.

285 Posner, *University of Chicago Law Review*, 1976, 499, p. 501 ff.; Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 105 ff.; Macey/Miller, *University of Toronto Law Journal*, 1993, 401, p.406; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1188 ff.; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 395.

286 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 147; Ferran, *European Company and Financial Law Review*, 2006, 178, p. 11; Schön, *European Business Organization Law Review*, 2004, 429, p. 440-41.

Nevertheless, it is not the purpose of this dissertation to take a position on which system fits best to the needs of creditors, because to be able to make such statement, a profound analysis of other factors and circumstances related to creditor protection as well as an analysis of costs and advantages of a system compared to alternative systems²⁸⁷ would be needed. Rather, this part of the dissertation, attempts to describe the most widely used contractual mechanisms of creditor protection that sophisticated and expert creditors, such as banks in their position as creditors make use of. Further, a critical perspective of these mechanisms is given by assessing the efficiency or inefficiency of these mechanisms regarding creditor protection.

The focus of the paper is on the self-help or contractual mechanisms for creditor protection. The reason for this selection rests with the attempt of the paper to examine the role of banks as monitors of debtors' performance in their role as financial gatekeepers. It is widely suggested that banks, as sophisticated creditors, do not rely on legal capital rules as a means to protect their interest vis-à-vis debtors, but on contractual mechanisms that allow them to provide ex-ante the desired level of protection.²⁸⁸ Hence, the attention on self-help mechanisms of creditor protection.

B. A critical assessment of the statutory creditor protection

Before embarking on the discussion regarding the self-help mechanisms of creditor protection, a short presentation of the main criticism of the statutory provisions of creditor protection is necessary, in order to provide the backdrop against which the following discussion of contractual mechanisms will take place.

Criticism of statutory protection, especially of the legal capital rules, has been levelled particularly against the inability of these rules to provide to creditors the information they promise to provide regarding the ability of the company to meet her liabilities as well as the high costs related to the implementation of the creditor protection provided by these statutory provisions. The critical voices have not come only from common law,²⁸⁹ but also from civil law scholars.²⁹⁰

287 Miola, *European Company and Financial Law Review*, 2005, 413, p. 425.

288 Deakins/Hussain, *The British Accounting Review*, 1994, 323; Walter, *Die Aktiengesellschaft*, 1998, 370, p. 371; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 716; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 138.

289 Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921; Armour, *Modern Law Review*, 2000, 355; Ferran, *European Business Organization Law Review*, 2005, 93; Ferran, *European Company and Financial Law Review*, 2006, 178.

290 See e.g. Enriques/Macey, *Cornell Law Review*, 2001, 1165; H.E. Boschma/M.L. Lennarts/J.N. Schutte-Veenstra, *Alternative Systems for Capital Protection*, 2005 (hereinafter "Boschma et al., *Alternative*

C. Criticism directed at the legal capital regime

The legal capital regime constitutes one of the main building blocks of company law in Europe in general, and in the EU in particular.²⁹¹ The regime *per se* was locked into place through the EU directives, one the most important directives being the Second Company Law Directive, codifying company law's principles and rules. The Second Directive, implementing the legal capital doctrine, has governed how public limited liability companies are established and operated for the last three decades. However, in the last ten years, the European legal capital regime has come under fire by various legal scholars who criticise the regime for being “a costly and inefficient way to protect the creditors”,²⁹² whose rules represent a non-negligible financial burden to companies.²⁹³ Inefficient, because these rules have not delivered the needed protection to creditors,²⁹⁴ which was also one of the prime reasons why the directive was adopted in the first place.²⁹⁵ Costly and burdensome, because compliance especially with the rules for raising capital when contributions others than in cash are made,²⁹⁶ as well as with the rules regarding profit distributions impose on companies unnecessary costs and prohibit the investment of unused capital on economically beneficial projects.²⁹⁷ The High Level Group of Company Law

Systems”), p. 4; Miola, *European Company and Financial Law Review*, 2005, 413, p. 425 ff; From German scholars: Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 120, also Haas, *Deutsches Steuerrecht*, 2006, 993; Hirte, *Kapitalgesellschaftsrecht*, p. 300 ff; Kübler, *European Business Law Review*, 2004, 1032; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695; Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006.

291 Wiedemann, *Gesellschaftsrecht*, p.557 ff; High Level Group of Company Law Experts, Report on A Modern Regulatory Framework for Company Law in Europe, 2002 (hereinafter “High Level Group Report”), p. 13.

292 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1184.

293 See e.g. Enriques, *European Corporate Governance Institute Working Paper Series in Law*, 2005, p. 20 ff.; See also Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 721. Amongst the more serious costs, Mülbert/Birke count the rules imposed on firms by way of making certain beneficial corporate transactions either very difficult or impossible. Some of these transactions include raising new equity capital when shares are noted below par, distribution of assets in the amount in the amount of legal capital and capital surplus to shareholder when there are no worthwhile projects to pursue, financial assistance to potentially beneficial leveraged buyouts, the issuing of stock against future services, arduous rule for the valuation of contributions in kind, etc.

294 Wiedemann, *Gesellschaftsrecht*, p. 557; Hirte, *Kapitalgesellschaftsrecht*, p. 304; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 137 ff.

295 Second Directive, supra (n 8), paras.2 and 4 of Preamble.

296 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1195. Reference is here especially made to in kind contributions. See also Miola, *European Company and Financial Law Review*, 2005, 413, p. 422: “...the benefits of such rules are, as far as protecting creditors is concerned, doubtful to say the least, while their costs are certain, even substantial.”

297 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1196; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 695; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 138. See also Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 134.

Experts in its report conceded that the European legal capital regime “is generally not considered a competitive disadvantage for European companies, but it is no competitive advantage either”,²⁹⁸ pointing to the fact that the concept of legal capital, one of the cornerstones of European Company Law, is criticised for failing to protect the creditors of the company.²⁹⁹

I. Minimum legal capital – trivial and irrelevant

One of the basic requirements of the legal capital regime as established the by the Second Directive is that before a company takes its first ‘breath’ as a legal vehicle with limited liability, it must raise a certain amount of minimum capital. According to the Second Directive, this amount is 25.000 Euro (Art. 6 Para. 1). The minimum capital required by the Directive has been criticised for being trivial and meaningless.³⁰⁰ It is trivial because the amount of 25.000 Euro is too low of an amount to provide any realistic protection to creditors against the risk of insolvency caused by exogenous shocks to the company.³⁰¹ The principle of proportionality of own (equity) capital to the risk/loss potential of the company cannot be guaranteed even for the small companies, the loss potential of which is normally much higher than the minimum legal capital.³⁰² Additionally, the requirement of the Second Directive that at least one quarter of capital, namely 6.250 Euro, is paid in before a company starts operations adds more to the woes of the minimum capital requirement. Considering that the Second Directive applies only to public limited liability companies (Art. 6 Para. 3), it becomes obvious that the amount of minimum capital cannot provide any significant protection to creditors of the company.³⁰³ The legal capital does not provide a ‘buffer capital’ or a pool of capital, which the company can avail herself of when facing difficulties, because the legal capital is a business capital that can be consumed in the course of business and not a regulatory capital.³⁰⁴ Therefore, the seriousness-

298 High Level Group Report.

299 *Ibid.*, p. 13.

300 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1185; Miola, *European Company and Financial Law Review*, 2005, 413, p. 426; Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921, p. 931; Hirte, *Kapitalgesellschaftsrecht*, p. 304; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 138.

301 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 718. “At best, this may reduce the probability of insolvency of rather small ventures in the start-up phase. However, knowing that the public company is usually the typical legal form for large scale undertakings this amount will hardly reduce the probability of insolvency caused by exogenous shocks by more than a trivial percentage.” See also Boschma et al., *Alternative Systems*, p. 6.

302 Grigoleit, *Gesellschafterhaftung*, p. 461.

303 See also Ewang, 2007, p. 9 “Despite its triviality, the capital maintenance doctrine on which the minimum capital doctrine is based is an unnecessary abstraction and provides illusory protection.”

304 Cf. with regulatory capital held by banks as a ratio of weighted assets.

test function, assumed to be performed by the legal capital could be strongly questioned.³⁰⁵ Further, the amount of capital stipulated by the Directive is completely disconnected to the type of business activity, and thus also to the size of risk a company chooses to undertake.³⁰⁶ Considering the ‘one-quarter-of-paid-up-capital’ rule, it is possible that also small-scale enterprises avail themselves of the possibility of being established as public limited liability companies to perform large scale business activities. Thus the ‘filter effect’ of the minimum capital to prevent ‘bogus’ or ‘sham’ companies from gaining limited liability and performing large size business activities loses its strength.³⁰⁷ Certainly, increasing the minimum capital would not be a solution either, because it could constitute too high a burden for successful projects to materialise. Additionally, the difficulties of quantifying an amount of minimum capital that reduces significantly the risk of insolvency and that would make a balanced barrier neither too high to prevent successful business initiatives to materialise nor too low to make it easy for ‘sham’ companies to exploit the status of a public limited liability company are almost insuperable. Any chosen amount would be arbitrary and inappropriate, and economically doubtful³⁰⁸ because it is difficult to determine ex-ante the amount of capital necessary to cover a firm’s future liabilities.³⁰⁹

It is certainly better, one has to concede, that little capital is better than no capital. But it is open to doubt whether the level of protection provided to creditors and the effectiveness of the seriousness signals given by the minimum capital justify the current complex system of rules.

As a matter of fact, there is a growing trend³¹⁰ in relying more on stronger company law rules regarding managers and shareholders (also of shareholders-managers) liability towards company’s creditors for actions that endanger the existence of the company by causing³¹¹ its

305 For a critical perspective on the seriousness-test function of the legal capital see Hirte, in: *Verhandlungen des Sechundsechzigsten Deutschen Juristentages. Sitzungberichte - Referate und Beschlüsse*, 2006, p. P 27. See also Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, pp. 717-8.

306 See Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, p. 799. However, certain types of business activities, such as banks, require a substantially higher amount of minimum capital.

307 Hirte, *Kapitalgesellschaftsrecht*, p. 304. The minimum capital is simply a “*Eintrittskarte*”, an entry card into the privilege of limited liability.

308 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, pp. 718-9. See also Schön, *European Business Organization Law Review*, 2004, 429, p. 437 stating that there is no meaningful link between the financial needs of an individual enterprise and the amount of legal capital prescribed by statutory law.

309 Ewang, 2007, p. 18.

310 For example the 2008 German Act to Modernise the Law on Private Limited Companies and Combat Abuses.

311 Such acts include for example undercapitalization or deviation from the rules of appropriate financial

insolvency or its inability to serve its debts. This refocusing in the mechanisms of statutory creditor protection is seen as a complementary response to the weakness of the legal capital maintenance mechanisms of creditor protection.³¹² The privilege of limited liability is no longer justified when those persons enjoying this privilege misuse it for personal benefit and to the disadvantage of the company or of the company's creditors. Under this stricter liability regime, the statutory requirements would demand a two-steps model³¹³ for ensuring a better protection of the creditors of a company experiencing a crisis: first, the duty of the management of the company experiencing the crisis are to be focused on maintaining the interests of the company's creditors and not of the shareholders. This includes also the prohibition to use company's assets for the payment of debts other than of those pertaining to creditors. As a second step, the company's management is obliged to stop trading and file for insolvency in order to avoid incurring more debts and cause more harm to the company's creditors (see for example the English concept of wrongful trading³¹⁴). This trend moves the focus of creditor protection away from the "entry requirements" into the limited liability regime through minimum legal capital to the "exit liability"³¹⁵ by holding company's management liable under stricter rules combined with added requirements regarding publicity of company's information. The strengthening of the liability rules for company's management tightens also the liability of company's shareholders, who might be held liable in the same way as the company's manager where the controlling shareholder exerts undue influence on the manager as to cause the later to act according to the instructions of the former,³¹⁶ or where the manager is also the sole shareholder of the company, as it typically is the case in private companies.

planning, deprivation or withdrawal of assets from the company (and putting the company in danger of insolvency or at disability to pursue its statutory goals) or the treating of the company's assets as it were of the shareholders (or differently put, when the non-separation of the company's assets from those of the shareholders). For a more thorough discussion on these situations triggering personal liability for the shareholders see Grigoleit, *Gesellschafterhaftung*), p. 394 ff. and Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 332 ff.

312 See also Kroh, *Der existenzvernichtende Eingriff*, 2013, p. 111 – 2.

313 See the work of Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 324 ff. for a longer elaboration of this model under German law.

314 See for example the concept of wrongful trading in English company law.

315 Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 333 and Kroh, *Der existenzvernichtende Eingriff*, 2013, p. 112.

316 An example of such a situation is when the company's manager fails to run the company for the benefit of the company as a whole rather for the benefit of a particular shareholder, with other words failing to commit to the so called "decentralized pursue of profit" (in German language „*dezentrale Gewinnverfolgung*“). The so called "decentralized pursue of profit" leads to the neutralisation of diverging individual interests of the company's shareholders, guaranteeing in this way their equal participation in the company's success. Also the company's management is bound by the company purpose to act in the interest of the company as a whole and to commit to the "decentralized pursue of

II. Legal capital might mislead creditors

The essential idea of the legal capital regime is that the capital contributed by the shareholders³¹⁷ by way of subscribing the shares of the company constitutes the security to creditors dealing with the company. The capital is available to the company for trading, but it should not, without special safeguards,³¹⁸ be returned to the shareholders of the company.³¹⁹ Returning capital to shareholders by way of distributions would involve the return of assets to the shareholders in priority to the interests of creditors. This return of the capital, except when it involves the return of excess capital such as e.g. in the form of dividends and thus not leading into insolvency or in the inability of the company to serve its debt, would disturb the normal system of priorities in fulfilling the company's obligations towards third parties, including the company's shareholders,³²⁰ and have the potential³²¹ to reduce the amount of capital available to creditors to satisfy their claims against the company.³²¹ This situation would constitute one of the borders that needs and has been set to the granting of limited liability to entrepreneurs. Going beyond this border would justify setting apart the privilege of limited liability and making the entrepreneur personally liable towards creditors.³²²

However, the difficulty with the legal capital rules is that exactly the legal capital raised through the contributions by the shareholders, which the regime claims it helps provide security for creditors, is required to be maintained but not set aside and put in a safe box³²³ to reimburse

profit". For a more elaborate discussion on this concept see Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 321 ff. See also Berger, *Konzernausgangsschutz: Die Beendigung von Beherrschungs- und Gewinnabführungsverträgen*, 2016, p. 45 ff.

317 Wiedemann, *Gesellschaftsrecht*, p. 558: "Wer für ordnungsgemäße Finanzierung sorgt, darf seinen Risikoeinsatz beschränken." ("The one who takes care to ensure proper funding, may be allowed to limit the risk he undertakes". English translation by the author).

318 Ferran, *Company Lawyer*, 1999, 314, p. 318 ff.

319 Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921, p. 928.

320 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 5; For a general discussion on the priorities of claims over the assets of the company see the seminal work of Hansmann/Kraakman, *Yale Law Journal*, 2000, 387.

321 See also Ewang, 2007, p. 11.

322 The right to harming company's creditors (through the granting of limited liability to entrepreneurs) is to be limited in order to be justifiable. One of the borders set by to avoid the misuse of limited liability is the principle of the separation of the company's property from that of its owners. These have to be kept strictly separated and the company's owner(s) should not treat the company's assets as its own assets, otherwise it risks personal liability. See Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 305 – 306.

323 This would also be probably economically undesirable and unfeasible, as the capital would not be used efficiently. Davies, *Introduction to company law*, 2002, p. 84 ff. suggests also that a creditor protection

creditors' claims against the company when needed, but rather used in the course of business.³²⁴ The Oxford English Dictionary defines the verb "to maintain" as "To keep up, preserve, cause to continue in being (a state of things, a condition, an activity, etc.); to keep vigorous, effective, or unimpaired; to guard from loss or deterioration."³²⁵ However, as it has been shown above, the legal capital rules of the Second Directive do not purport to ensure this kind of capital maintenance, rather they merely require that capital is not returned to shareholders, unless some conditions are fulfilled. The legal capital and the maintenance of capital do not perform the capital adequacy function as in the case of financial intermediaries, such as banks.³²⁶ Certainly, when the legal capital is lost or reduced, the legal capital rules require the shareholders to replenish the capital³²⁷ before they distribute value to themselves.³²⁸ Nevertheless, there is no guarantee that the paid up capital is available to the creditor at any other point in time than when the company was registered.³²⁹ The 'legal capital' or 'capital', as found in the law or used by corporation statutes, has little or no relationship to the concept of "capital" as the economist, the businessman or the simple creditor knows it or understands it.³³⁰ Critics point to the fact that the legal capital regime might be misleading to the creditors of a company³³¹ when it assumes, falsely, that the fixed amount of the legal capital informs the current and future creditors about the resources the company possesses, and which cannot be distributed to shareholders.³³² Legal capital is not a collection of assets the creditor can avail himself to satisfy his claims. "The legal capital is entirely a legal invention, highly particularized in its meaning, historical in reference, and not relatable in any way to the ongoing economic condition of the enterprise."³³³ Considering

technique that would require companies to raise a certain minimum amount of capital and put it on one side, or take out a bond to a certain amount, so that the capital, or the bond can be made available to meet the claims of the creditors would make the corporate form very unattractive for business. See also Ferran, *Company Lawyer*, 1999, 314, p. 317.

324 Vetter, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 788, p. 799; Miola, *European Company and Financial Law Review*, 2005, 413, p. 480.

325 See www.oed.com.

326 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 21; See also Ferran, *Company Lawyer*, 1999, 314, p. 316; High Level Group Report, p. 78; Ewang, 2007, p. 20.

327 Unless the shareholders decide to reduce the subscribed capital of the company.

328 Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921, p. 928.

329 *Ibid.*, p. 719; See also Miola, *European Company and Financial Law Review*, 2005, 413, p. 479.

330 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 39.

331 As to the real capital the company possesses.

332 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1186: "In the real world however, creditors (and potential creditors) care neither about these resources nor about the legal capital rules that are supposed to signal these resources."

333 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 39; See *ibid.* p. 92: "A corporation's "legal capital" is a wholly arbitrary number, unrelated in any way to any economic facts that are relevant to a

these concessions, it is at best unclear how is the legal capital to perform one of its basic functions, which also provides the *raison d'être* for the Second Directive, namely that of providing security to creditors.³³⁴ If it is assumed that the legal capital of a company serves as a 'financial cushion' to amortise the losses that creditors might face due to dealing with a debtor that became insolvent, then it is questionable that the legal capital as provided by the Second Directive performs that function.³³⁵ If at all, the legal capital under the Second Directive serves as an optional signal about the soundness of a firm,³³⁶ which is prone to manipulation, rather than serving as a protection to creditors.

III. Legal capital is based on historical and not actual values

Another reason why the legal capital has been criticised for its inefficiency is its historical reference of the value of the company's assets.³³⁷ To put it differently, the legal capital represents "...a number that implies that a valuation of at least that amount was placed upon some indeterminate assets that were transferred to the corporation at some indeterminate past time in exchange for shares then issued."³³⁸ Thus, if the legal capital is to convey any message about the company's resources, that would be a message about an historical event, with no relevance to the current economic situation of the firm. The value of the assets, to which legal capital corresponds, may appreciate or depreciate with time. If this were to happen, as it usually does, the value of the assets of the company would discontinue having a corresponding value to the original share capital employed.³³⁹ According to the accounting scheme adopted in the Fourth Directive,³⁴⁰ assets are valued at historical costs, following in this way the principle of

creditor."

334 Hirte, *Kapitalgesellschaftsrecht*, p. P 16; Haas, *Reform des gesellschaftsrechtlichen Gläubigerschutzes*, p. E 127; Kübler, *European Business Law Review*, 2004, 1032, p. 1031 ff.

335 Schön, *European Business Organization Law Review*, 2004, 429, p. 438 "In summary, the existence of a minimum legal capital requirement, while it may not be particularly burdensome to some serious-minded entrepreneurs, does not help much creditors." See also Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 718 claiming that the reduction of the probability of insolvency is trivial.

336 Optional, because for private companies there is no minimum legal capital required as it is the case for public companies. Thus, private companies could also be formed with no or little capital (e.g. 1 Pound limited company in England, or 1 Euro UG (Unternehmergesellschaft in Germany). See Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 101 ff.

337 Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 138 ff.

338 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 39; Schall, *Kapitalgesellschaftsrechtlicher Gläubigerschutz*, p. 79 ff.

339 Ewang, 2007, p. 23.

340 Former Fourth Council Directive (EEC) 78/660 of 25 Jul. 1978 based on Art.54 (3)(g) of the Treaty on the annual accounts of certain types of companies, OJ 1978 L/222/11 (hereinafter the "Fourth Directive"). The Fourth Directive has been repealed by Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 on the annual financial statements, consolidated financial

prudence.³⁴¹ As a result, creditors wishing to inform themselves about the firm's existing equity must examine the entire balance sheet of the company.³⁴² Additionally, they must consider the current value of the company's assets and not the historical value at the time the asset was purchased or contributed.³⁴³ For this reason, the information regarding the assets as shown on the balance sheet does not convey useful information to creditors with regard to the protection available upon liquidation.³⁴⁴

A further criticism relates to how the limits of distributable profits are determined under the legal capital regime of the Second Directive. While it is broadly accepted that the freedom of shareholders to return value to themselves by way of distributions needs to be subjected to certain limitations,³⁴⁵ the focus of the debate rests with the question as to what kind of rules should determine what amount of profits should be distributed to the company's shareholders.³⁴⁶ If profits are allowed to be paid to shareholders before it is known for sure that all creditors will be paid in due course, then certain limits to these distributions need to be found.³⁴⁷ Critics of the current rules of the Second Directive for determining distributable profits point to the inefficiency created by linking the distribution of profits with the accounts of the company.

statements and related reports of certain types of undertakings, amending Directive 2006/43/EC of the European Parliament and of the Council and repealing Council Directives.

- 341 Schön, in: Eidenmüller/Schön (Hrsg.), *The Law and Economics of Creditor Protection. A Transatlantic Perspective*, 2008 (hereinafter "Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*") in p. 187 Schön points out that the 'prudence principle' leads to an asymmetric perspective which does not always correspond to the 'true and fair value' one has in mind when focusing on the information value of annual accounts disclosed to capital markets and to the general public.
- 342 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1187.
- 343 Wymeersch, *Financial Law Institute Working Paper Series*, 2006, 1, p. 12.
- 344 Boschma et al., *Alternative Systems*, p. 7. See also Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 37. Equally, the answers provided by the balance sheet are wholly dependent upon the accounting conventions governing the recognition of liabilities. Inherently, the efficiency of the legal capital system can rise no higher than the level of verity that can be achieved through "generally accepted accounting principles" and the consistency with which they are followed.
- 345 Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 183 calls the protection of the creditors' interests by way of entity shielding a 'natural complement of limited liability'.
- 346 According to the tradition of Roman law, companies were only allowed to distribute profits to their owners after the company was liquidated and all creditors had received their funds. See Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 183-4.
- 347 Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 186.

Determining the distributable profits according to a balance sheet test,³⁴⁸ as determined in the Second Directive, does not reflect the real capacity of the company to make distributions.³⁴⁹

Striking the right balance for addressing the need to protect the legitimate interests of corporate creditors without preventing the company and its shareholders from acting in an economically sensible way³⁵⁰ seems to be an ongoing and challenging task.

IV. Legal capital doctrine is costly to companies

The rules of the legal capital regime have also been criticised as economically inefficient because they impose non-negligible costs on companies.³⁵¹ Thus referring to the rules requiring an evaluation by an independent expert for contributions in kind, the legal capital regime is said to impose time-related costs by delaying the formation of the company or the increase of capital through *in kind* contributions, as well as money-related costs by making the companies paying for the experts.³⁵² Further, the rules for the valuation of contributions other than in cash discriminate public limited companies (*vis-à-vis* private limited companies which are not subject to these rules) and make their entry into the capital markets to raise cash more costly.³⁵³

The provisions of the Second Directive disqualifying the supply or performance of future services from the category of assets that can be contributed in the firm in exchange for cash makes the financing of start-up companies difficult.³⁵⁴ In the ‘new economy’ ideas and services

348 For a role of the balance sheet test in the legal capital regime see Rickford, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 140.

349 Drygala, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 587, p. 593; Boschma et al., *Alternative Systems*, p. 7; Miola, *European Company and Financial Law Review*, 2005, 413, p. 469. See also Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 189 admitting that the balance sheet tests fails to address the question regarding the ability of a company to meet its liabilities “as they become due”, because it does not take into consideration the settlement dates of the liability. For more details see also High Level Group Report, p. 13 and Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921, p. 938.

350 Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 183.

351 Kuhner, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 753, p. 579; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 310 ff; Micheler, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 324, p. 330 ff; Roth, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 348, p. 356; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 144; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1195. See also KPMG, *Feasibility study on an alternative to the capital maintenance regime established by the Second Company Law Directive 77/91/EEC of 13 December 1976 and an examination of the impact on profit distribution of the new EU-accounting regime*, 2008 (hereinafter “KPMG, *Feasibility study*”), on a discussion on costs caused by the legal capital system, although the study does not make a calculation of these costs.

352 Schön, *European Business Organization Law Review*, 2004, 429, p. 441-2 suggests that such a rule is desirable, but it cannot be expected from the individual creditor to check the value of the contributed asset personally, rather he has to be able to rely on the control exerted by the independent expert.

353 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1195.

354 Kübler, in: Hopt/Wymeersch (Hrsg.), *Capital markets and company law*, Reprinted. 2005, p. 103. But

are often more worth than physical assets. Start-up companies might experience difficulties in the first years of their operations to engage talented service providers because of insufficient cash. Allowing the contribution of services against stock would have provided some relief for these companies.³⁵⁵

The strict requirements on distributions, including share buy-backs and reduction of capital, might result in a situation where the company might not be able to distribute surplus cash even though there are no good projects to invest in. As a consequence, capital will not be employed in economically beneficial projects, but will remain with the company and probably invested in underperforming projects instead of allowing the shareholders to invest the surplus capital in more efficient projects.³⁵⁶ Furthermore, because of the strict limits on distributions, the signalling effect of the dividend policy is also restrained. Such a restraining of the signalling effect does not allow managers of the firm to convey to the capital markets important information about the future cash flows of the firm and thus the confidence of the company's controllers in the business of the enterprise. Insufficient information about the dividend policy of the firm might also result in reduced liquidity in the markets, thus making it more difficult for firms to raise additional capital.³⁵⁷

Lastly, legal capital rules have been regarded as burdensome also with regard to the requirements prohibiting a company to issue shares under par, making it in this way more difficult for companies to raise new capital at the time when they might need it the most.³⁵⁸

Over the last ten years, the legal capital regime, including the capital maintenance doctrine, has become a preferable hitting target of a considerable number of legal scholars who point out the

see Schön, *European Business Organization Law Review*, 2004, 429, p. 442 who suggests that little is to be said in favour of allowing companies to provide capital in the form of services, the value of which is difficult to determine.

355 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1196.

356 Smith Jr./Warner, *Journal of Financial Economics*, 1979, p. 117; See also Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1196; Armour, *European Business Organization Law Review*, 2006, 5, p. 7. But see Schön, *European Business Organization Law Review*, 2004, 429, p. 444 who suggests that the shareholders must not be allowed to withdraw legal capital guarantee informally and without assuring that creditor's interests are protected, even though the distribution of free cash flow may sometimes appear efficient from the company's point of view.

357 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1196.

358 Companies wishing to issue shares under par would have first to reduce the par value of the shares, before proceeding with the capital increase by the issue of new with a reduced par value. Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1198; Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 138. But see Schön, *European Business Organization Law Review*, 2004, 429, p. 442 suggesting that the issuance of shares under par should continue to remain illegal, because it gives parties a wrong impression about the amount of capital the company has received.

inefficiency to achieve its goals for which the regime was established in the first place. While there is a considerably broad agreement that legal capital does not provide creditors with a ‘financial cushion’ or with security for the satisfaction of claims against the company, legal scholars differ in their opinions with respect to several issues, such as which creditors of the company does the legal capital purports to protect; which creditors of the company need actually protection; and is the legal capital intended to protect creditors by itself, or is legal capital supposed to provide instruments, such as information (signalling the soundness of the company), to enable creditors to protect themselves? Other questions, such as what should the rules of legal capital achieve or should company law regulate capital adequacy instead of capital maintenance, or should creditor protection be provided within or outside the core company law, which fall in the realm of public policy issues have not yet received clear and definitive answers and it seems that it will remain so also for some more time to come.

Some of the most fervent critics of the legal capital regime have asked for the complete overhaul of the system established by the Second Directive, if not a complete abolishment of the Directive in order to make a new start.³⁵⁹ The Rickford Group Report criticising the current legal regime provides:

*“The theory is disproportionate in its effects, ill-targeted for its purpose, inconsistent in its own terms and has led to widely divergent and misleading measures of implementation. Some provisions are readily avoidable. Others simply represent loopholes and gaps in the scheme of protection. In short the regime is incomplete, dysfunctional, avoidable and unsuccessful as a harmonization measure.”*³⁶⁰

Nevertheless, it seems rather improbable that such a regime will be abolished altogether. Without addressing the issue of designing a system that prevents effectively and in a balanced way that assets are returned to shareholders in a way that shifts disproportionate risks to creditors it might still arguably be better to keep in place the current system, which has already created a tradition in the way it is being implemented, thus providing legal certainty to the relevant actors of company law.³⁶¹

359 For some of the fiercest criticism see Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990; Enriques/Macey, *Cornell Law Review*, 2001, 1165; High Level Group Report; Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921; Kübler, *European Business Law Review*, 2004, 1032; Kübler, *Columbia Journal of European Law*, 2005, 219; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695; Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006; Eidenmüller/Engert, *AG*, 2005, 97; Armour, *Modern Law Review*, 2000, 355; Ferran, *European Company and Financial Law Review*, 2006, 178.

360 Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921, p. 947.

361 Schall, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2009, p. 139 ff; Lutter, *Legal capital in Europe*, 2006, p. 6. Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1202. For a collection of the

§ 4. Self-help mechanisms of creditor protection

A. Self-help mechanisms as an alternative to the legal capital system

Critics of the legal capital system base their criticism on a comparative approach of the legal capital system with alternative approaches offered especially in the US legal system. Reference is often made here to the contractual mechanisms of creditor protection via financial covenants. However, the range of self-help mechanisms to creditors includes other tools as well, such as, for example, protection through mandatory disclosure of financial information or through the obtainment of securities or guarantees.³⁶² Supporters of the self-help mechanisms³⁶³ point to the advantage provided to the parties to the transaction to tailor the credit conditions according to their financing needs.³⁶⁴ The risk of default will be reflected in the credit interest rates charged by the creditor.³⁶⁵ These mechanisms would also allow the creditors to exercise the adequate level of monitoring due to the mechanisms in place that force the debtor to provide information needed to assess its performance by the creditor. This monitoring allows the creditor to renegotiate or modify the credit terms accordingly.³⁶⁶

I. The origin of the contractarian paradigm in company law

In a nutshell, the contractarian paradigm in company law is based on the approach that views the firm as a “nexus of contracts”. Persons involved in the affairs of the company, be they shareholders, managers, creditors or even employees, enter voluntarily into complex, private contract-based relations, either express or implied in order to regulate the relationships between them. In entering in this multitude of contracts, each party aims at maximising its own benefit.³⁶⁷ The actors in the nexus of contacts are considered as rational, and therefore able to maximise their position by entering into private agreements.³⁶⁸ Supporters of the contractarian approach

advantages of the existing legal capital system see Lutter, *Legal Capital in Europe*, 2006 p. 2 ff.

362 Keay, *Modern Law Review*, 2003, 665, p. 667.

363 Support for the self-help mechanisms comes especially by representatives of the economic theory, especially of the economic analysis of law. See e.g. Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305; Merkt, in: Eidenmüller/Schön (Hrsg.), *The Law and Economics of Creditor Protection. A Transatlantic Perspective*, 2008; Mülbart, *European Corporate Governance Institute Working Paper Series in Law*, 2006; Schön, *European Business Organization Law Review*, 2004, 429; Eidenmüller/Engert, *AG*, 2005, 97.

364 Kuhner, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 753, p. 760.

365 Micheler, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 324, p. 330; Kuhner, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 753, p. 760.

366 Micheler, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 324, p. 330.

367 Fama, *Journal of Political Economy*, 1980, 288, p. 290.

368 Keay, *Modern Law Review*, 2003, 665, p. 675.

see the company as a private initiative among individual members and therefore support the idea that relationships between them should be subject to contract, rather than to rules by legislation.³⁶⁹ The private individuals are rational actors in a contract relationship and therefore they are able to protect themselves. In accordance with the voluntary contracting approach, the proponents of the contractarian model suggest that neither a person nor a company becomes a creditor by force.³⁷⁰ They choose to become creditors, and therefore they should seek to gain the adequate protection or compensation for the enforcement of their claims through the terms of the contract with the debtor.³⁷¹ Contractual creditors have an arsenal of mechanisms that allow them to gain the adequate protection against the risk of losing out if a company is not able to meet the claims owed to them. These self-help mechanisms are discussed in the following sections.

II. Contracts and covenants

The growing use of covenants in loan agreements is credited to the need of lenders to have a better overview and control of the credit risk related to a loan agreement that would allow them the possibility of early risk recognition as well as early intervention in order to avoid or mitigate credit losses.³⁷² As such, covenants are an important tool in the hand of creditors to actively influence the management of a borrowing company, especially in times of financial difficulties.³⁷³ Whereas in the US, they have been in use already for a relatively long period of time, in Europe the growing use of covenants by creditors, as a means of protection against shareholders' opportunistic behaviour, is a relatively new experience.³⁷⁴

369 Keay, *Modern Law Review*, 2003, 665, p. 673.

370 This statement however does not provide a relief to tort creditors.

371 Kuhner, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 753, p. 760; Keay, *Modern Law Review*, 2003, 665, p. 687.

372 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381. See also Thießen, in: Sadowski (Hrsg.), *Regulierung und Unternehmenspolitik. Methoden und Ergebnisse der betriebswirtschaftlichen Rechtsanalyse*, 1996 (hereinafter „Thießen, *Regulierung und Unternehmenspolitik*“), who states that financial covenants are „auf dem Vormarsch“ (English “on the rise” or “gaining ground”). In Germany, the growing use of covenants could also be partly explained by the heavy reliance of German enterprises on banks for debt capital. See e.g. Ernst & Young, *Finanzierungsstrukturen im deutschen Mittelstand. Wege zum Wachstum*, 2006, p. 11. Additionally, the implementation of the Basel II requirement has also been suggested as a reason for the widespread of covenants in Germany as well. See e.g. Servatius, *Gläubigereinfluß durch Covenants: Hybride Finanzierungsinstrumente im Spannungsfeld von Fremd- und Eigenfinanzierung*, 2008 (hereinafter (Servatius, *Gläubigereinfluß durch Covenants*“), p. 33.

373 Krolak, *Der Betrieb*, 2009, 1417, p. 2. Maintaining the “going concern” value of the debtor, and thus avoiding the insolvency is of interest not only to the shareholders of the borrower, but also for the other company's stakeholders, such as creditors, employees, social insurance authorities, tax authorities, etc. who stand to lose substantially when a firm goes insolvent.

374 Bratton, *The Law and Economics of Creditor Protection*, p. 40 suggests that with the ushering in of mobile incorporation for smaller firms facilitated by the jurisprudence of the ECJ, especially through the *Centros*, *Überseering* and *Inspire Art* cases, enabling smaller firms to escape national legal capital

1. What are covenants?

Covenants as creditor protection mechanisms are widely used in the common law jurisdictions, especially in the US,³⁷⁵ where protection of creditors is primarily a matter of contract rather than of company law.³⁷⁶ They allow the creditor to perform credit monitoring with the view to determine the ability of the debtor to perform pursuant to conditions set in the credit agreement. The creditor and the debtor enter into a contractual agreement and determine privately the terms and conditions of the loan agreement, which reflect the probability of default and probability of insolvency of the borrower. Based on the freedom to contract, both parties to the transaction, i.e. creditor and debtor, choose the loan terms that best reflect their respective individual needs. As such, contractual mechanisms provide the advantage of a tailored solution to lending or borrowing.³⁷⁷ In a creditor – borrower relationship, when the creditor performs his part of the deal, she gets in return only a promise that the debtor will, at the time and under the conditions agreed, perform her part of the deal. As the debtor makes only a promise to repay, the creditor faces the uncertainty that the debtor’s performance will not match the expectations³⁷⁸ of the creditor and therefore the investment of the creditor will either devalue or lose. For this reason, in order to ensure compliance with the terms of the contract, creditors insert the so-called ‘covenants’. However, as the word ‘covenant’ suggests, the existence of *trust* between the parties regarding the performance of their obligations is necessary for the fulfilment of the agreement. Covenants belong to those mechanisms that allow the lender to circumscribe the performance or the avoidance of certain actions³⁷⁹ by the controllers of the debtor company that could increase the risk of insolvency of the debtor, and thus increase the credit risk of the creditor. Early financial literature defines covenants as provisions in the debt contract which restrict the firm from engaging in specified actions after the debt is sold.³⁸⁰ From a legal point of view, covenants

requirements, covenants enter the scene of creditor protection mechanisms as useful mechanisms also for creditors in Europe.

375 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 117 ff. See also Servatius, *Gläubigereinfluß durch Covenants*, p. 33.

376 Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 313.

377 Kuhner, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2005, 753, p. 760.

378 Apart from the risk that the debtor will not keep his promise to pay back, the creditor faces also the risk that his expectations, as a result of information asymmetries, will not reflect the real situation of the debtor at the moment they negotiated the contract. This issue is discussed further in the paper.

379 Often referred to as “negative covenants”.

380 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 117.

are clauses³⁸¹ included in the loan contract, thus forming part of the contract agreement,³⁸² and contain specifications for a certain course of actions that are binding to both parties. They contain rights and duties for the creditor and the debtor. The imposition of covenants on the debtor is tied to the development of certain indicators of the debtor company, which as it will be explained below, reflect the company's risk of default. The higher the default risk, the higher the number of covenants or the stricter they are in limiting the flexibility of the borrower.³⁸³

2. The warning and guidance functions of covenants

Covenants, either financial or non-financial, follow generally two main goals: avoiding debtor's insolvency and influencing debtor's business decision-making. Thus, on one side they aim at creating an early-warning system for the creditor to recognise situations, which could put the solvency of the debtor into danger as a result either of over-indebtedness or of the inability to make due on its payments to the creditor.³⁸⁴ On the other side covenants provide the creditor with the possibility to intervene, in cases where the debtor is facing financial distress, by influencing the business decision-making of the company with the view to implement strategies that would lead the company out of the financial distress.³⁸⁵ Both, the warning and the guidance functions of the covenants are necessary for an efficient credit risk management by the creditors. They deliver the creditors the mechanisms to keep the debtor 'on a tight leash' in order to ensure the repayment of credit according to the terms and conditions of the agreement.

In order for the creditor to intervene in the decision-making of the debtor, she needs various kinds of information, which give her insight into the health of the debtor company. Therefore, covenants follow also the goal of creating a transparency system with regard to the operations of the debtor, by requiring the supply of information regarding certain financial or other indicators³⁸⁶ of the company. The increase of transparency of the debtor's operation gives the creditor the possibility to create a monitoring system for the early recognition of situations that

381 In Germany they are known with the term '*Nebenabreden*' (English 'subsidiary agreements'), '*Nebenklauseln*' (English 'subsidiary clauses') or '*Negativerklärung*' (English 'negative pledge'). See e.g. Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 21 and Servatius, *Gläubigereinfluß durch Covenants*, p. 32.

382 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 19; Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1383.

383 Bratton, *The Law and Economics of Creditor Protection*, p. 62: "Covenant intensity follows default risk".

384 The warning function of covenants. See Servatius, *Gläubigereinfluß durch Covenants*, p. 32.

385 The guidance function of covenants. See Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1382 and Fleischer, *Zeitschrift für Wirtschaftsrecht*, 1998, 313, p. 314. See also Keay, *Modern Law Review*, 2003, 665, p. 690.

386 The so called „soft indicators“.

could endanger the solvency of the company. The explanation of the kind of information required under such covenants follows in the next sections.

a) *Avoiding debtor's insolvency*

Covenants, which aim at avoiding the insolvency of the debtor company typically define key financial figures which the borrower must keep in order to reduce the risk of insolvency and thus be able to make the repayments to the creditor according to the credit agreement.³⁸⁷ Certainly, there is no full guarantee that by just maintaining these key financial figures the company will avoid insolvency, as there is also no guarantee that the debtor company will always be able to maintain these key financial figures even if fervently wished so. Business misfortunes resulting from events, which are completely out of the debtor's control could always happen and thus cause the debtor to fail despite her efforts to maintain its financial health.

However, these covenants reflect the best estimations of the creditor, based on the past financial history of the debtor, the keeping of which, given there are no events over which the debtor has no influence, will ensure the debtor will avoid over-indebtedness or illiquidity. It becomes obvious that these types of covenants are aimed at restricting to some degree or substantially the discretion power of the controllers of the debtor company³⁸⁸ to take over entrepreneurial risks at levels which are unhealthy for the debtor, but allow them to pursue entrepreneurial risks that are acceptable to the creditor.³⁸⁹ Such covenants are called financial covenants or are often referred to as 'negative' covenants'. The content of financial covenants and the way how they operate is explained in the following sections.

b) *Influencing debtor's business decision-making*

The purpose of these covenants is to enable the creditor, based on the signals coming from the early-warning system³⁹⁰ showing an impairment of the debtor's key financial indicators, to intervene by asking the debtor to submit additional information or submit certain decisions to the creditor for prior approval. Thus, the effects of these types of covenants kick-in when the debtor has failed to maintain the key financial figures agreed in prior with the creditor. In such a situation, the debtor has the chance either to let the creditor declare an 'event of default', which could cause an acceleration of the credit by the creditor, and eventually cause the debtor to go

387 Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1385.

388 Bratton, *The Law and Economics of Creditor Protection*, p. 48.

389 A complete elimination of business risk is neither possible, nor desirable. The pursuing of business risk by a company is sine qua non to its existence. See Keay, *Modern Law Review*, 2003, 665, p. 681.

390 As explained above, this early-warning system is built to detect situations of financial distress of the debtor company.

insolvent, or allow the creditor to influence the business decision-making of the debtor.³⁹¹ The powers that might be granted to creditors pursuant to such covenants range from co-decision rights on important business and personnel decision to taking full control of the management of the company. Such rights, however, are not without consequences for the creditors. The risk of liability, referred to in the US as ‘equitable subordination’³⁹² and in Germany discussed under the topic of “*Umqualifizierung der Darlehensmittel in Eigenkapitalersatz*”,³⁹³ looms over creditors who by their actions put themselves in the same position of that of shareholders in managing the company.³⁹⁴ A further analysis of this liability risk follows in the coming sections. The realisation of these types of covenants is enabled among others also through the so called “non-financial covenants”. Under these covenants, the debtor company promises to deliver certain reports in the frequency and in periods of time determined by the creditor. The non-financial covenants do not infringe on the discretion of the debtor’s management to operate the business of the company, but they allow the creditor to gain an overview on the operations of the debtor with the view to detect situations of financial distress.³⁹⁵

3. Types of covenants

The parties to the credit agreement can freely decide on the content of the rights and duties inserted through covenants in the credit agreement to ensure the repayment of the credit by the debtor.³⁹⁶ Covenants could be classified in various types, such as, for example according to the type of duties they impose on the debtor³⁹⁷ or according to the rights they grant to the creditor with regard to the business of the debtor.³⁹⁸ However, there is no agreement on a general uniform classification for them.³⁹⁹ For the purposes of better explaining the functions being performed

391 Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1389.

392 Fleischer, Zeitschrift für Wirtschaftsrecht, 1998, 313, p. 318. ‘Equitable subordination’ is a variant of the lender liability doctrine in the US. See e.g. Berlin/Mester, Journal of Financial Intermediation, 2001, 108, p. 109.

393 Fleischer, Zeitschrift für Wirtschaftsrecht, 1998, 313.

394 *Ibid.*, p. 314.

395 Bratton, *The Law and Economics of Creditor Protection*, p. 48.

396 However, questions of liability for the creditor should be considered when drafting the covenants following the doctrine of lender liability (‘equitable subordination’ in the US and ‘*Eigenkapitalersatzrecht*’ in Germany).

397 E.g. financial covenants vs. non-financial covenants. Thießen, Zeitschrift für Bankrecht und Bankwirtschaft, 1996, 19, p. 21 ff. divides them into affirmative covenants and financial or even risk covenants.

398 E.g. covenants restricting management discretion vs. covenants not restricting management discretion.

399 Fleischer, Zeitschrift für Wirtschaftsrecht, 1998, 313, p. 314 classifies covenants in four groups according to the function they perform. Thießen, Zeitschrift für Bankrecht und Bankwirtschaft, 1996, 19, pp. 20-21 divides covenants in affirmative covenants and financial or risk covenants. Bratton, *The*

by the most typical covenant, in this paper they will be divided into three groups, namely *affirmative*, *negative* and *financial* covenants.

a) *Affirmative covenants*

Affirmative covenants are those covenants that require from the borrower to keep certain goals regarding the management of the company. Affirmative covenants provide the creditor with the information he needs to check whether and how is the debtor keeping the negative covenants, which are crucial to the creditor for the repayment of his credit. They also allow the creditor to exercise influence over the management of the debtor by conditioning certain decisions of the management with the prior approval by the creditor.⁴⁰⁰ Among the most typical covenants of this kind are:⁴⁰¹

- i) the *change of control* clause,⁴⁰² which grants the creditor special rights to terminate the credit agreement when changes in the ownership structure of the debtor company take place.
- ii) the *material adverse change* clause, which requires the debtor to inform the creditor regarding the occurrence of ‘very important events’, such as, for example, when the economic and/or financial situation of the company is impaired to the state that would endanger the continuity of the company.⁴⁰³ Certainly, the difficulty with this clause is the precise definition of the events that are to be considered important for the continuation of the company. Legal practice, however, suggest that legal proceedings against the company that could bring substantial liabilities could be considered as ‘very important events’ under the current clause.⁴⁰⁴ At the occurrence of such events, the

Law and Economics of Creditor Protection, uses a classification which divides covenants into affirmative and negative. Servatius, *Gläubigereinfluß durch Covenants*, divides covenants into affirmative, negative and financial covenants. Krolak, *Der Betrieb*, 2009, 1417, classified covenants into financial and non-financial covenants. Nevertheless, it can be observed that all the authors refer to the same clauses (covenants), only grouped differently.

400 Although Bratton, *The Law and Economics of Creditor Protection*, p. 47 states with regard to the affirmative covenants as pertaining to “ministerial matters” he mainly referring to the informational covenants which require the debtor to provide information and submit reports to the creditor with respect to the company’s operations.

401 For more details on the content of this type of covenants see Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19; Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381; Servatius, *Gläubigereinfluß durch Covenants*; Bratton, *The Law and Economics of Creditor Protection*.

402 Servatius, *Gläubigereinfluß durch Covenants*, p. 41.

403 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 20 and Servatius, *Gläubigereinfluß durch Covenants*, p. 41.

404 Servatius, *Gläubigereinfluß durch Covenants*, p. 41.

creditor allows himself the right to terminate the credit agreement or to stop further supply of credit pursuant to the credit agreement.⁴⁰⁵

- iii) the *cross default* clause, which is aimed at protecting the creditor from impairments in the financial situation of the group of companies, a member of which the debtor is, that can negatively impact also the financial situation of the debtor.⁴⁰⁶

Additionally, affirmative covenants include also the so called *informational covenants*, through which the borrowing company is required to provide the lender with periodic financial statements and other relevant information,⁴⁰⁷ that allow the lender to obtain an accurate view of the financial condition of the borrower. These covenants also provide for the right of the lender to inspect company's financial records.⁴⁰⁸ This information helps the lender to ascertain whether the provisions of the contract or whether an 'event of default' has occurred or is about to occur.⁴⁰⁹ However, in the requirement for the information it is necessary to strike a balance between the amount of information the borrower shall supply and the costs, in time and money, the borrower will have to incur to produce the information.⁴¹⁰ Last, affirmative covenants include also requirements that the debtor maintain her assets, for example, by insuring them against damage or loss; that the debtor adheres to the applicable legislation, maintains business licences and patents, uses an appropriate bookkeeping system, as well as other requirements as it pleases the contractual parties.⁴¹¹

b) Negative covenants

In contrast to the positive covenants, which allow the debtor to carry out a certain action, negative covenants contain requirements that forbid the debtor in general to carry out certain actions or to carry them out without the prior approval by the creditor.⁴¹² These covenants extend

405 Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1387 ff.

406 Servatius, *Gläubigereinfluß durch Covenants*, p. 40.

407 See Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1384 for more details. The lender might also require the borrower to submit financial reports to an auditor before delivering them to the lender. More on Otto/Mittag, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 325.

408 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 112.

409 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 143.

410 The more information does not mean the more protection for the creditor. Assessing the usefulness of the information obtained will often imply costs in terms of time and expertise for the lender obtaining the information. This could limit the effectiveness of the warning function of informational covenants. See on this matter Keay, *Modern Law Review*, 2003, 665, p.692.

411 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 20: "*Im Prinzip sind der Phantasie der Vertragsschließenden Parteien keine Grenzen gesetzt.*" (English "In principle, there are no limits set to the fantasy of the contracting parties").

412 Servatius, *Gläubigereinfluß durch Covenants*, p. 42.

the power of influence of the creditor over the business decisions of the debtor to the point that one could talk of effective control over the firm.⁴¹³ Among the most typical covenants of this group are:

- i) the *pari passu* clause, which regulates the ranking of debt vis-à-vis other debt incurred or to be incurred in the future by the debtor.⁴¹⁴ These covenants aim at protecting the creditor from the dilution of her claim against the debtor company through the issuance of debt senior to hers. Certainly, the creditor is concerned to have as few other creditors ranking in the same rank with him as possible and even more concerned to have a minimum, or at best having no creditor ranking senior to her in case of liquidation.⁴¹⁵ Therefore, through the *pari passu* clause the creditor will require that she will rank at least in the same rank with other secured creditor, if not senior to them.
- ii) the *negative pledge* or *debt restriction* clause,⁴¹⁶ which regulates the use of security for future debt. Through such a clause, the creditor wishes to prohibit the debtor to issue new debt without her permission or that the assets of the debtor are used to guarantee or secure future debt, and thus reduce the pool of assets available for the satisfaction of her claims in insolvency.⁴¹⁷
- iii) the *restriction of dividends or other payments to shareholders* clause, which forbid the debtor to return value to shareholders if certain conditions regarding profitability are not met.⁴¹⁸

Moreover, negative covenants include limitations on assets sales, on the granting of guarantees or loans, the conclusion of contracts above a certain value, acquisitions of other companies, and much more.⁴¹⁹ Also with regard to negative covenants, the contracting parties can choose from a bunch of options when negotiating their credit agreement.

c) **Financial covenants**

Among the most important covenants that should help the debtor maintain a low default risk are the financial covenants. The prime goal of these covenants is to force the debtor to respect certain key financial indicators or financial ratios, which have a direct influence on the capital structure

413 Bratton, *The Law and Economics of Creditor Protection*, pp. 48-9.

414 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 20.

415 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 104.

416 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 20.

417 Bratton, *The Law and Economics of Creditor Protection*, p. 49.

418 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 22.

419 See Servatius, *Gläubigereinfluß durch Covenants*, pp.42-3 for more examples on negative examples.

of the firm.⁴²⁰ They set to the borrowing company financial goals according to which also the business decisions of the firm should be oriented. An impairment of the key financial figures or ratios⁴²¹ serves as a signalling mechanism to the lender to decide what remedial actions to take to ensure the repayment of the credit or loan.⁴²² With regard to the imposition of these covenants, the contracting parties need to strike a balance between effectively reducing the credit risk of the borrower and avoiding making these covenants so complex that keeping them becomes too difficult of a challenge for the borrower, thus making the credit unattractive. In the presence of information asymmetry striking this balance can become very challenging.⁴²³

Among the various key financial indicators and ratios, typical financial covenants contain minimum requirements with respect to four of them: level of own (equity) capital, level of debt, earnings and liquidity.⁴²⁴ Without going into details on each of these covenants, covenants on the level of own capital or referred otherwise as the *net worth requirements*, oblige the borrower to maintain a level of own capital above a certain given figure, which is considered healthy by the creditor.⁴²⁵ As long as the debtor maintains this level of capital, she will not risk over-indebtedness, and thus also going insolvent.

Covenants on debt, referred to as *gearing ratio* or *debt-to-equity ratio*, determine the amount of debt as to equity capital that the debtor firm can incur. Because the amount of allowable debt is determined as a ratio, the debtor firm may increase the debt when it increases its own capital as well.⁴²⁶

Covenants on earnings, also referred to as *interest coverage* covenants, require that the ratio of earning of the company before interest and tax expenses be not less than a certain level defined by the creditor.⁴²⁷ The purpose of such covenants is to measure the debtor's ability to debtor, during the duration of the loan, to service interests payments related to the principal.⁴²⁸

420 In German ‚*Kapitalstrukturaufgaben*‘. Servatius, *Gläubigereinfluß durch Covenants*, p. 43.

421 Also referred to as “designated events”. Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 21.

422 Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, p. 130; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 723.

423 Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95, p. 96 ff.

424 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1382; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p.21; Fleischer, *Zeitschrift für Wirtschaftsrecht*, 1998, 313, p. 314.

425 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1382 and Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 313.

426 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1382; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 21.

427 *Ibid.*, p. 21.

428 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1383.

A very useful type of financial covenant, used primarily to evaluate in the short term the credit risk of the borrower is the liquidity covenant, otherwise referred to also as *current ratio* covenant. This covenant, expressed as a ratio of realisable assets to short term liabilities, requires the debtor to maintain liquid assets that will guarantee him the fulfilment of short term claims and thus avoid insolvency due to illiquidity.⁴²⁹

The determination of the content of the financial covenants, including the essential financial indicators or ratios, is a domain of the contractual freedom of the parties to the credit agreement. There are no exact formulas to determine the perfect figures. On the one side, too broadly defined indicators might dampen the warning function of the covenants, and as a result the remedial actions of the creditor might come too late. On the other side, too narrowly defined indicators might cause the debtor to breach the covenants, even when no substantial impairment of the financial situation of the debtor has occurred, creating in this way more noise than sending helpful signals. Usually, the content of covenants will depend primarily on the individual financial situation of each debtor, but also not less on the negotiating power of the parties to the agreement.⁴³⁰

4. The effects of sanctions on the debtor's behaviour

The usefulness of covenants as a means of creditor protection against the non-performance by the debtor is shown in the consequences that derive from their breach, more specifically, on the sanctions that are imposed on the debtor when an 'event of default' occurs that causes the debtor to no longer observe the agreed covenants.

An 'event of default' is a substantial breach of the quantitative requirements specified in the financial covenants. The accurate and adequate description of what constitutes 'event of default' takes a substantial part of the bond or loan agreement and it is the parties' prime concern.⁴³¹

The sanctions that kick-in in the event of a breach of covenant serve the creditor to manage the risk of default⁴³² from the non-performance of the debtor, before the debtor has reached the point where she will not be able to meet its obligations against the creditor. Through the sanctions, the creditor manages the default risk by intervening in the decision-making of the debtor and thus

429 *Ibid.*, p. 1383.

430 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 22.

431 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 104. Usually, when an 'event of default' has occurred, the stockholders might have already lost their investment in the firm. Therefore, the clauses where the 'event of default' are determined and described are the most negotiated clauses between the bond issuer and the bondholders.

432 Servatius, *Gläubigereinfluß durch Covenants*, p. 44.

by exerting influence on the management of the debtor firm.⁴³³ The right of the creditor to intervene in the decision-making process of the debtor is seen as a compensation for, as well as a mechanism to reduce the increased risk of default that she would have bear in the case of a breach of covenant.⁴³⁴

Among the rights that a creditor gains in the case of a breach of covenants are the acceleration of the debt payment, the obtainment of additional securities or guarantees, the termination of the credit agreement, higher interest rates, conditioning certain decisions of the debtor with the prior consent of the creditor, the conversion of debt into equity capital, and last but not least the stepping of the lender into the control of the company.⁴³⁵

As already introduced above, covenants allow creditors to manage the risk of default that arises from the participation of the creditor in the entrepreneurial risk of the debtor. The creditor manages the risk by exercising intensive supervision⁴³⁶ of the debtor and by influencing the decision of the debtor firm with respect to future cash flows.⁴³⁷ One could say, however, that in both cases the creditor is attempting to steer or guide⁴³⁸ the actions of the debtor's management with the purpose to reduce or avoid opportunistic or self-serving behaviour that would endanger the interests of the creditor ex-post, i.e. after the loan or credit has been allocated. The threat of sanctions as a result of a breach of covenant plays the role of a straitjacket to ensure that the debtor will not misbehave.

However, the efficiency of the covenants as a means of self-help creditor protection mechanism has been widely debated in the literature.⁴³⁹ A summary of these discussions and an evaluation of covenants efficiency to protect creditors follow in the next section.

433 This is also the second function of the covenants. See Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1385.

434 Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1385.

435 For a detailed catalogue of consequences resulting from a breach of covenant see Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 103; Thießen, *Regulierung und Unternehmenspolitik*, pp. 150-4; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 21; Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, p. 1385; Servatius, *Gläubigereinfluß durch Covenants*, pp. 45-46.

436 The creation of a early warning system that allows the creditor to realize when the financial situation of the debtor become critical.

437 Thießen, *Regulierung und Unternehmenspolitik*, p. 144.

438 Servatius, *Gläubigereinfluß durch Covenants*, p. 33.

439 For English literature see eg. Berlin/Loeys, *Journal of Finance*, 1988, 397; Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990; Enriques/Macey, *Cornell Law Review*, 2001, 1165; Keay, *Modern Law Review*, 2003, 665; Bratton, *The Law and Economics of Creditor Protection*; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, 401. For German literature see Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19; Thießen, *Regulierung und Unternehmenspolitik*; Fleischer, *Zeitschrift für Wirtschaftsrecht*, 1998, 313; Servatius,

5. Assessment of covenants as self-help creditor protection mechanism

The use of covenants as a mechanism for the management of default risk faced by creditors as a provider of debt capital has become widespread also outside the financial or capital markets where there were originally developed and established.⁴⁴⁰ They are replacing the traditional means for ensuring the repayment of loans, such as collateral or personal guarantees.⁴⁴¹ Instead of taking out collateral, whose value and adequacy as a protection mean depend on the going-concern situation and thus on the cash-flow of the debtor firm, creditors are aiming at influencing the cash-flow of the debtor firm itself as well as the future use of these cash-flows.⁴⁴² The way how a creditor exercises the influence was already described briefly above. However, there are concerns among the critics of the contractarian approach regarding the efficiency and the costs of such mechanism to the creditors. They claim that the value of covenants as a self-help protection mechanism for creditors is debatable.⁴⁴³ Instead, the legal capital regime presents a protection system that the covenants simply replicate.⁴⁴⁴ Both lines of reasoning have their merits and the definitive solution on the most efficient system is far from over. A summary of the advantages and the disadvantages of covenants follows below.

a) *Advantages deriving from covenants*

(i) *Compensation against the problem of the asymmetry of information*

Supporters of the contractarian paradigm in company law (already explained in Section § 4.A.I. The Origin of the contractarian paradigm in company law) suggest that one of the ways how a creditor can hedge against the risk of default is by setting the interest rate that reflects the risk profile of the debtor.⁴⁴⁵ Whether the creditor will extend capital to the borrower and if yes, under what terms, will depend on how the creditor assesses the ex-ante uncertainty, referred to as “credit risk”.⁴⁴⁶ In order to be able to lend, the creditor requires the trust of the debtor not only on his willingness but also on his ability to repay the loan. These fears of the creditor lie at the

Gläubigereinfluß durch Covenants.

440 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, in p. 19 states: “*Auch bei uns sind covenants auf dem Vormarsch.*” (English “Also at us, the covenants are on the rise”).

441 Thießen, *Regulierung und Unternehmenspolitik*, p. 144.

442 *Ibid.*, p. 144.

443 Bratton, *The Law and Economics of Creditor Protection*; Keay, *Modern Law Review*, 2003, 665.

444 Bratton, *The Law and Economics of Creditor Protection*, p. 41.

445 See explanations by Posner, *University of Chicago Law Review*, 1976, 499, p. 503 and Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 128.

446 Servatius, *Gläubigereinfluß durch Covenants*, p. 49.

heart of each financial transaction.⁴⁴⁷ It is assumed that an informed creditor will accurately choose the interest rate that will protect him in the case of a failure by the debtor to make good on his promise to repay the loan. However, the risk of default that a creditor is faced with depends on his ability to collect adequate, accurate and relevant information⁴⁴⁸ about the ability of debtor to pay the loan as well as interests, not only ex-ante but also ex-post.⁴⁴⁹ The ability of the creditor to collect the information can be limited because of the existence of the problem of the asymmetry of information.⁴⁵⁰ It is said therefore that covenants requiring the provision of various types of information regarding the financial, but not only financial, situation of the borrower help to close the information gap between the lender and the borrower and reduce the asymmetry of information. Through the covenants, the creditor may ask for more information than just the information on annual accounts or information provided following a balance sheet or solvency test.⁴⁵¹ Additionally, the creditor may ask the debtor to provide the information on regular periods of time, as the creditor considers it necessary that would allow him to assess best the risk of default.

Nevertheless, the contribution of covenants in reducing information asymmetries and assisting the creditor to make informed decisions about the risk of default may be limited due to the fact that the information provided under the covenants refer more or less to the past; when negative developments related to the information supplied by the debtor materialize, it is already too late for the creditor to intervene, and last but not least, the accuracy of information supplied, especially of financial indicators, depends greatly on the accuracy of the accounting procedures employed by the debtor firm.⁴⁵² Additionally, collecting accurate and adequate information by the lender might be costly, as the information provided by the borrower himself is subject to adverse selection problems, since directors experience strong incentive to misrepresent the borrowing company' financial situation.⁴⁵³ Obtaining relevant information about the financial

447 *Ibid.*, p. 49.

448 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 21.

449 Servatius, *Gläubigereinfluß durch Covenants*, p. 65.

450 Schmidt, European Business Organization Law Review, 2006, 89, p. 92. As a result of information asymmetries, creditors face a greater risk of default than shareholders. See Servatius, *Gläubigereinfluß durch Covenants*, p. 77.

451 *Ibid.*, p.66; Schmidt, European Business Organization Law Review, 2006, 89, p. 90 ff.

452 See Wittig, WM - Zeitschrift für Wirtschafts- und Bankrecht, 1996, 1381, for more details p. 1386.

453 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 21.

situation of the borrower from other sources⁴⁵⁴ entails also costs, sometimes high, and the information might be subject to creditworthiness concern or difficult to interpret.⁴⁵⁵

(ii) *Market alternative to statutory insolvency*

Insolvency is inefficient, as the value of a firm's assets is higher when the firm is a going concern than when those assets are liquidated individually.⁴⁵⁶ Hence, there is an interest in keeping the firm floating. It is suggested that covenants provide to creditors the possibility to manage the risk of default through powers that are typically provided in insolvency law without the debtor having to enter the insolvency process.⁴⁵⁷ Such powers include for example the direct influence that a creditor can exercise over the management of the debtor firm to pursue business strategies that maximize the firm value by vetting decisions on how the assets of the debtor are being used or invested. Additionally, in contrast to the insolvency procedure, covenants can bring forward in time the moment when the creditor takes control over the decision-making of the debtor by determining firm-specific situations that would trigger such transfer of control in the case of a breach of covenant.⁴⁵⁸ The efficiency of this mechanism might suffer ex-post by the doctrine of the "lender liability", which might hold the creditor liable if the firm becomes insolvent even after the lender took control or because the lender took control of the decision-making of the borrower.⁴⁵⁹ A longer explanation of this problem follows in the next section (see Section 5.b. Disadvantages deriving from covenants).

454 Such as e.g. credit rating agencies, statistical and qualitative procedures developed in the literature for estimating probability of default. See Pellens/Sellhorn, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, pp. 385 – 386.

455 *Ibid.*, p. 386.

456 Thießen, *Regulierung und Unternehmenspolitik*, p. 21 ff; Schmidt, *European Business Organization Law Review*, 2006, 89, p. 91.

457 Analytically, from an economic point of view see Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 22 ff. Additionally Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1390 and Servatius, *Gläubigereinfluß durch Covenants*, p. 68.

458 Thießen, *Regulierung und Unternehmenspolitik* in his analysis p. 29 ff confirms the efficiency of this mechanism with regard to minimising the risk of default, despite the costs related with the use of such mechanism.

459 For English literature on this issue see e.g. Hass, *University of Pennsylvania Law Review*, 1987, 1321; Fischel, *Yale Law Journal*, 1989, 131; Berlin/Mester, *Journal of Financial Intermediation*, 2001, 108. For German literature see Thießen, *Regulierung und Unternehmenspolitik*; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19; Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381; Fleischer, *Zeitschrift für Wirtschaftsrecht*, 1998, 313; Servatius, *Gläubigereinfluß durch Covenants*.

(iii) Greater flexibility in the arrangement of contractual relation.

It is accepted among legal scholars that bond contracts grant extensive flexibility to borrowers and lenders because they make decisions on how they want to regulate their lending relation based on context-specific considerations, according to the needs of the particular borrower and of the particular lender.⁴⁶⁰ In this respect they are infinitely adaptable.⁴⁶¹ Unlike the “off-the-rack” nature of mandatory legal capital rules providing ready-made solutions to the issue of creditor protection, bond contracts through covenants provide firm-specific financing solutions, as well as creditor protection solutions. Covenants restricting distributions to shareholders, which is usually the prime concern of corporate creditors, are based on negotiated figures or margins of, for example, borrower’s working capital, net earnings or return on capital, taking into consideration the borrowers’ general economic strength, current and projected cash flows, the borrowers’ potential to make profits,⁴⁶² as well as other firm-specific information. Moreover, the decision of the debtor’s management to return value to the shareholders in the form of various distributions is indirectly consented by the creditor, who requires the debtor to observe the agreed covenants. The management of the firm, who is elected and represents the shareholders, is thus not wholly free on its discretion to return value to the shareholders⁴⁶³ or else will risk the penalty of sanctions for a breach of covenant. Lenders can also avail themselves of ex-ante protection mechanisms by requiring the borrower to supply different financial reports and information that would allow the lender to acquire a more accurate view of the borrower’s financial situation and thus to make informed decisions about whether to provide or not credit to the borrowing firm. In this context, adequate and accurate financial information on the financial condition of the borrower becomes a precondition for effective creditor self-help.⁴⁶⁴

(iv) Early recognition of financial crisis of the debtor

As already referred to above, covenants allow the creditor to bring forward in time the moment when he would have the power to exert influence regarding the way how the debtor invests or uses his assets. The debtor has either the option to accept such an intervention or declare a breach of covenants,⁴⁶⁵ which could lead to insolvency. Considering that insolvency may reduce

460 The events that would constitute a breach of covenant could be adapted according to the branch of economy where the debtor firm is operating, to the firm’s situation itself and could vary from contract to contract. See Servatius, *Gläubigereinfluß durch Covenants*, p. 70.

461 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 8.

462 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 113.

463 *Ibid.* in p. 16 puts it: “As the creditor sees it, hungry goats have been set to watch the cabbages.”

464 Mülbart, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 21.

465 Declaring a breach of covenants might give the right to the creditor to accelerate the repayment of the

substantially the value of the debtor's assets,⁴⁶⁶ the debtor has an interest to accept the intervention of the creditor and renegotiate the debt contract instead of declaring an event of default. Here lies also the value of early warning contracts.⁴⁶⁷ The renegotiation of the debt contract allows the lender to avoid opportunistic decisions on the debtor's side that might destroy firm value at the expenses of creditor but to the benefit of the debtor.⁴⁶⁸ Without such covenants the lender might not have the leverage to force the debtor to converse about the future steps.⁴⁶⁹ Thus, the possibility to renegotiate the terms of the contract, allows the lender to influence business decisions and strategies of the borrower, with the view to maximize the firm's value.⁴⁷⁰ In this way, the lender can correct the borrower's behaviour through the threat of imposing higher interest rates, demanding waiver fees or additional securities, or through exerting influence over the borrower's management.⁴⁷¹ Especially the possibility of exerting influence over the debtor's management seems attractive to the creditor. *Servatius*, talks about "disciplining the decision-makers".⁴⁷² Creditor – debtor relationships are burdened by a classic principal – agent problem⁴⁷³ of the type present also in a shareholder – management relationship.⁴⁷⁴ Building on a trust element in their relationship, creditors expect that the debtor will behave in such a way as to avoid endangering the repayment of the loan to the creditor.⁴⁷⁵ However, due to information asymmetries, the creditor will need to ensure that the debtor will abide by the term of the agreed debt contract. Hence, a principal – agent problem exists. It is suggested that covenants help minimize this problem by influencing the decision-makers of the firm.⁴⁷⁶ In the absence of covenants, and when the debtor firm is facing financial difficulties that could lead to insolvency, creditors are interested in the management not delaying a filing of

loan which could have financial repercussions for the already weakened debtor.

466 Krolak, *Der Betrieb*, 2009, 1417, pp. 2-3

467 Bratton, *The Law and Economics of Creditor Protection*, p. 55.

468 Schmidt, *European Business Organization Law Review*, 2006, 89, p. 91.

469 Bratton, *The Law and Economics of Creditor Protection*, p. 56. See also Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 29.

470 Servatius, *Gläubigereinfluß durch Covenants*, p. 72.

471 Thießen, *Regulierung und Unternehmenspolitik*, p. 146. See also Krolak, *Der Betrieb*, 2009, 1417, p. 5 ff.

472 Servatius, *Gläubigereinfluß durch Covenants*, p. 73.

473 Armour et al. in Kraakman et al., in *The Anatomy of Corporate Law*, p. 2; Hansmann/Kraakman, in: Kraakman et al., *The Anatomy of Corporate Law*, p. 21.

474 Jensen/Meckling, *Journal of Financial Economics*, 1976, 305.

475 Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95, p. 96.

476 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1389; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 22 ff; Servatius, *Gläubigereinfluß durch Covenants*, p. 75.

insolvency in order to prevent a further wipe out of the firm's assets.⁴⁷⁷ However, creditors have no ex-ante mechanism to force the management of the debtor firm not to delay the filing for insolvency. They could rely on the threat of personal liability imposed on the management by the statutory provisions on wrongful trading as a mechanism that will force management not to delay insolvency. Nevertheless, a going-concern firm is more valuable than an insolvent firm.⁴⁷⁸ Therefore, covenants present creditors with a better alternative than insolvency by influencing or disciplining the decision-makers of the firm without having to file for insolvency in the first place. It is suggested that early warning covenants allow the creditor to intervene in the management of the firm before the firm has reached the point in time when filing for insolvency would be the only remaining option.

b) Disadvantages deriving from covenants

For the opponents of the legal capital regime, covenants as a creditor protection mechanism amount to a “negotiated approach to statutory mandate”.⁴⁷⁹ They are praised for their protective reach and firm-specific sensitivity.⁴⁸⁰ As the transaction takes place between informed parties, loan agreements and bond covenants have, over a period of time, been formalized and standardised to become a powerful instrument to secure the interests of creditors engaged in major loan or credit transactions. As *Manning/Hanks*, so descriptively put it: “*A century of experience has gone into the development of this awesome engine, and though in the process it has become a Leviathan and slow-footed, its design is subtle, its range is great, its fire power is devastating, and its boiler plate armor is impenetrable.*”⁴⁸¹ Their structure is complex and their content infinitely adaptable.⁴⁸²

For the proponents of the legal capital contractual provisions through covenants replicate to some extent the protection already provided through the norms of capital maintenance.⁴⁸³ Therefore, the capital maintenance regimes saves the lenders the costs of having to draft similar loan

477 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, p. 423; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1171; Servatius, *Gläubigereinfluß durch Covenants*, p. 74.

478 Bratton, *The Law and Economics of Creditor Protection*; Schmidt, *European Business Organization Law Review*, 2006, 89; Krolak, *Der Betrieb*, 2009, 1417.

479 Bratton, *The Law and Economics of Creditor Protection*, p.41.

480 Armour, *Modern Law Review*, 2000, 355, p. 374; Mülberr/Birke, *European Business Organization Law Review*, 2002, 695, p. 716; Schön, *European Business Organization Law Review*, 2004, 429, p. 439.

481 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 103.

482 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 8

483 Schön, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2000, 706, p. 727; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 395.

covenants.⁴⁸⁴ Additionally, nothing hinders the creditor to ask for stricter protection against the debtor company, for example, in the form of personal guarantees from the firm's management or shareholders. Moreover, and this seems to be one of the strongest arguments of defenders of the legal capital regime, covenants are costly and not available as a protection mechanisms to all types of creditors, and especially not to the weakest ones, such as employees, trade creditors or involuntary creditors.⁴⁸⁵

(i) Reduction of borrower's flexibility

It the purpose of the covenants to circumscribe what the debtor may do, and consequently by way of exclusion also what the debtor may not do. The debtor is thus constraint in its freedom to pursue certain actions. Covenants serve to prevent borrowing companies from acting opportunistically through an ex-post devaluation of the creditor's claim in the firm.⁴⁸⁶ For example, by putting restrictions on the amount of debt issued after the bonds have been issued or credit has been provided, covenants provide a stopping mechanism that protects the interests of creditors. Other covenants as well, such as covenants on investment policies, namely restricting company's decisions in what projects to invest and in what not, serve also as a mechanism to prevent the borrower from investing in projects where the losses will fall on the creditors, and the most benefits will accrue to shareholders.⁴⁸⁷ However, the imposing of covenants in bond contracts is associated with costs for the borrower, as his flexibility to pursue investing and financing opportunities is limited or hampered.⁴⁸⁸ Should a debtor not be able to keep the agreed covenants, he is faced with the option to either renegotiate or suffer the sanctions from the breach of covenants. However, a debtor might not always be able to control the keeping or not of the covenants, for example when the economic conditions turn negative and the firm loses valuable business. In these cases therefore, restrictions imposed by covenants produce non-optimal results.⁴⁸⁹ Renegotiating the covenants to adapt them to the new situations could be

484 Armour, *Modern Law Review*, 2000, 355, p. 374.

485 Schwarcz, *Cardozo Law Review*, 1996, 647, p. 652; Schön, *European Business Organization Law Review*, 2004, 429, p. 727.

486 Such actions include claim dilution, asset withdrawal and substitution, underinvestment or risky investment. Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117; Armour et al. in: Kraakman et al., *The Anatomy of Corporate Law*, p. 116; Enriques/Macey, *Cornell Law Review*, 2001, 1165; Bratton, *The Law and Economics of Creditor Protection*, 36.

487 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1169.

488 Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95, p. 119; Ferran, *European Company and Financial Law Review*, 2006, 178, p. 3. See also Schön, *European Business Organization Law Review*, 2004, 429, p. 727 and Schmidt, *European Business Organization Law Review*, 2006, 89, p. 89.

489 Lin, *Vanderbilt Law Review*, 1993, 1485, p. 1504.

considerably difficult⁴⁹⁰ and costly, due to factors such as information asymmetries and collective action problems.⁴⁹¹ The level of difficulty and the costs tend to increase when the lenders or creditors are many.⁴⁹² Literature shows that the difficulty to renegotiate covenants relaxes when the creditworthiness of the borrowers increases and the creditor considers the covenants too restrictive.⁴⁹³ This counter-cyclical effect in the renegotiation of covenants might cause the debtor to make sub-optimal business decisions that affect also the value of the creditor's claim in the firm.

(ii) The danger of lender liability

As already introduced above, one of the most important outcomes in the case of a breach of covenant, which in the same time might represent also the most important reasons for the use of covenants, is the possibility that creditor have to influence the decision-making of the borrower regarding future business strategies.⁴⁹⁴ It is expected that the influence of the creditor on the debtor's decision-making will be the substantial, the stronger the reliance of the debtor on the creditor's funds. However, regardless of the benefits that a creditor could extract from a substantial influence on the debtor's business decisions, too much influence does not come without costs to the creditor itself. That is due to the so called doctrine of lender liability⁴⁹⁵ which could hold the creditor liable in case on debtor's insolvency for faulty or deficient management or influence over the debtor's business decisions. Creditors, by exerting too much influence upon the business or entrepreneurial decisions and behaviour of the debtor firm, could find themselves in shareholders- or directors-like positions, and therefore might also be treated as such in a firm insolvency, thus bearing also personally losses.⁴⁹⁶ This liability potential presents creditors with difficult choices: on the one side, the possibility to influence the debtor's management strategic

490 However, see Smith Jr./Warner, *Journal of Financial Economics*, 1979, 117, conclusions that the stringency of covenants in private placements stems from the ease with which they can be renegotiated.

491 Schmidt, *European Business Organization Law Review*, 2006, 89, p. 92.

492 Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95, p. 106.

493 For instance see Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95.

494 Thießen, *Regulierung und Unternehmenspolitik*, p. 146.

495 Fleischer, *Zeitschrift für Wirtschaftsrecht*, 1998, 313, p. 313; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 314. In German law, a faulty influence of a creditor over the debtor's business could lead to making the creditor liable under the concept of "Sittenwidrigkeit" under § 826 of BGB for losses incurred by the debtor or to subordinate the debt through the "Eigenkapitalersatz" concept, namely by transforming the debt into equity. See discussion in Servatius, *Gläubigereinfluß durch Covenants*, p. 120. In the US, the lender liability doctrine is grounded upon the fiduciary duties concept. See e.g. Fischel, *Yale Law Journal*, 1989, 131; Berlin/Mester, *Journal of Financial Intermediation*, 2001, 108, p. 108.

496 Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 314; Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 402;

business decisions serves as a motivation to monitor debtors via covenants, but on the other side the creditors are faced with the prospect of liability for “too much” influence on the debtor’s decision,⁴⁹⁷ although the debtor was already in financial difficulties and needed all the help he could get. What makes the situation more complicated for creditors is the lack of legal certainty regarding when the creditor’s influence shall be considered “too much” for liability purposes.⁴⁹⁸ Such would be the case in a company reorganisation or what is in German called a “*freie*” or “*stille Sanierung*”.⁴⁹⁹ However, a certain degree of control by the creditors is not only needed but also justified: it is the right of the lender to impose proper conditions on the debtor in order to increase the probability of repayment.⁵⁰⁰ Additionally, creditor monitoring of the debtor is necessary to avoid suboptimal performance by the debtor that would reduce firm value. Faced with the dilemma of liability, creditors might choose a more risk-averse behaviour by adopting less intrusive strategies in order to avoid lender liability. In some other cases, in the presence of uncertainties about the outcome of their involvement in a debtor’s reorganisation effort, creditors might choose a rather passive approach by simply obtaining the rights granted to them under other covenants⁵⁰¹ or refusing to allocate further capital by abiding strictly to the penalties for a breach of covenant. As a consequence, the end result could be the type of suboptimal outcome, such as the debtor going insolvent that the creditor through its covenants was trying to avoid.⁵⁰² No doubt, it is submitted there is a case for lender liability, especially in the cases when, as a result of the influence and/or control of the debtor’s decisions by the major and sophisticated

497 Thießen, *Regulierung und Unternehmenspolitik*, p. 146.

498 In the US, the courts have developed the test of “instrumentality” or of the “alter ego”, according to which a creditor could be held liable when the debtor, because of the control and influence exerted by the creditor, becomes a ‘mere instrumentality’ of the creditor. Usually the focus has on the improper acquisition of control over the debtor or the creditor’s subsequent abuse of control or influence over the debtor. The decisions of the debtor are not made any more in his interests but in those of that the creditor. Hass, *University of Pennsylvania Law Review*, 1987, 1321, p.1329. See also Servatius, *Gläubigereinfluß durch Covenants*, p. 119.

499 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 31.

500 Hass, *University of Pennsylvania Law Review*, 1987, 1321, p. 1323.

501 Such as e.g. acceleration of the loan payment; execution of guarantees.

502 See arguments by Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, pp. 31-32 insisting that the avoidance of insolvency is probably the most important contribution of covenants. However, see Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1391 who questions the usefulness of financial covenants as means to avoid insolvency. He states that financial covenants have only a limited usefulness, and that usefulness could materialize only when creditors abide strictly by the covenants and are able to monitor them closely and continuously.

creditors, the interests of small and weak creditors could be prejudiced.⁵⁰³ However, this doctrine is in need of clear rules and codification.⁵⁰⁴

(iii) Exacerbation of creditor – creditor conflicts of interests

It is submitted that bond and loan agreements as a creditor protection mechanism are suitable especially for investment creditors or sophisticated creditors, namely for those creditors that extend large amounts of credits for a substantial period of time to incorporated enterprises.⁵⁰⁵ Smaller creditors, such as consumers or trade creditors, are not in a position to insert financial covenants or negotiate their insertion in contracts due to a lack of bargaining powers and collective action problems.⁵⁰⁶ Therefore, when their investment in the firm does not exceed the threshold where their benefits are greater than the costs, they would choose rational apathy as a course of action instead of action.⁵⁰⁷ Another line of arguments brings conflict potentials between creditors in the picture. Thus, it has been submitted that small or weak creditors could also benefit from covenants by being in the shadow of larger, sophisticated creditors. When larger creditors impose covenants on debtors, the benefits from a reduction of the debtor's risk of insolvency will spill over to the small creditors, who can free-ride on the efforts by the sophisticated creditors.⁵⁰⁸ This argument would assume the existence of a principal-agent relation between the two types of creditors, where the larger creditor is the agent. However, it is difficult to argue for the existence of such a relationship, in a true sense, because the sophisticated creditors act in the first place in their own interest. The benefit that smaller creditors might obtain from the covenants imposed by the sophisticated creditor seems to be a side effect, rather than a planned outcome.⁵⁰⁹ This is probably at best shown in cases where the debtor firm is facing financial difficulties.⁵¹⁰ In these situations, sophisticated creditors are in a position to alter the

503 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 402: "The big guns thunder and small claims interests may be among the victims."

504 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, p. 32.

505 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p.103; Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1188.

506 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, pp. 399-400; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 313; Engert, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 785.

507 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 399.

508 Enriques/Macey, *Cornell Law Review*, 2001, 1165, p. 1172; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305, p. 313.

509 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 401: "The common benefit is not their goal."

510 As to the following see Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 724; Merkt, *European Business Law Review*, 2004, 1045, p. 1050; Schön, *European Business*

term of the loans and ask for additional securities or guarantees to ensure the repayment of the loan or the minimisation of the default risk. Smaller creditors, on the other side, are neither in a position nor able to alter the terms under which they extended credit to the debtor firm. As a result, any additional security or guarantee to the benefit of sophisticated creditors reduces the pool of assets available to the creditors as a whole and devalues the claims of unsecured or weak creditors.⁵¹¹ Covenants protect lender not only against the probability of default of the debtor, but also against competing creditors if the debtors' financial position deteriorates.⁵¹² The possibility of adjusting creditors, who are typically sophisticated creditors, to alter the terms of the contract in a way they consider appropriate in order to better protect their own interests could result in a conflict of interests between the two types of creditors. For example, a non-alignment of interest can be observed when considering long term and short-term creditors. The one party, the long-term creditor who is typically a big creditor, wants to maintain the going-concern value of firm in order to benefit in the long-term from the relationship with the troubled debtor. The other party, the short term creditor who is typically a small creditor wishes to send the debtor firm into solvency in order to save at least a part of the credit from what has remained of the troubled firm.⁵¹³ Therefore, smaller or non-adjusting creditors cannot rely on the adjusting creditors for their protection as their interests are not necessarily aligned with one another.⁵¹⁴

(iv) No contract is perfect

The usefulness of the covenants' strategy to protect creditor suffers from the drawback that no contract can be drafted in such a way as to foresee in sufficient details all the situations through which the debtor firm would increase the risks to creditors.⁵¹⁵ When covenants are drafted, they contain the best knowledge regarding past opportunistic behaviours by the debtors, but they

Organization Law Review, 2004, 429, p. 443; Mülberr, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 21.

511 Schön, Zeitschrift für Unternehmens- und Gesellschaftsrecht, 2000, 706, p. 727; Merkt, European Business Law Review, 2004, 1045, p. 313.

512 Hass, University of Pennsylvania Law Review, 1987, 1321, p. 1326.

513 For a more detailed view on the collision of interests between the different types of creditors see Servatius, *Gläubigereinfluß durch Covenants*, pp. 84-86.

514 As Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 401 so to the point puts it: "What is good for a bank might not be as good for a consumer creditor."

515 Halpern/Trebilcock/Turnbull, University of Toronto Law Journal, 1980, 117, p. 125 and Schwarcz, Cardozo Law Review, 1996, 647, p. 652.

cannot contain all contingencies.⁵¹⁶ It is suggested that they are “as good as the foresight of the parties and their advisers”.⁵¹⁷

Moreover, drafting very complex and formal contracts could be very costly for the parties to the negotiation.⁵¹⁸ The expertise and the time of experts are required, which pushes up the costs of the credit, as the creditor would need to factor in these costs in the final price of the loan.⁵¹⁹ This fact makes covenants attractive mainly for larger lenders who are able to hire the needed expertise for drafting high complex covenants, denying in this way the small creditor the benefit from covenants.⁵²⁰

Additionally, complex covenants would not provide helpful for the creditor unless he is also able to provide a complex monitoring. Again, the complex monitoring is only possible if the benefits exceed the costs, because such monitoring can be time consuming and costly.⁵²¹ This in turn results in weak or low levels of monitoring for small loans, and therefore not beneficial for smaller creditors.

Therefore in a summary, ex-ante covenants are limited with regard to protecting creditors, whereas ex-post they might be difficult to monitor and renegotiate.

c) *Summary*

To sum up, one could reasonably state that covenants provide tailored solutions to the financing needs of the debtor and to the protection needs of the lender. The credit document is an agreement among businessmen, who know best what do they need in order to make their contractual relation functional.⁵²² Although to a large part, these agreements have been standardised,⁵²³ they still provide sufficient flexibility to the parties to consider their particular situation and interests, financial or otherwise,⁵²⁴ when setting out the covenants. The solutions provided by the

516 Bratton, *The Law and Economics of Creditor Protection*, p.43. It is however submitted that full protection might not even be desired, as that would create a moral hazard on the side of the creditor, which would remove any motivation to exercise monitoring by him.

517 Keay, *Modern Law Review*, 2003, 665, p. 691.

518 Bratton, *The Law and Economics of Creditor Protection*, p. 43: “[...] no one knows how an optimal debt contract looks like.”

519 Coase, *Economica*, 1937, 386, pp. 391-2.

520 Schwarcz, *University of Illinois Law Review*, 2002, 1, p. 652.

521 The one who monitors should also know what is searching for in order to carry out the monitoring successfully. Therefore professional advice might be well needed to realize this kind of monitoring, and that advice can be costly.

522 Manning/Hanks, *Legal capital*, 3. ed., 1. reprint. 1990, p. 114.

523 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 8.

524 Bratton, *The Law and Economics of Creditor Protection*, p. 42: ‘Borrowers and lenders negotiate against the background of that state of the art menu of protections, trading off the borrower's interest in business

covenants serve basically and primarily to the interests of the parties that have negotiated them and not the collective interests of all creditors. This implies that in particular situations, the interests of the contractually protected creditors may diverge sharply from the interests of weak, less-protected creditors.⁵²⁵ While the benefits from restrictions imposed through covenants regarding distribution of assets to shareholders may spill also to less sophisticated creditors, the opposite is true when the borrower starts to experience financial troubles and is in default with respect to the fulfilment of the covenants terms.⁵²⁶

Although the covenants and the debt contract can be tailored to the needs of the lender and borrower, they still do suffer from a limited optimality.⁵²⁷ Enforcing and monitoring them may entail high transaction costs.⁵²⁸ The presence of these cost makes covenants unattractive for small and unsophisticated creditors extending small amount of credits to debtors, and thus attractive only for major creditors who possess the expertise as well as the financial means to exercise monitoring. The threat of lender liability reduces further the usefulness of covenants as a means of creditor protection through an active management of default risk⁵²⁹ and might also encourage rational apathy or risk-averse behaviour to limit the risk of liability.

Following the arguments above, it could be reasonably concluded that despite their advantages as a means of financing and risk management, covenants have also inherent deficits that lower their efficiency regarding creditor protection, in particular with regard to the protection of non-contractual creditors.⁵³⁰ Additionally, transaction costs related with the drafting, execution and monitoring of a negotiable contractual protection through covenants are non-negligible.⁵³¹

flexibility against the lender's interest in financial security.’

525 Ferran, *European Company and Financial Law Review*, 2006, 178, p. 11.

526 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 724.

527 Bratton, *The Law and Economics of Creditor Protection*, p. 42: ‘[...] no one knows what an optimal debt contract looks like.’

528 Covenants are also subject to transaction costs in the form of renegotiation costs. Renegotiation costs are high especially for publicly places bonds, because of the high number of bondholders who face collective action problems. Transaction costs in the case of a renegotiation might be high also because of information asymmetry problems and hold up problems cause by the lender. For more see Schmidt, *European Business Organization Law Review*, 2006, 89, p. 90.

529 Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381, p. 1391.

530 Denozza, in: Eidenmüller/Schön (Hrsg.), *The Law and Economics of Creditor Protection. A Transatlantic Perspective*, 2008 (hereinafter “Denozza, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*”), p. 415 warns that in a zero-sum game created by the insolvency of the debtor, rules that offer better protection to skilled creditors by enabling them to contract better term for their debt or to obtain collateral harm the interests of less skilled creditors who are not in a position to contract for better protection. As a result, creditors will be satisfied according to their ability to protect themselves not only against the debtor’s opportunism but also against other classes of creditors, usually the sophisticated, skilled creditors.

531 Giering, *Risikobezogener Gläubigerschutz im Recht der GmbH. Vorschläge zur Vermögensbindung und Gesellschafterhaftung de lege ferenda*, 2009 (hereinafter „Giering, *Risikobezogener Gläubigerschutz*“),

III. Security

Another way of contractual protection for creditors is the possibility to obtain security in the form of a proprietary claim over the assets of the borrower to secure payment of the debt.⁵³² Security, as covenants, restricts the borrower's freedom of action in order to minimize the risk of transactions that would reduce the wealth of the firm, and thus prejudice creditor's interests. However, between the two mechanisms there are substantial differences, which are best observed when the borrower defaults. In contrast to rights granted to the creditor pursuant to a covenant,⁵³³ the holder of a security acquires possession of the debtor's assets when the debtor fails to repay the debt and may realize them in order to extract the amount of money lent to the borrower. Thus, with the security interest, the creditor is granted proprietary rights and the security is "self-enforcing".⁵³⁴ Covenants are not self-enforcing, since it has to be proved first that there is a breach of covenants, and second and most importantly, in the presence of a covenants breach, the party imposing it may not satisfy her claim against the debtor neither on a particular asset nor on the business of the debtor as a whole.

1. Reasons for taking security

The compelling reasons for a creditor to obtain security rest on a number of privileges granted to the secured to protect his claim from devaluing and to reduce financial exposure.⁵³⁵ Thus, in insolvency proceedings, the security holder will have priority over unsecured creditors as well as over other secured creditors who rank junior to him.⁵³⁶ Holding a security over the assets of the debtor allows the creditor to actively take measures to enforce such security when the debtor defaults on the repayment. Whether the security is a fixed or floating charge,⁵³⁷ the result is that when the creditor chooses to realise the security, the assets under the charge are no longer those of the debtor firm.⁵³⁸ Moreover, obtaining security affords the creditor a certain measure of control of the business of the debtor firm, similar to that granted pursuant to covenants. This allocation of control is of increased relevance when the debtor is facing financial difficulties and

p. 257 ff.

532 Davies, *Principles of Modern Company Law*, p. 815.

533 Some authors consider covenants and securities as substitutes. Bebchuk/Fried, *Yale Law Journal*, 1996, 857, p. 878.

534 Armour, *Center for Business Research Working Papers*, 2008, 1, p. 4.

535 LoPucki, *Virginia Law Review*, 1994, 1887, pp. 1921-2; Keay, *Modern Law Review*, 2003, 665, p. 687; Servatius, *Gläubigereinfluß durch Covenants*, p. 61.

536 Davies, *Principles of Modern Company Law*, p. 818; Finch, *Modern Law Review*, 1999, 633, p. 637.

537 For instance, in the United Kingdom.

538 Davies, *Principles of Modern Company Law*, p. 822.

the risk of default lingers. In such a situation, allocating control over the enforcement efforts to those creditors who are best placed to maximise the value of the firm is essential to prevent ineffective enforcement efforts by dispersed creditors, who on a “race to collect”⁵³⁹ may achieve a suboptimal result and probably worse, liquidate a debtor who is more valuable as a going concern. Additionally, the creditor could be in the position even to prohibit the debtor from issuing additional debt which would rank senior to him⁵⁴⁰ and thus maintain its priority in rights vis-à-vis other creditors.

2. Benefits and costs

On a different perspective, debtors as well stand to benefit from granting security to creditors. Thus, granting security lowers⁵⁴¹ the aggregate cost in a lending transaction by signalling⁵⁴² a lower pre-loan risk of default.⁵⁴³ A lower pre-loan risk of default translates into lower interest rates and therefore, also lowers the costs of capital for the debtor.⁵⁴⁴ Additionally, when obtaining security for the loan, the creditor will tend to narrow its monitoring focus to the asset that constitutes the security in order to increase its monitoring efficiency.⁵⁴⁵ Narrowing the monitoring focus helps to establish monitoring routines, which reduce the overall costs of monitoring for the creditor,⁵⁴⁶ and that in turn lowers also the cost of capital for the borrower. However, this is the case when the security interest is on a specific asset or groups of assets, but not when the security is a floating charge and thus the whole business of the debtor is relevant for the creditor. Nevertheless, also this kind of security interest provides benefits for both, debtor and creditor. As it will be explained in the subsequent chapters, this form of security interest encourages creditors and debtors to engage in a kind of relationship which is characterised by an intensive flow of “soft” information from the debtor to the creditor, longer duration of the relationship and more intensive monitoring by the creditor. This kind of relationship, known also

539 Armour, Center for Business Research Working Papers, 2008, 1, p. 4.

540 Davies, *Principles of Modern Company Law*, p. 818. In more detail about the powers of a security holder see Mann, *Harvard Law Review*, 1997, 625, p. 638 ff.

541 The ways how a creditor may reduce pre-loan risk perception were briefly discussed above.

542 However, the signalling theory does not always stand, especially in the case of larger borrowers with good credit rating. Keay, *Modern Law Review*, 2003, 665, p. 687.

543 Mann, *Harvard Law Review*, 1997, 625, p. 638.

544 In the cases of debt capital, the signalling effect is even stronger when the debtor agrees to contribute additionally to the equity capital of the company before creditor supply debt capital. Servatius, *Gläubigereinfluß durch Covenants*, p. 55 ff.

545 When the creditor has a charge on a particular asset, he will focus his whole attention of that asset and ignore other assets. See also the arguments by Levmore, *Yale Law Journal*, 1982, 49, on the monitoring of ‘focal points’.

546 Brinkmann, *European Company and Financial Law Review*, 2008, 249, p. 250.

as “relationship lending” provides observable benefits as regards a more effective protection of creditors. These benefits are analysed in more details in Chapter 8.

However, on the downside, both parties are faced with costs. For the creditor, there is no protection that provides full protection. Obtaining security as a means to ensure the payment of the debt is not a perfect protection. Reasons vary. The information and negotiation costs for closing a security may be excessive given the financial risk that might be involved.⁵⁴⁷ Creditors face sometimes difficulties to determine the value of the asset, which is charged with a security.⁵⁴⁸ Asking for expert valuations to determine the value of the asset could be costly and thus lower profit margins for creditors.⁵⁴⁹ As in the case of financial covenants, the complexity of the transaction presents smaller creditors with difficulties related to the lack of expertise, financial or legal, needed to close the arrangement.⁵⁵⁰

In a long-term debt relationship the value of the asset could change substantially making the renegotiation of debt contract necessary in order to obtain additional security, should the asset decrease in value. However, this will require the parties to incur transaction costs. Moreover, start-up companies might have less fixed assets and more non-fixed or immaterial assets, whose value is difficult to determine and who retain value when the firm is a going-concern value rather than when they are liquidated individually.⁵⁵¹ Additionally, the creditor faces also the risk that his evaluation of the debtor’s risk of default is totally wrong and has been underestimated, in which case the security will be only of little comfort. However, the wish of lenders to lend money at no risk does not reflect the reality of the lending business. Without the existence of the credit risk, a good part of the credit markets would also disappear⁵⁵² and the creditors need the borrowers and the risk that they bring with them for simple reason that without the borrowers, also the lenders would not exist.

On the debtor’s side, the granting of security is not a desired action,⁵⁵³ and sometimes not even necessary. On an evaluation of literature, it results that the strongest debtors or larger companies

547 Finch, *Modern Law Review*, 1999, 633, p. 638.

548 Servatius, *Gläubigereinfluß durch Covenants*, p. 61.

549 *Ibid.*, p.61 ff; Keay, *Modern Law Review*, 2003, 665, p. 687.

550 Finch, *Modern Law Review*, 1999, 633, p. 638.

551 Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19, pp. 20-21.

552 Servatius, *Gläubigereinfluß durch Covenants*, p. 62.

553 Costs such as information costs and costs for the administration of the loan increase the overall cost of capital. Mann, *Harvard Law Review*, 1997, 625, p. 659 ff.

with good credit ratings do not secure their debt.⁵⁵⁴ It seems that these borrowers are not in need of signalling the market of their strength or ability to pay. Their financial credentials are sufficiently good as to justify even putting pressure on the creditors to either lend them or they will go elsewhere for capital.⁵⁵⁵ The situation is different though with smaller or junior firms lacking the financial credentials to obtain credit without issuing security. For these types of firms, borrowing could result with higher costs because they might not possess sufficient security, and as a result might have to accept higher interest rates as a compensation of the credit risk.⁵⁵⁶ Especially larger borrowers, who accept to grant securities, could be faced with burden related to information costs, which includes all efforts spent to gather pre-loan information, and costs for the administration of the loan, which come in the form of reduced operational flexibility to invest its own assets in ways most profitable.⁵⁵⁷

Similarly to the covenants, security charges on the debtor's assets could grant creditors considerable control over the business decisions of the borrower. As in the case of lender liability referred to above, creditors might find themselves in a position similar to shadow directors and thus risk being held liable for being the *alter ego* of the debtor company by controlling as a matter of fact the business decisions of the debtor or by obtaining an exclusive right to supply the debtor with further credit.⁵⁵⁸

3. Impact of security on creditor's monitoring incentives

This risk as well as other burdens, which a creditor could face when it chooses to secure its debt could well have repercussions on the adequacy of monitoring efforts that creditors are willing to expend. As already introduced above, when deciding whether to extend credit and if yes, at what interest rate, a given creditor will also estimate the amount and difficulty of monitoring she would have to carry out to avoid debtor's misbehaviour. One the reasons why creditors choose to be secured is also the simple fact that by taking an asset as security for the repayment of the debt, the creditor can narrow the focus of its monitoring efforts to the performance of the asset taken as security.⁵⁵⁹ From an economic point of view, this is efficient for the creditor. The

554 Mann, *Harvard Law Review*, 1997, 625, p.629; Finch, *Modern Law Review*, 1999, 633, p. 638.

555 Keay, *Modern Law Review*, 2003, 665, p.687; Mann, *Harvard Law Review*, 1997, 625, p. 629.

556 Hence, the well-known statement: money is lent to those who don't need it.

557 Mann, *Harvard Law Review*, 1997, 625, p. 668.

558 Davies, *Principles of Modern Company Law*, p. 818.

559 Schwartz, *Journal of Legal Studies*, 1981, 1, p.10; Mann, *Harvard Law Review*, 1997, 625, p. 650. Taking a specific asset or class of assets as a security implies the presence of expert knowledge on the side of the secured creditor regarding the performance of that asset or its value in liquidation.

creditor does not need to monitor the entire business or assets of the debtor, rather only his security. In this aspect, the facilitation regarding monitoring efforts and costs brought about by the security is similar to the role played by the concept of legal personality in company law, whereby creditors of a company need not monitor the whole personal assets of a changing number of firm owners, but rather only the fluctuations in the assets of the company.⁵⁶⁰ When the assets that have been taken as security represent important assets⁵⁶¹ of the debtor, then monitoring them provides important signals about the financial stability of the debtor.⁵⁶² However, monitoring from secured creditors suffers from similar problems as in the case of the creditors who impose covenants as a means of protection their interests.⁵⁶³ Security reduces the costs of the secured creditor on the one side, but increases the costs to the unsecured creditor on the other. Thus the existence of security raises the expected costs of default for unsecured creditors because it reduces the debtor's pool of assets to satisfy creditor's claims in insolvency.⁵⁶⁴ This in turn forces unsecured creditors to monitor more intensively because they have no guarantee to hold on to if the debtor fails. As a result, they incur more costs. Seen from this perspective, one could dare say that the assumption that unsecured creditors benefit from the monitoring of secured creditors⁵⁶⁵ might not have a very firm foundation. Instead, the opposite could be true. Secured creditors would benefit from obtaining security from the debtor as well as from increased monitoring from the unsecured creditors.⁵⁶⁶ This view presents a picture where security is taken only or mainly as a means to secure the claim of the creditor in default. Pursuant to this view, the creditor does not have strong incentives to monitor borrower's performance, except when such monitoring is essential to guarantee her claim. There is however

560 Hansmann/Kraakman, *Yale Law Journal*, 2000, 387, pp. 309-405.

561 Levmore, *Yale Law Journal*, 1982, 49, considers these assets as 'focal points'.

562 *Ibid.*, p. 69.

563 Although, covenants could be used to control a broader range of inefficient behaviour by the debtor. Bebchuk/Fried, *Yale Law Journal*, 1996, 857, p. 879.

564 Schwartz, *Journal of Legal Studies*, 1981, 1, p. 10. See also Brinkmann, *European Company and Financial Law Review*, 2008, 249, on the disadvantages faced by unsecured creditors when a debtor grants security rights to secured creditors.

565 Enriques/Macey, *Cornell Law Review*, 2001, 1165.

566 On the pattern of secured credit, benefits and burden to creditors and debtors, as well as problems with regard to the monitoring by secured creditors see Jackson/Kronman, *Yale Law Journal*, 1979, 1143; Schwartz, *Journal of Legal Studies*, 1981, 1; Levmore, *Yale Law Journal*, 1982, 49; Goode, *Canadian Business Law Journal*, 1983-84, 53; Triantis, *Virginia Law Review*, 1994, 2155; Bebchuk/Fried, *Yale Law Journal*, 1996, 857; Mann, *Harvard Law Review*, 1997, 625; Finch, *Modern Law Review*, 1999, 633; Keay, *Modern Law Review*, 2003, 665. For German literature see e.g. Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19; Merkt, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2004, 305; Servatius, *Gläubigereinfluß durch Covenants*; Giering, *Risikobezogener Gläubigerschutz*.

another perspective that present collateral not mainly as a means to guarantee repayment of the credit, but rather as a means to allocate priority rights to intervene and decide as regards reorganisation chances when a debtor is financially distressed.⁵⁶⁷ According to this view, creditors that are allocated seniority over other lenders by ways of security interest enjoy more bargaining power when the debtor firm is financial distressed. Because of this position, these creditors are more willing to intervene and engage in out-of-court reorganisations of distressed firms, as opposed to foreclosure,⁵⁶⁸ since they are certain of the benefits from a successful reorganisation. Hence, it is reasonable, on efficiency grounds, to grant security and thus also seniority to a single, well-informed creditor who has the incentives and the skills to monitor the debtor more effectively.⁵⁶⁹

IV. Protection through interest rates

The most basic element of protection against credit risk is the interest rate. More specifically, supporters of the contractarian model of creditor protection submit that creditors should carry out a risk assessment of the potential borrower with the purpose to determine whether they should extend credit, and if yes what interest rate they will charge. The interest rate they charge reflects the risk profile of the borrower and it shall compensate the creditor for the risk that they are accepting.⁵⁷⁰ In this way, the price of the loan paid by the borrower includes not only a rental payment for the borrowed capital, but also a risk-compensation payment for the case that the borrower will fail to return the borrowed capital. The corollary to this idea is that the higher the credit risk perceived by the creditor, the higher the interest rate that the debtor will pay as compensation.⁵⁷¹

1. Accuracy of information as a necessary precondition

The operation of this mechanism rests on the quality of information premise, namely on the ability of the creditor to gather and assess relevant and qualitative information about the

567 Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1.

568 Foreclosure benefits the interests of the particular secured creditors, but leaves non-secured creditors with fewer assets to satisfy their claims when the debtor has gone bankrupt. On the contrary, reorganisation of a distressed firm benefits the creditors collectively, secured and non-secured, since the firm is maintained as a going concern and the chances of repayment of the credit increase for all creditors.

569 For empirical studies on this issue see Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1, Davydenko/Franks, *Journal of Finance*, 2008, 565, and Franks/Sussman, *Review of Finance*, 2005, 65.

570 Posner, *University of Chicago Law Review*, 1976, 499, p. 508; Halpern/Trebilcock/Turnbull, *University of Toronto Law Journal*, 1980, 117, p. 128; Finch, *Modern Law Review*, 1999, 633, p. 655.

571 Posner, *University of Chicago Law Review*, 1976, 499, p. 501.

probability⁵⁷² of the borrower to repay the loan. The assessment of information by the creditor, despite efforts to conduct a thorough assessment, can lead however only to a “good” perception about borrower’s ability to repay the loan, but not to assurance. This lack of assurance is partly to be blamed on the asymmetry of information⁵⁷³ problem, and partly on the simple fact that no matter how hard one tries, one knows only partly, and therefore the evaluation of the debtor’s ability to repay will be imperfect. With respect to the asymmetry of information problem, the debtor could be blamed for misrepresenting its financial situation to give the impression of a lower risk profile, and thus benefit from lower interest rates. Or the debtor could choose to change the risk profile, usually in the upper direction, after obtaining credit, in order to compensate for high interest rates.⁵⁷⁴ But for the simple fact that one can know only partly, the debtor cannot be blamed in every case, for it is difficult to foresee what will happen after the credit has been extended. Some situations, such as, for example, consumers changing their consuming habits or tastes because of reasons totally unrelated to the performance of the debtor, cannot be foreseen, and therefore a debtor cannot be blamed for going insolvent. In any situation, it is impossible to compensate creditors for risks that could not be foreseen.⁵⁷⁵ The uncertainty and imperfection in the assessment of credit risk make the usefulness of interest rates as a protection mechanism for creditors uncertain.

2. Adverse selection and adverse incentives problems

The attractiveness of this mechanism is low especially for those types of creditors who are not in a position to collect as well as assess the information about debtor’s financial situation. With the exception of banks or of other financial intermediaries providing capital, other creditors, such as trade suppliers, will face information costs,⁵⁷⁶ which are disproportionate to the value of the transaction. Additionally, a creditor will have to incur costs also after the credit has been extended in order to update continuously the information about the debtor financial health.⁵⁷⁷

572 The focus is here on the probability rather than willingness of the borrower to pay. A creditor is not much worried about the willingness of the borrower, as the problem could be resolved also by simply applying to a court to force the debtor to pay. However, what neither the court, not contract, nor law can do, is to increase the probability of the debtor to pay. Hence, the concern of the creditor about the probability of the debtor to pay.

573 See e.g. Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65, pp. 71-75.

574 Borrowers can choose from a variety of ways to behave opportunistically with the view to expropriate lenders, such as e.g. generous dividend policy, generous bonus policy, risky investment policy, asset disposal or claim dilution by borrowing subsequently funds at higher rates, etc.

575 Posner, *University of Chicago Law Review*, 1976, 499, pp. 504-505.

576 Information costs include costs for collecting information from the debtor or about the debtor and the costs for assessing this information. Where the debtor lacks the expertise, he will need to employ the needed expertise, which in turn adds to the overall information costs.

577 As the debtor’s financial position can change quickly. Ziegel, *University of Toronto Law Journal*, 1993,

These are the costs of staying alert. If he fails to do that, then his assessment of risk will be based on information that has been rendered meaningless.⁵⁷⁸ However, because creditors cannot evaluate the credit risk for each transaction, they will tend to charge uniform interest rates on all debtors, without differentiating among them, and thus without taking into account the risk of loss associated to a particular debtor.⁵⁷⁹ This results in turn in a subsidisation of credit for bad debtors at the expense of good debtors.⁵⁸⁰ When continuing, this phenomenon could lead to an *adverse selection* problem,⁵⁸¹ where the “good” creditors with a lower credit risk will be pushed out of the market for debt capital, because they will not be willing to subsidise the credit for borrowers with a higher credit risk. However, such developments could increase the overall credit risk of the creditors who are left mainly with a portfolio of low quality debtors to do business with. Additionally, the relation between higher interest rates and higher risk proves inefficient due to the risk of creating the *moral hazard* that the creditor wished to avoid. More specifically, debtors with lower rating will have no reputation to maintain, as they pay already high interest rates. These debtors, therefore, face the incentive to engage in high-risk-high-yield business beyond the risk level agreed before the credit was extended in order to reduce the cost of credit. As a result, higher interest rates could backfire by creating *adverse incentives* for debtors.⁵⁸² For creditors therefore, higher interest rates do not necessarily translate in higher return on capital. Especially in the case of banks, higher interest rates indicate higher risk, and for higher risk banks are required to hold more regulatory capital.⁵⁸³ Higher regulatory capital reduces the capital available to banks for allocating new credits, thus also lowering the overall bank’s return on capital. The efficiency of interest rates as a mechanism for credit risk management is therefore lowered.⁵⁸⁴

511, p. 530.

578 Keay, *Modern Law Review*, 2003, 665, p. 690.

579 Bebchuk/Fried, *Yale Law Journal*, 1996, 857, pp. 885-6.

580 This effect was also created by the rules of the Basel I Accord, because banks applied a standard charge of 8% of capital ratio for borrowers of the same type. For more details on the subsidisation of credit for borrowers of lower quality see chapter 5.

581 Of the type explained by Akerlof, *Quarterly Journal of Economics*, 1970, 488. See also Servatius, *Gläubigereinfluß durch Covenants*, p. 60.

582 Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65, p. 73.

583 The Basel II Accord provides a more sensitive relation between risk and regulatory capital for banks, compared to Basel I. Under Basel II, credit risk is assessed individually and continuously for each creditor, either through an external evaluator (e.g. a rating agency) or internally through in-house developed systems by banks. For more details on bank’s assessment of credit risk see chapter 5.

584 Servatius, *Gläubigereinfluß durch Covenants*, p. 61.

3. Limitations of interest rates as a creditor protection mechanism

Strategies aimed at avoiding *adverse selection* and *adverse incentive* problems suffer from inefficiencies, which have already been discussed in this paper. For example, it is suggested that a way to avoid adverse incentives on the side of the debtor, who contracts higher-than-agreed risk after the credit has been extended, is by exerting continuous monitoring of the debtor's activity.⁵⁸⁵ This efficiency of this strategy is limited due to the monitoring costs that a creditor will incur, which beyond the point where they equal or exceed the benefit from interest rates become unsustainable. Additionally, intensive monitoring and controlling of the debtor's activity could subject the creditor to liability, where the debtor despite efforts to the contrary, goes insolvent. Moreover, asking for additional securities to counter for increased risk could have similar results as the charging of higher interest rates, namely *adverse selection*. High-risk debtors are "invited" to finance high-risk transactions through the provision of securities. This could chase away lower-risk debtors who are either not willing or not able to take over additional costs in form of a limitation in their operational flexibilities by granting additional securities over their assets.⁵⁸⁶

The interest rates that a debtor pays for the credit obtained is a natural indicator of his credit risk as perceived by the creditor. However, it is an imperfect one. It indicates only the best perception of the creditor based on his ability to collect and evaluate relevant information about the debtor's ability to repay the credit. Information asymmetry problems as well as the general limitation on foreseeing events makes the creation of the perception by the subject to imperfections, which also affect the accuracy of the interest rates set as well as the adequacy of protection provided through interest rates. Simply higher interest rates cannot be the longer term solution to higher risk. The results could be counterproductive and suboptimal for both, creditor and debtor. From an economical point of view, protection through higher interest rates represents only a limited form of protection.⁵⁸⁷ From a legal point of view, a continuous adaptation of the interest rates to reflect the changing credit risk of the borrower⁵⁸⁸ could present legal difficulties with respect to the ability of creditors, more specifically banks, to continuously adapt the terms of their credit agreements according to the changing creditworthiness of the borrower.⁵⁸⁹

585 Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65, p. 73.

586 *Ibid.*, pp. 73-74.

587 Servatius, *Gläubigereinfluß durch Covenants*, p. 61.

588 The Basel II Accord presents a model on how banks are to reflect the interest rates they charge on the credit based on the credit rating of the debtor. For more details see chapter 5.

589 Kersting, *Zeitschrift für Wirtschaftsrecht*, 2007, 56; Mülbart, *WM - Zeitschrift für Wirtschafts-*

V. Personal guarantees by the controllers of the debtor

When a creditor extends credit to a debtor, he wishes to have the debtor behave in a way that it would not endanger the repayment of the credit through the taking of high levels of risk. Creditors tend to be risk-averse and wish that also the debtor would take a risk-averse approach. As it was already explained in the sections above, in order to ensure a risk-averse attitude, creditors attempt to influence the controllers⁵⁹⁰ of the debtor. Apart from the ways already mentioned, such as the covenants or the taking of security, the point is often made that creditors could protect themselves against the risk of non-payment from the debtor by requiring guarantees from the shareholders or the managers of the debtor. Where the debtor fails to repay the debt, the managers or the shareholders step in to take over the liability.⁵⁹¹

1. Advantages for creditors

It is suggested that when the controllers of the debtor company agree to be held personally liable for the debts of the company, they signal their trust in the stability of the company, and therefore in its ability to repay the debts. This signal should serve to lower the credit risk perceived by the creditor, and thus lowers also the interests rates charged on the credit. In this respect, the signal given through the personal liability of the controllers is similar to the signal given to creditors by the shareholders of the debtors when they agree to contribute additional equity capital before the creditor provides the main credit financing. The purpose is the same: risk sharing between the fixed claimants and residual claimants.⁵⁹² It is expected that the controllers of the debtor company would be more risk-averse because their personal assets are on the line should the company fail to make good on its promise to pay.⁵⁹³ The more of the controllers' personal assets on the line, the more risk averse will they be.

Moreover, holding the controllers of the debtor company liable by using their assets as security might come to the advantage of unsecured creditors. More specifically, when secured creditors ask for personal guarantees from the controllers, the assets of the company itself are not burdened as security for the company's debts and therefore the claims of the unsecured creditors against

Bankrecht, 2004, 1205.

590 Management and/or shareholders.

591 Posner, *University of Chicago Law Review*, 1976, 499, p. 505; Keay, *Modern Law Review*, 2003, 665, p. 688.

592 Mankowski, in: Lutter (Hrsg.), *Legal capital in Europe*, 2006, p. 408.

593 Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65, p. 74.

the company are not diluted. The pool of assets at the ownership of the debtor company would not be reduced and will be used thus for the satisfaction of the unsecured creditors' claims.⁵⁹⁴

2. Limitations of personal guarantees as a creditor protection mechanism

A number of limitations though limit the efficiency of personal guarantees as a creditor protection mechanism. Some of the limitations could also be counterproductive.

The obtainment of personal guarantees will normally depend on the ability and bargaining power of the creditor vis-à-vis the debtor. It is logical to say that mainly, if not only, large creditors, such as banks as provides of larger amounts of debt capital, would possess the financial power to extract personal guarantees from the company controllers.⁵⁹⁵ However, granting personal guarantees to some creditors and not to others could lead to the discrimination of the latter group of creditors. The discrimination would be shown no only with regard to the (non-) provision of personal guarantees but also with regard to the fulfilment of liabilities. Controllers of the company would feel compelled to give priority to the repayment of credit to creditors who have obtained personal guarantees from them, than to the repayment of credit to creditors who have simply an unsecured claim against the debtor company. The resulting consequence is thus disadvantageous especially to smaller creditors, who usually lack the strength to extract personal guarantees from company's controllers. These creditors, in the absence of securities of any kind, could be forced to remain alert and step up their monitoring of the debtor's activity in order to ensure their repayment. From the increased monitoring benefit also the creditors who have secured their claims through personal guarantees, therefore they stand to benefit twice.⁵⁹⁶

Further, obtaining personal guarantees from the company controllers for the repayment of debt removes the effect of limited liability established in company and could force the creditors to monitor the personal pool of assets of the company's controllers. Except when the personal guarantees are in form of securities over particular assets of the controllers, in which case monitoring efforts would be limited to the performance of that particular asset, monitoring the changing pool of assets of the controller would present the creditor with added costs related to the collection of information regarding the performance of the assets of the controller and therefore with increased overall monitoring costs. These costs could increase further where the number of controllers providing personal guarantees is high. Therefore the benefits created by

594 Finch, *Modern Law Review*, 1999, 633, p. 656.

595 Keay, *Modern Law Review*, 2003, 665, p. 688.

596 See also similar discussion in Section III. 3. above "Impact of security on creditor's monitoring incentives above".

the concept of separate legal personality, whereby the creditors of a company would only have to focus on the assets of the company and not on those of a changing number of shareholders as a guarantee for the fulfilment of their claims, are questioned.

Additionally, personal assets of the company's controllers are limited, and therefore also the final risk they will bear should the company go insolvent. However, where the company is facing financial difficulties and is approaching insolvency, the fact that the company's controllers have put their personal assets on the line could provide for them an incentive to increase risk further instead of reducing it.⁵⁹⁷ They could gamble for resurrection because if the company successfully manages a turnaround of the situation, they would benefit from saving their own personal assets, whereas if the company fails, their personal assets would have been lost anyway. Seen from this perspective, obtaining personal guarantees from company controllers could produce counter-incentives regarding the reduction of risk.⁵⁹⁸

VI. Risk insurance

Risk insurance represents another contractual tailored risk management mechanism to creditors. The mandatory insurance mechanism provides also a tailor-made solution to the problem faced by company with a known "propensity to do harm and cause liabilities".⁵⁹⁹

1. The advantages from risk insurance

Under this mechanism, creditors are provided with additional sources of capital, namely by insurance companies, to satisfy their claims in full against the debtor companies.⁶⁰⁰ Moreover, insurers would play an important monitoring role over the performed activities against which the debtor has agreed to insure himself. Insurers would price increased risk with higher insurance premia, causing in this way shareholders, as residual claimants, to refrain from engaging in overly risky activities in order to avoid paying higher insurance costs.⁶⁰¹ Mandatory insurance is said to provide superior protection to creditors because it is more finely tuned to the risk faced

597 Dorndorf/Frank, *Zeitschrift für Wirtschaftsrecht*, 1985, 65, p. 74.

598 In some occasions, the debtor company could go insolvent despite efforts to the contrary by the management. Reasons for that could rest with factors which are totally unrelated to the controller's decisions or activities. In this case, obtaining personal guarantees from company controllers would not play role with regard to the encouragement of risk-averse behaviour.

599 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 725. Examples of such business activities are transportation or legal services.

600 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, p. 725.

601 *Ibid.*, p. 725.

by creditors.⁶⁰² Mandatory insurance purports to reduce moral hazard on the side of the insured debtor, thus reducing also excessive risk-taking that might endanger the interests of the corporate creditors.

2. Limitations of risk insurance as creditor protection mechanism

However, the achievement of the purported goal of reduced moral hazard is unsure. Mandatory insurance could create barriers⁶⁰³ for newly incorporated companies due to greater insurance costs,⁶⁰⁴ and this would create a competitive disadvantage for these firms. Further, when the monitoring of the risk is not effective and the insurer is not able to assess and thus price risk accurately, offering insurance in this case would provide increased incentives for the insured debtor to engage in overly risky activities.⁶⁰⁵ The insured company will probably make use of the inability of the insurer to price risk accurately and thus engage in higher-risk-higher-return activities knowing that it bought insurance at an undervalue. As a result, mandatory insurance in this case might lead to an increased rather than decreased moral hazard on the side of the insured company. Insurance thus might not create the optimal level of incentive for starting a business activity.⁶⁰⁶ Inability of the insurer to assess and price risk adequately might lead to under- or over-insurance, both of which represent situations leading to suboptimal results in terms of social benefits from the business activities as well as in terms of creditor protection.⁶⁰⁷

Insurance is not always available and it would not cover all risks.⁶⁰⁸ Where insurance is provided, it is also necessary that levels of insurance and premia are so decided that the mandatory insurance is considered meaningful,⁶⁰⁹ namely not only that the premia serve as a mechanism to reduce moral hazard and thus risk, but also that the cover provided, when the insured event occurs, is meaningful to compensate the damages and liabilities. However, determining the

602 *Ibid.*, p. 726.

603 Freedman, *Modern Law Review*, 2000, 317, p. 340.

604 This might be the case for newly incorporated companies for which there are no previous records or no information on their risk profiles. See also Keay, *Modern Law Review*, 2003, 665, p. 693.

605 Freedman, *Modern Law Review*, 2000, 317, p. 340.

606 *Ibid.*, p. 341.

607 Whereas the downside effects of under-insurance were briefly highlighted above, the downside effects of over-insurance include increased costs of insurance to companies, which especially for small companies might constitute a large financial burden even a barrier to conduct the business. See Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, pp. 101-103.

608 Freedman, *Modern Law Review*, 2000, 317, p. 341. It might be also desirable that insurance companies do not cover all the risk for all kind of activities. Present complete insurance could create strong moral hazards and invite shareholders and managers to excessively risk-taking. See Easterbrook/Fischel, *University of Chicago Law Review*, 1985, 89, p. 103.

609 Freedman, *Modern Law Review*, 2000, 317, p. 341.

appropriate level of insurance presents the same difficulties that determining the level of minimum capital presents.⁶¹⁰ Additionally monitoring the risk profile of the insured company in order to adjust the level of insurance premia and insurance cover provided might require extensive efforts and costs. In a world of costless information, these costs would be non-existent and monitoring and surveillance would be complete.⁶¹¹ However, in the real world with imperfect markets where information costs, insurance companies might find it too expensive⁶¹² to exercise the kind of monitoring and price insurance risk in such a way that would reduce moral hazard and thus risk to creditors' interests.

Therefore, the effectiveness of the mandatory insurance mechanism to provide superior protection to corporate creditors would depend on the ability of the insurance companies to monitor and assess price accurately.⁶¹³

VII. Efficiency of risk diversification as a creditor protection mechanism

With respect to risk diversification strategies, creditors are free to determine the level of their investment in a debtor company and therefore also able to limit the risk they are willing to take over should the debtor fail to pay back. This approach to risk minimisation goes in the same direction with the approach taken by supporters of the contractarian model that a person becomes creditor by his own choice, and therefore he should seek to protect himself through the mechanism of voluntary contracting.⁶¹⁴ Investment diversification is therefore a low-cost and less intrusive way to minimize risk.⁶¹⁵ However, the statement needs some further qualifications. Not all persons who become contractual creditors are in a position to minimize risk through the diversification of investment, the most obvious case being the debtor's employees.⁶¹⁶ This group of creditors has tied the investment of its human capital with the company that has employed them. They cannot simply invest only a part of their knowledge or human capacity in the debtor company, and therefore risk minimisation through diversification is not applicable to them.⁶¹⁷ A

610 *Ibid.*, p. 341.

611 Halpern/Trebilcock/Turnbull, University of Toronto Law Journal, 1980, 117, p. 140.

612 In the case of small, closely held companies. Also, the moral hazard problem is likely to be more these types of companies. See Halpern/Trebilcock/Turnbull, University of Toronto Law Journal, 1980, 117, p. 141.

613 Freedman, Modern Law Review, 2000, 317, p. 342.

614 Keay, Modern Law Review, 2003, 665, p. 687.

615 Easterbrook/Fischel, University of Chicago Law Review, 1985, 89, p. 101, 107. Additionally, limited liability facilitates diversification.

616 Easterbrook/Fischel, University of Chicago Law Review, 1985, 89, p. 107.

617 Halpern/Trebilcock/Turnbull, University of Toronto Law Journal, 1980, 117, p. 149.

second group of creditors who faces difficulties to diversify are trade creditors, especially in markets where a debtor company has *monopsony* power. This group of creditors becomes specialized in certain products and they depend on the purchasing ability of the debtor company for their existence and profit.

In certain situations, it could be suggested that investment diversification to minimize risk is not recommended because it could contribute to an increase in the debtor's misbehaviour and thus in its failure to pay back. This applies not only with respect to equity investors, but also to debt investors. More specifically, where investment, either in the form of equity or debt, is small and scattered among many investors, they will face collective action and free riding problems,⁶¹⁸ which could result in little or no monitoring of the debtor's activities. Their investment in the debtor company will not justify adequate monitoring of the debtor and therefore they will choose rational apathy, instead of involvement. This could create incentives for the debtor company to increase its risk profile, because its activities are not monitored. Therefore, diversification is a cheap and passive way to minimize risk but not to actively manage it. Risk remains in the debtor company and it could even go unchecked.

VIII. Mandatory disclosure

*“Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.”*⁶¹⁹

Several reasons speak in favour of mandatory disclosure as opposed to discretionary disclosure.⁶²⁰

1. Rationale for mandatory disclosure

Legal scholars agree that mandatory disclosure of company's information is an indispensable mechanism of creditor protection because it is a prerequisite for self-help. Informed creditors will either abstain from contracting with a particular debtor company or will demand appropriate risk premia before contracting in order to compensate for the risk.⁶²¹ Self-evidently adequate and accurate information about debtor's ability to make good on its payment is a precondition in order to allow the creditor to determine the appropriate risk premium. Reliable and adequate

618 Levmore, Yale Law Journal, 1982, 49.

619 Brandeis, *Other People's Money - and How Bankers Use It*, 1914, p. 62.

620 For short analysis of these reasons see Schön, Journal of Corporate Law Studies, 2006, 259.

621 Information as the cause for reducing uncertainties in the communication among people. Roth, *Das einheitliche Recht auf Information*, 2006, p. 179.

information facilitates the “screening” process and might lead to lower costs for credit.⁶²² The economic rationale for mandatory disclosure points to three justifications: the first justification relates to the protective function of mandatory disclosure,⁶²³ and more specifically to the promotion of confidence and protection of equity and debt investors.⁶²⁴ The second justification relates to the market failure. More specifically, mandating disclosure serves to counterbalance negative consequences in the credit markets as a result of incomplete information.⁶²⁵ When too little or no quality information is produced, consumers will focus only on information regarding price and quantity, and therefore, following the Akerlof “lemon theory”,⁶²⁶ markets functioning improperly are created, and the good products are chased out of the market.⁶²⁷ Thus, mandatory disclosure serves to protect investors or individuals dealing with the company as well as the functioning of the market. The third justification for mandating disclosure relates to the considerations for preventing the disclosure of false or misleading information. Thus, the risk that a producer of information will misinform is higher when it is difficult to verify it.

2. Inefficiencies addressed through mandatory disclosure

Information is not always readily available and always in the amount and quality desired.⁶²⁸ Credit markets are characterised by information imperfectness where information is incomplete and market players face asymmetry of information problems,⁶²⁹ which increase the cost of information. When information is underprovided, investors extending credits to a company would need to expend more efforts to search sufficient and accurate information about the debtor company from non-issuer sources.⁶³⁰ Incomplete information gives rise to a number of other problems such as adverse selection and moral hazard. Mandating disclosure of information that would enable creditors to make informed decisions would thus not only mitigate information asymmetries problems but also reduce the cost of capital.⁶³¹ Additionally, inefficiencies created

622 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 95.

623 Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 260.

624 Merkt, in: Ferrarini et al. (Hrsg.), *Reforming company and takeover law in Europe*, 2004 (hereinafter “Merkt, in: Ferrarini et al. *Reforming company law*”), p. 10.

625 Sørensen, *European Business Organization Law Review*, 2009, 255, p.262; Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 97.

626 Akerlof, *Quarterly Journal of Economics*, 1970, 488.

627 Schön, *Journal of Corporate Law Studies*, 2006, 259, pp. 272; Sørensen, *European Business Organization Law Review*, 2009, 255, p. 262.

628 Roth, *Das einheitliche Recht auf Information*, p. 179 – 180.

629 Schön, *Journal of Corporate Law Studies*, 2006, 259, pp. 271-2.

630 Coffee, *Virginia Law Review*, 1984, 717, p. 722.

631 *Ibid.*, p. 722: “A mandatory disclosure system can thus be seen as a desirable cost reduction strategy

by the investment of funds in search of accurate information about debtor companies would be eliminated by mandating disclosure of company's information.⁶³²

Mandatory disclosure of company's information, rather than voluntary disclosure or disclosure regulated by private ordering, helps to address agency problems like the opportunistic behaviour of the debtor's management damaging corporate creditors' interests either "by concealing bad news or exaggerating good news."⁶³³ Because companies face the incentive to publish immediately good news, but are reluctant to disclose negative one, mandatory disclosure would remove this incentive distortion by requiring the disclosure of information of both kinds of quality.⁶³⁴ Only under this condition can one expect that equity or debt investors choose to invest by accepting the consequences of the *caveat emptor maxim*.⁶³⁵

Information markets are also subject to signalling problems, which make it difficult to discern high-quality credible information from low-quality information.⁶³⁶ The difficulty to discern "good" information from "bad" information might increase if one considers that in the absence of a mandatory disclosure requirement, companies could use a variety of formats and standards to disseminate information, which in turn would also increase the costs for processing and comparing the information provided in order to acquire an accurate view of the company. Mandatory disclosure through agreed conventions and standards would reduce these costs and ease the process of comparing information.⁶³⁷ Requiring the management to disclose not only positive but also negative information about the company would help investors to obtain a balanced view of the company, rather than only the more optimistic view of company's management, which is often subject to perceptual biases.⁶³⁸

through which society, in effect, subsidizes search costs to secure both a greater quantity of information and a better testing of its accuracy."

632 *Ibid.*, p. 722: "[...] a substantial basis exists for believing that greater inefficiency would exist without a mandatory disclosure system because social costs would be incurred by investors pursuing trading gains. Collectivization minimizes the social waste that would otherwise result from the misallocations of economics resources to this pursuit."

633 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p.99; See also Mahoney, *University of Chicago Law Review*, 1995, 1047, p. 1051 ff.

634 Withholding negative information and disclosing only positive information is typically faced in situations where disclosure is discretionary instead of mandatory. Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 276.

635 Sørensen, *European Business Organization Law Review*, 2009, 255, p. 266.

636 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p.99; Sørensen, *European Business Organization Law Review*, 2009, 255, p. 263.

637 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 99.

638 *Ibid.*, p. 99.

In the presence of asymmetry of information, the issue of fairness arises.⁶³⁹ Company directors may provide company information to shareholder, but not to the rest of the world.⁶⁴⁰ The issue of insider trading becomes acute when these shareholders choose to act on this inside information benefiting at the expense of uninformed investors. Insider trading has the negative consequence that investors will lose confidence in the market and therefore inefficiencies in the form of higher costs for capital arise.⁶⁴¹ Mandating the disclosure of information would therefore reduce the causes for unfairness coming from the unequal distribution of information, as theoretically all investors would obtain the same company information in the same time⁶⁴² and in the same format.⁶⁴³

Moreover, disclosure would also help to address concerns of management monitoring and disciplining. This is valid not only within the company context, i.e. in a shareholder-director agency relationship, but also without the company context, where mismanaged companies could become takeover targets, and the old management being fired by the new owners. The fear of takeover could prove incentivizing for the management to avoid misbehaviour that could lead to company's failure.⁶⁴⁴

3. Critical elements for an efficient protection through disclosure

Whereas there is not much dissent about the rationales of mandatory disclosure, there is however much debate regarding several other issues, such as what company types should face mandatory disclosures,⁶⁴⁵ who should be the addressees of the disclosed information; what kind of information should be disclosed; how detailed should the information be in order to strike a

639 Sørensen, *European Business Organization Law Review*, 2009, 255, p. 266.

640 Actually, the shareholders have a right to information about the company's business, a right that goes hand in hand with the share capital they own. The thesis of the uniform right of information, thoroughly discussed by Roth, *Das einheitliche Recht auf Information*, pp. 182 ff., holds that once a legal relationship (like for example that between a shareholder and a company) gives rise to the right of information, that right includes all kinds of information that are necessary to satisfy the information need of the party claiming the right of information, in our case, of the shareholder.

641 Sørensen, *European Business Organization Law Review*, 2009, 255, p. 266.

642 In practice though this is very difficult to happen. In an innovative economy, access to information on innovation is limited at the outset only to some market participants who will also exploit it to their own advantage. Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 272.

643 Extending the uniform right of information, that shareholders enjoy (see Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 111), also to other investors, could address the issue of unfair treatment.

644 Mahoney, *University of Chicago Law Review*, 1995, 1047. Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 273.

645 In the US, only listed companies are subject to mandatory disclosures, whereas in Europe all sorts of incorporate companies are subject to European directives on disclosure. Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 260.

balance between the comprehensibility of information useful to serve as a self-help tool for creditors and the costs related to such comprehensibility, considering that information needs of the various creditors types of a company may vary considerably; when and how often should information be disclosed and in what way should it be disclosed; and last but not least who shall police the disclosure of information to ensure observance with the disclosure requirements, which is necessary to maintain confidence in the markets and stability of debtor – creditor relationships.

As to the question of to whom should the disclosure be addressed legal scholars⁶⁴⁶ make different proposals, because of the different target groups they have in mind. Some commentators do not specify any particular type of creditor to whom disclosure should be addressed, but focuses more on what type of information should be addressed and when,⁶⁴⁷ whereas some others suggests that mandatory disclosure should target the “financially literate investor”⁶⁴⁸ referring mainly to investment companies and fund managers⁶⁴⁹ and not to the proverbial small trader or supplier dealing with a private limited liability company. As a matter of fact the key issue is the “what” of information that should be disclosed compared to the “how” this information is to be disclosed. Determining who the audience of the disclosure is, has a major bearing on the type of information to be disclosed, because creditors and equity investors are not interested on the same type of information about a company. As *Merkt* rightly points out, “the typical share capital investor is looking for return *on* investment whereas the average creditor is looking for return *of* investment”.⁶⁵⁰ These diverging expectations on the company have a bearing on the type and amount of information that is to be disclosed. The capital market investor needs the kind of information that would enable him on a daily basis to decide whether to keep the investment with the current company or to reinvest it,⁶⁵¹ whereas the average creditor needs basically the information whether the company is sufficiently solvent to repay the credit and the interest when

646 See eg. Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2006, and Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*.

647 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2006, in pp. 24-28 categorises mandatory disclosure in “related” and “non-related to insolvency”.

648 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 116 argues that nowadays Europe’s financial markets traditionally are more intermediary-oriented, and therefore the addressee of the disclosed information has changed from the creditor himself to the intermediary. Hence, disclosure need no longer be primarily tailored to the knowledge of the unsophisticated or average investor, but rather to the financially literate investor.

649 Merkt, in: Ferrarini et al. *Reforming company law*, p. 29.

650 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 110.

651 E.g. information on promising research and development or innovative business strategies. See Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 272.

they fall due.⁶⁵² *Merkt* maintains that while equity investors need more information on a more frequent basis to make their investment decisions, average creditors have no such need, as they are interested only in information about events that might threaten the debtor's solvency and thus trigger the creditors' reactions to that.⁶⁵³ However, this does not mean that equity investors and average creditors need completely different sets of information to protect their interests. *Merkt* establishes a strong link between the disclosure of information to equity investors and the protection of average creditors' interests: "the higher the standard of investor disclosure, the less comprehensive creditor disclosure is needed."⁶⁵⁴ In supporting this reasoning, *Merkt* maintains the idea that smaller and unsophisticated creditors reap the benefits of protection when sophisticated and powerful creditors impose certain standards of behaviour on debtor companies. Furthermore, the average creditor is also not willing to spend money in collecting and analysing information pertaining to the financial position of the debtor if they can spread the risk by means of diversification or including possible losses in the prices they charge to the debtor.⁶⁵⁵ However, the difficult question of how much information is necessary to enable creditors to satisfy their needs for information⁶⁵⁶ and like this help themselves still remains. Ideally it should be all the amount of information that a creditor needs to calculate the appropriate risk premium.⁶⁵⁷ However, issues of information complexity and information overload arise.⁶⁵⁸ Additionally, it could be prohibitively costly for the producer of information to make disclosure on an ongoing basis.⁶⁵⁹ The company would be busy just producing the amount and the type of information that the various investors would require of her and she would stop then doing the business she should actually be doing. Therefore, a balance needs to be struck between the benefits of mandating

652 *Merkt* in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 110.

653 *Ibid.*, p. 111.

654 *Ibid.*, p. 111.

655 *Ibid.*, p. 111.

656 Roth, *Das einheitliche Recht auf Information* discusses thoroughly in his book the need, recognized by law, of shareholders for information on the company. Although in the focus of his discussion are the shareholders, by analogy, one can extend the need for information about the company also for the company's creditors. This need can either be recognised by statutory law or by the contract underlying the relationship between the creditor and the debtor company.

657 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 24.

658 Information could be difficult to understand and costly to interpret. Additionally, too much information would not improve the knowledge level of investors either. It will be difficult for them to digest all the information, and therefore they might be able to act upon that information. See Sørensen, *European Business Organization Law Review*, 2009, 255, pp. 272-5.

659 Cost of information include the assembling of information, its verification (e.g. by employing an auditor to improve the credibility of information) as well as its publication through the means of mass-media. See Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 276.

disclosure, the type and amount of information that should be disclosed and the costs of producing comprehensible and useful information.

The situation might seem to complicate further if one expands the question above, namely: “How much information *of what type* is enough to enable creditors to help themselves?” This is a question of the effectiveness of the creditor protection system, and as such it cannot be seen separated also from the issue of the time when the information is disclosed and the way how it is being disclosed. A list of four prerequisites has been suggested, the fulfilment of which would help achieve effective creditor protection through mandatory disclosure. The prerequisites are⁶⁶⁰:

- i) information should be easily available, e.g. via the internet from the company’s homepage or commercial register;
- ii) information is renewed periodically, e.g. every three months;
- iii) information is standardized, i.e. all companies use the same standardized methodologies and calculations and reporting format in order to enable comparison of data;
- iv) information is easily understood and can be easily acted upon accordingly.

4. The content of disclosed information

Regarding the type of information disclosed it is submitted that the content of information will depend on the purposes that the disclosure intends to pursue. Thus, the content of disclosure for corporate governance purposes will be somewhat different from the content for creditor protection purposes, although pursuing the improvement of corporate governance mechanisms in a company would lead subsequently to lower risks for creditors.⁶⁶¹ However, even information about the company’s financial figures, which is of more interest to creditors, have relative meaning and importance with regard to creditor protection. For example, information on the nominal capital of the company is not very useful to corporate creditors because of the uncertainties that the company’s assets still amount to the nominal capital stated in the company’s charter.⁶⁶² Alternatively, from the informational point of view, it is suggested that the annual accounts might be of more relevancy to creditors. However, annual accounts, especially in the case of private limited companies suffer from severe limitations that put the

660 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, pp. 24-25. See also Merkt, in: Ferrarini et al. *Reforming company law*, pp. 113-7.

661 E.g. disclosure of executive pay or disclosure of the relations between company and its shareholders are important from a corporate governance point of view, but not directly important for creditors, although from a second consideration of the information disclosed, the way a company uses its resources could well indicate increased or decreased risks to the creditors. See also Ferran, *European Business Organization Law Review*, 2003, 491, p. 499.

662 Mülbert/Birke, *European Business Organization Law Review*, 2002, 695, pp. 715-722.

efficacy of their use for disclosure purposes into questions.⁶⁶³ As the name suggests, annual accounts are published only once a year for lack of time and resources, and often when they are published they are already old and do not reflect any longer the financial situation of the company.⁶⁶⁴ Additionally, because of their nature, namely reflecting the past financial performance of the company, they cannot serve as a basis for assessing or forecasting the probability of the company's insolvency. To forecast insolvency, the company's prospects and future plans are more relevant.⁶⁶⁵ Moreover, in the case of private limited liability companies, annual accounts might suffer from insufficient reliability due to their lack of skilled personnel and control mechanisms, which larger companies possess, to ensure that annual accounts are correctly compiled and can be relied upon by the interested readers.⁶⁶⁶ Against this backdrop, *Mülbert* suggests that an assessment on the company's probability of default for a given timeline by the directors might be much more useful information for creditors upon which they can act accordingly.⁶⁶⁷ *Merkt*, on the other side, suggests the disclosure of a somewhat different kind of information, namely the publication of the results of the solvency test, including either the liquidity test or the balance sheet test, or a combination of both.⁶⁶⁸ However, both proposals are subject to limitations. *Mülbert* argues that evaluating the probability of default is a difficult task especially with respect to private limited companies, which lack the abilities and resources to do that accurately. Moreover, directors might be tempted to lie if they realise that the company has a higher probability of default.⁶⁶⁹ As for the proposal by *Merkt*, the solvency test itself is subject to the fierce debate⁶⁷⁰ as to whether the liquidity or the balance sheet test is more accurate to assess the solvency of a debtor or its ability to remain solvent. Additionally, the period of time,

663 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 24; Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 109.

664 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 24; Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 109.

665 *Ibid.*, p. 109.

666 *Ibid.*, p. 109.

667 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 25.

668 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 111.

669 Directors will be more tempted to lie in this case 'since it would be difficult to detect ex-post whether the directors had lied about the probability of default or whether they had correctly calculated but were proven "wrong" by subsequent developments.' Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 25.

670 See eg. Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921; High Level Group Report; Schön, *European Business Organization Law Review*, 2004, 429; Schön, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, 186; Armour, *European Business Organization Law Review*, 2006, 5; Rickford, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*; Mülbert/Birke, *European Business Organization Law Review*, 2002, 695; Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006; KPMG, *Feasibility study*; Boschma et al., *Alternative Systems*.

which the solvency test should cover is also issue of content with some scholars suggesting six months, and some others one year.⁶⁷¹

In face of the limitations mentioned above, *Mülbert* suggests that a less demanding requirement would be to disclose periodically whether the company has sufficient capital, i.e. that it is not undercapitalised.⁶⁷² However, this requirement suffers from an even more severe limitation, namely that there is no universally agreed criteria as to what would constitute sufficient levels of capital for a certain company considering their risk profile. Not only there are no accepted criteria on the issue of undercapitalisation, but also the setting of these levels is even considered by courts and legislators as arbitrary and economically inefficient.⁶⁷³

Alternatively, *Merkt* points out to an alternative and innovative idea to improve the quality of mandatory disclosure,⁶⁷⁴ namely the idea advanced by *Hertig* that suggests to require banks that have adopted the Internal Rating Banks Approach (IRB) following the implementation of Basel II Accord to disclose the results of their internal ratings for calculating capital requirements for companies applying for debt capital.⁶⁷⁵ In his paper, *Hertig* maintains that disclosing internal ratings by banks might lead to a reduction in the cost of capital for both publicly-held and closely-held firms, as investors would have richer and timelier information about the company than the information provided by the external rating firms.⁶⁷⁶ Additionally, disclosure of bank internal ratings would make smaller firms attractive to private equity investors, who would benefit from lower costs of information gathering and processing and in turn facilitate smaller firms' access to finance.⁶⁷⁷

Despite the perceived benefits from the disclosure of banks internal rating, the idea however carries also non-negligible risks to the banks disclosing the information as well as to the

671 Interdisciplinary Group on Capital Maintenance, *European Business Law Review*, 2004, 921.

672 Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006, p. 25.

673 Ewang, 2007, p. 18.

674 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, pp. 111-112.

675 Hertig, *European Corporate Governance Institute Working Paper Series in Law*, 2005, pp. 8-13.

676 Hertig, *European Corporate Governance Institute Working Paper Series in Law*, 2005, p. 9. Listed firms would benefit from increased stock prices as investors will expect lower returns following the disclosure of private information, whereas non-listed firms would profit from an improved loan pricing.

677 Hertig, *European Corporate Governance Institute Working Paper Series in Law*, 2005, p. 9. It is generally difficult for smaller firms to get a reliable rating from an external rating firm because the rating costs and risk are not considered worth the reward. As a result, private investors would need to expend more efforts and money to gather reliable information about smaller firms. Disclosure of bank internal ratings mitigates this problem by economizing on the information gathering and processing costs.

companies, the information of which will be disclosed.⁶⁷⁸ Thus, banks disclosing the internal rating will be faced with an increased risk of being held liable for the accuracy of their ratings.⁶⁷⁹ Additionally, disclosure of bank's internal rating might trigger early termination of loan covenants with companies facing difficulties, and like this exacerbate further the situation of the debtor company and of its creditors, especially of unsecured and involuntary creditors.⁶⁸⁰ Moreover, it is debatable whether the information contained in the bank's internal ratings would serve the average creditor of a company who is not a financially literate investor.⁶⁸¹ IRB ratings might not meet the "easy to be understood and to be acted upon" criteria suggested by *Mülbert*⁶⁸² and therefore might not serve an effective mechanism of creditor protection.

5. Time, frequency and dissemination form of disclosed information

For the mandatory disclosure to serve as an effective mechanism of creditor protection, two additional factors are relevant: namely the time and frequency of disclosure and the way how disclosure takes place, i.e. in paper form or electronically.⁶⁸³

On the time and frequency factor, it is important to emphasize that annual publication of, for example, company accounts will not play much of an informational role, since at the time when the information is disclosed, it has already become outdated, as it does not reflect anymore the financial situation of the company at the time the reports were published.⁶⁸⁴

Related to the problem of the time when mandatory disclosure occurs is also the problem of the way how disclosure takes place. The issue of how disclosure takes place is especially relevant for the cross-border protection of creditors. It is suggested that mandatory disclosure could enhance accountability and transparency of company's governance and affairs,⁶⁸⁵ providing to

678 For more details on the risks see Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, pp. 112-113.

679 *Ibid.*, p. 112; See also Hertig, European Corporate Governance Institute Working Paper Series in Law, 2005, p. 9 who states that one could find many examples of uninformed lenders.

680 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 112.

681 *Ibid.*, p. 112.

682 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 25.

683 In what way disclosure takes place affects not only the ease but also the speed of access to such information.

684 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 117. In Europe, generally the publication of the annual accounts takes place twelve to thirteen months after the end of the fiscal year. See also Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2006, p. 24 and Boschma et al., *Alternative Systems*, p. 65. Information on the annual accounts is not up-to-date even on the date of publication, let alone at such time as it becomes known to the creditor, because the financial position of the company could have drastically deteriorated in the meantime.

685 High Level Group Report, p. 33.

domestic creditors of branches of foreign companies a self-help mechanism, namely through adequate information about the rules of the home State concerning legal capital rules, including undercapitalization.⁶⁸⁶ The form of disclosure plays an important role in increasing the relevancy of information disclosed regarding the financial situation of the debtor. Hence, information disclosed electronically using the internet will present a more up-to-date picture of the debtor's finances than a printed report published several months after the financial figures were compiled.⁶⁸⁷

6. Summary on mandatory disclosure as a creditor protection mechanism

Use of disclosure or publicity as a means of disciplining is not a new idea that came to life with the development of securities markets or company law. The concept of disclosure is at least as old as the Bible itself, in which the lack of publicity or disclosure was considered as a sign of hiding evil things from those who, if they came to know about the evil things, could penalize the evildoer. Instead, if one's intentions and works were clean and not evil, he should not fear their exposure.⁶⁸⁸ The concept of disclosure nowadays attempts to play more or less the same role: disclosing company's information to third parties in order for them to understand the intentions and works of the producer of information in relation them. The managers of a company, because of limited liability, feel incentivized to carry out ("evil") works at the disadvantage of creditors. Therefore, to counter the negative inclinations of company's controllers,⁶⁸⁹ some disclosure regarding how these controllers are managing the works of the company is beneficial for the protection of those who stand to suffer losses if the company fails. Through disclosure, those obtaining the information would make better-informed decisions whether and how to deal with the company. Creditor protection is therefore achieved through information.⁶⁹⁰

686 Miola, *European Company and Financial Law Review*, 2005, 413, p. 423. In Europe this is done through the Eleventh Directive on the disclosure requirements for branches of foreign companies and the Fourth Directive on the publication of annual accounts.

687 A step in this direction is the Transparency Directive, which requires listed companies to publish periodic and ongoing information about the company's financial situation using the company's website. in: OJ L/390/38. However, see Merkt, *European Company and Financial Law Review*, 2004, 3, p. 33 of the issue of reliability of internet as a medium for company disclosure.

688 The Gospel according to John, chapter 3, verses 19 through 21.

689 Disclosure is thus regarded as collateral to limited liability. Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 291.

690 Merkt, in: Ferrarini et al. *Reforming company law*, p. 28. On the merits of mandatory as opposed to discretionary disclosure see e.g. Coffee, *Virginia Law Review*, 1984, 717; Easterbrook/Fischel, *Virginia Law Review*, 1984, 669; Mahoney, *University of Chicago Law Review*, 1995, 1047; Ferran, *European Business Organization Law Review*, 2003, 491; Merkt, *European Company and Financial Law Review*, 2004, 3; Merkt, in: Ferrarini et al. *Reforming company law*; Schön, *Journal of Corporate Law Studies*, 2006, 259.

In Europe, in contrast to the practice in the US, use of disclosure as a disciplining mechanism covers not only companies listed in securities markets, but more or less all companies with limited liability.⁶⁹¹ The tendency speaks for more reliance on disclosure than on substantive rules⁶⁹² to provide for creditor protection. Both, European jurisprudence⁶⁹³ and scholarship support the increased role of disclosure in this respect. The Report by the High Level Group suggested that disclosure requirements can be more efficient, more flexible and easier to enforce than substantive regulation. Such disclosure would also create a lighter regulatory environment and would allow for greater flexibility and adaptability.⁶⁹⁴ Hence, the High Level Group in its report recommended the EU to carefully consider whether disclosure requirements are better suited to achieve the desired effects than substantive rules to enhance the accountability and transparency of a company's governance and affairs.⁶⁹⁵ Disclosure of governance structures may incentivize a company to choose best governing practices as well as help prevent breaches of duty by directors.⁶⁹⁶ Although the focus lies here on disclosure for corporate governance purposes, it hard to deny that improvement of corporate governance would not lead to better creditor protection. However, in a different study on alternative systems for capital protection⁶⁹⁷ mandatory disclosure is considered insufficient for the purposes of creditor protection. The authors to the study maintain that the publication of the financial information offers only limited protection to creditors. While it could contain potential creditors from doing business with a particular company, it would do nothing to help creditors who already are in a business relationship with the company experiencing financial troubles. To put it in their words, the obligation to publish "does not make the company pay its debts."⁶⁹⁸ The problem pointed out in this latter study is that ex-ante disclosure alone would not do the job, but that continuous disclosure of updated company information is also necessary if disclosure is to play a useful role as a creditor protection mechanism.

691 Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 264.

692 Especially those related to the minimum share capital.

693 ECJ's decisions on Centros (ECJ ECR I-1459 (1999)) and Inspire Art (ECJ ECR I-10155 (2003)) put a strong emphasis on mandatory disclosure as a less restrictive and flexible to protect creditors than the inflexible measures of the minimum capital regime.

694 High Level Group Report, p. 34.

695 *Ibid.*, p. 34. See also Sørensen, *European Business Organization Law Review*, 2009, 255, p. 1.

696 High Level Group Report, pp. 33-34.

697 Boschma et al., *Alternative Systems*, pp. 65-66.

698 *Ibid.*, p. 66.

For the disclosed information to serve as a helpful tool of creditor protection it needs to be of such quantity and adequateness that it would enable the investor or creditor to take a different decision that he would have made had he not had such information.⁶⁹⁹ The issue of the materiality of information draws attention to the relevancy, adequacy and accuracy of the information disclosed, hence to the quality rather than to the quantity of information disclosed. For the goal should be optimal disclosure, not maximum disclosure.⁷⁰⁰ However, this does not solve the question as to what is an optimal level of disclosure. Defining the optimal level of disclosure for creditor protection purposes is an act of counterbalancing its negative and positive effects. While there is beyond doubt that disclosure can change the behaviour of the person whose conduct is being disclosed and thus serve as a regulatory technique,⁷⁰¹ the costs of such a behaviour-changing disclosure taking place on a continual basis could be prohibitively high.⁷⁰² A clear agreement as to how much disclosure is comprehensible disclosure is not yet in sight. As a matter of fact, it does not seem that a definitive answer is even possible, as the issue is strongly related to the question of whom is disclosure addressed to. Different creditors need different information of different comprehensibility and standardized in a different way. Here legal scholars are even more undecided. If disclosure takes place only within the framework of securities law, then the question of the recipients and of the content of the disclosed information is somewhat less problematic,⁷⁰³ as the participants in the securities markets are “financially literate investors” such as rating agencies, banks or investment firms.⁷⁰⁴ Complications arise when disclosure is to be made in the framework of company law for the purposes of creditor protection. Here the range of creditor’s sophistication varies greatly. Issues of information standardisation arise, and with it also the issue of costs associated with such standardisation. Since the production of information is not free,⁷⁰⁵ a company cannot be forced to disclose all the information needed by all the

699 Materiality of information according to the economic theory of information. Merkt, *European Company and Financial Law Review*, 2004, 3, p. 31; Roth, *Das einheitliche Recht auf Information*, pp. 182 ff.

700 Merkt, *European Company and Financial Law Review*, 2004, 3, p. 31.

701 Either as a reaction of the reputation-sensitive person whose conduct is being disclosed, or as a reaction of the public becoming aware of the conduct. See Ferran, *European Business Organization Law Review*, 2003, 491, p. 497 and Avgouleas, *European Company and Financial Law Review*, 2009, 440, p. 474.

702 Schön, *Journal of Corporate Law Studies*, 2006, 259, pp. 294-7 addresses additional costs that come with mandatory disclosure, such as, e.g. the hindering innovation, the abuse of publicly available information by strong market participants, or the use of disclosed information by companies acting in concert to define prices and levels of production and damaging free competition.

703 However, even when disclosure is addressed to this group of investors, the benefits of disclosure in helping these investors to adjust their investing behaviour to credit risk are uncertain. See Avgouleas, *European Company and Financial Law Review*, 2009, 440.

704 Merkt in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 116. An annual financial statement is meaningful to a financial literate investor.

705 See the discussion on the concept of “unravelling” of information in Schön, *Journal of Corporate Law*

different types of creditors to make informed decisions about their dealings with the company. That kind of disclosure is prohibitively expensive and it could also lead to an overload of information that reduces overall the usefulness of information. The issue of balancing the benefits and costs of disclosure of both parties becomes again visible. As already mentioned above, the information is useful for protection purposes, if the recipient of that information can act upon that information. Considering the limitations of the mandatory disclosure, it is not certain that all creditors will benefit from it. Some creditors will not even obtain the information,⁷⁰⁶ whereas some other will obtain it but will not know what to do with it⁷⁰⁷ or will simply not be able to act upon it because they lack the leverage to force the debtor to change behaviour. However, this limitation is not confined only to mandatory disclosure, but in general to mechanisms that aim at providing self-protection for creditors.

B. General evaluation of self-help mechanisms of creditor protection

Self-help mechanisms, as the name tells, are based on the capability of creditors to arrange themselves for the level of protection they deem appropriate. The capability of creditors to self-protect relies heavily on the performance of mechanisms, the well functioning of which depends greatly on information about debtor's ability to meet its obligations. On the basis of pertinent information, rational creditors would adjust their investment decisions and protection strategies to ensure the most optimal outcome.⁷⁰⁸ Hence, the ability of creditor to provide for self-protection will depend on their skills not only to collect but also to accurately assess that information. However, this fact makes creditor protection prone to certain weaknesses. Due to information asymmetry problems as well as concerns related to the reduction of transaction costs, creditors might not be as rational as the theory implies⁷⁰⁹ and

Studies, 2006, 259, pp. 274-5.

706 E.g. non-voluntary or tort creditors.

707 It is suggested that to provide useful information for a plurality of investors, also a plurality of disclosures is needed. See Avgouleas, *European Company and Financial Law Review*, 2009, 440, p. 470 ff.

708 Avgouleas, *European Company and Financial Law Review*, 2009, 440, p. 442. This assumption is in line with the Efficient Market Hypothesis as explained by Fama, *Journal of Finance*, 1970, 383, and Fama, *Journal of Finance*, 1991, 1575, which claims that investors are rational actors and use information efficiently to maximize wealth.

709 Market actors do not always make rational decisions that result in optimal outcomes. Their choices and investment decisions are not always constant and led by wealth maximisation or optimal returns, but often survival concerns prevail. Therefore, investors may choose to behave rationally or irrationally, depending on which is the best strategy to survive. Additionally, bounded rationality and herding behaviour further limit the effectiveness of disclosure. See Avgouleas, *European Company and Financial Law Review*, 2009, 440, pp. 450-455 and Lo, *Journal of Investment Consulting*, 2005, 21, p. 37 ff.

therefore they might not be in a position to assess risk appropriately. Information is not readily available and to collect it and assess it, one needs to expend resources, and these resources are not negligible.⁷¹⁰ Where the information collected is inadequate or inaccurately assessed, creditor's decision based on this information will be subject to "garbage in, garbage out" principle.⁷¹¹ Creditors will vary in their abilities to make informed decisions about extending credit, and some creditors will be more capable than others to make use of the self-help protection mechanisms. It was widely discussed above that sophisticated financial creditors, such as banks,⁷¹² are better placed to use their abilities to collect and assess debtor's information as a basis for extending credit.⁷¹³ But a bank is certainly not the paradigm of a creditor. For creditors, other than the financially sophisticated or literate ones, self-protection through information might be otiose. These creditors need some other sort of protection against the opportunistic behaviour of company's managers.⁷¹⁴

It was suggested earlier in this paper that one form of protection for the types of creditors who cannot rely on self-help mechanisms are the substantive rules,⁷¹⁵ such as those founded in company law, insolvency law or also in the criminal codes. The theory of private ordering proposes also an alternative route, namely the gatekeeping concept. According to this concept, which is widely discussed in Chapter 5, protection is provided indirectly through the controlling and monitoring activities of creditors which play the role of a gatekeeper in a financial system.

710 Schön, *Journal of Corporate Law Studies*, 2006, 259, p. 286. Moreover, Schwarcz, *Utah Law Review*, 2008, 1109, p. 1113 notes that during the 2008 financial crisis investors had information, but could not properly process it to adjust their risk positions.

711 In a chilling reminder of the causes of the current global financial crisis, Avgouleas, *European Company and Financial Law Review*, 2009, 440, points to the failure of the financial market to discipline risk-takes despite disclosure. He states that despite the fact that most risks that led to the 2008 crisis were fully disclosed, the risks and their consequences were not understood by the markets, and that was one of the reasons why markets failed to discipline those who took the risks.

712 Lin, *Vanderbilt Law Review*, 1993, 1485, p. 1502.

713 Sophisticated creditors could even benefit at the costs of other less sophisticated creditors. See .e.g. Denozza, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*, p. 414. Moreover, p. 415: "Therefore, what might increase the welfare of a class of creditors (let us say, the most sophisticated and most powerful class) could at the same time reduce the welfare of another class of creditors."

714 Keay, *Modern Law Review*, 2003, 665, p. 694 mentions a number of reasons why these creditors fail to protect themselves adequately. Among the reasons are ignorance about the ramifications of dealing with a company, competition concerns, lack of time and resources to undertake adequate checks, etc.

715 On the issue whether substantive rules or self-help mechanisms are better suited to protect creditors see for example discussions in See e.g. Denozza, in: Eidenmüller/Schön, *The Law and Economics of Creditor Protection*; Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2006; Schön, *European Business Organization Law Review*, 2004, 429; Kübler, *European Business Law Review*, 2004, 1032; Kübler, *Columbia Journal of European Law*, 2005, 219.

PART III

THE GATEKEEPING ROLE OF FINANCIAL INTERMEDIARIES

§ 5 The role of gatekeeping as an enforcement strategy

A. Gatekeepers: defining the term and what do they do

The literature on the gatekeeping strategy as a third-party control mechanism is very dense.⁷¹⁶ It does reflect the broad use of this strategy in various areas of life⁷¹⁷ to ensure the performance of obligations by using the skills of private third-parties to detect and disrupt behaviour that would damage the interests of one party for the benefits of another party. In this respect, third parties assess, verify and certify (or refuse to certify) the information disclosed by a firm to the public.⁷¹⁸ They are in a position, due to their profession or due to the business they are engaged in, to provide or refuse to provide a service or support to a firm wishing to carry out a particular transaction. These third parties are typically reputational intermediaries⁷¹⁹ who pledge one of their most important assets, namely *reputation*, to certify the appropriateness or accurateness of a certain action or disclosure.⁷²⁰ Gatekeeping is therefore an interdiction strategy that recruits third parties in the enforcement effort.⁷²¹ It harnesses the ability of third parties, either public or private, to ensure the appropriateness or compliance with the norm of a law by another party performing an action. As such, it is a mechanism of private ordering, because it aims at increasing the probability of deterring misconduct by directly influencing the compliance with

716 See e.g. Gilson/Kraakman, *Virginia Law Review*, 1984, 549; Gilson/Kraakman, *Journal of Corporation Law*, 2003, 715; Kraakman, *Yale Law Journal*, 1983-1984, 857; Kraakman, *Journal of Law, Economics and Organization*, 1986, 53; Choi, *Northwestern University Law Review*, 1998, 916; Oh, *Journal of Corporation Law*, 2004, 735; Coffee, *Business Lawyer*, 2002, 1403; Coffee, *Columbia Law Review*, 2003, 1293; Hamdani, *Southern California Law Review*, 2003, 53. For German literature see e.g. Hirte, *Berufshaftung. Ein Beitrag zur Entwicklung eines einheitlichen Haftungsmodells für Dienstleistungen*, 1996 (hereinafter “Hirte, *Berufshaftung*“); Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471; Velte/Weber, *Betriebswirtschaftliche Forschung und Praxis*, 2011, 239; Seibt, *Der Betrieb*, 2011, 1378; Masch, *Die Dritthaftung von Banken bei fehlerhaften Eigenauskünften*, 2005 (hereinafter „Masch, *Dritthaftung*“).

717 E.g. in communication, economics, education, political science, and certainly also in law. Oh, *Journal of Corporation Law*, 2004, 735, p. 3.

718 The “public” will normally imply the existing or potential investors who have an interest in the information disclosed by the firm.

719 Although some scholars disagree with this statement. See e.g. Oh, *Journal of Corporation Law*, 2004, 735, p. 15.

720 Coffee, in: Ferrarini et al. (Hrsg.), *Reforming company and takeover law in Europe*, 2004 (hereinafter “Coffee, in: Ferrarini et al. *Reforming company law*”), p. 455.

721 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 55.

the law of the third party instead of influencing the behaviour of the wrongdoer.⁷²² This strategy is employed mostly where direct deterrence or primary enforcement by means of legislation has failed or it is too expensive.⁷²³

In contrast to other strategies using third party efforts to ensure enforcement, such as the whistleblowing strategy, the gatekeeping strategy is a passive response by third parties to detect and/or prevent misconduct. The response may entail an action, such as the certification of annual accounts by an auditor, or an omission, such as the refusal by an investment bank to underwrite an issue of securities. However, in both situations the gatekeeper has to take a stand and has to express its position through a decision.⁷²⁴ The basic element of the gatekeeping strategy is the refusal of the third party to cooperate with the persons intending to carry out an act which could result damaging to the interests of other persons. In this sense, gatekeeping is a rather silent and less forceful strategy compared to other strategies that recruit third parties to ensure enforcement.⁷²⁵ As the name denotes, in order to be playing their role, gatekeepers need to have a “gate” to keep. This “gate” is the service or the support that only this gatekeeper can give in order to allow the other party to carry out the intended transaction. By keeping the gate and controlling access to it, the gatekeeper can monitor and eventually influence the behaviour of the other party. The sting in the gatekeeping strategy is that the party wishing to carry out a transaction cannot do so unless it is enabled or helped by the gatekeeper.⁷²⁶ It is exactly for this reason that gatekeepers are suited, at least theoretically, to monitor and disrupt wrongdoing when it is purported by the potential wrongdoer.

I. Definitions

Various legal scholars who have written on the gatekeeping strategy are not entirely clear as to the meaning of the “gatekeeping” term. Opinions vary as to what is the gate that is being kept and who is on which side of the gate.⁷²⁷ However, what is widely accepted by most scholars is that a gatekeeper is usually an external party who is able to monitor and screen the activities of a third party to make sure that these activities comply with some rules and standards.⁷²⁸ The term

722 Coffee, *Gatekeepers*, p. 606.

723 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, pp. 56-7.

724 Oh, *Journal of Corporation Law*, 2004, 735, p. 754.

725 For example the whistleblowing strategy requires a more active role by third parties to call attention to the misconduct to the potential victims or enforcement authorities. See Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 55.

726 Oh, *Journal of Corporation Law*, 2004, 735, p. 746.

727 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 491.

728 Coffee, *Gatekeepers*, p. 2.

“gatekeeper” has often been defined by taking into consideration the specific professional nature of the third party who plays the gatekeeping role, for example the investment bank, auditor or securities analyst. One of the most widely researched contexts where gatekeeping occurs is the issuing of securities. In this context, the definition of gatekeepers takes into consideration the relationship between the issuer and the various gatekeepers, such as the investment banks, auditors and lawyers. For conceptual reasons, this paper refers to the gatekeeper definitions in the securities issuer’s context to explain the gatekeeping concept.

Various scholars in their definitions on gatekeepers refer mainly to three roles played by a gatekeeper, which are explained below.

1. The *disruptive* function of gatekeepers

In a first effort to define the gatekeeping concept, *Kraakman* provides a broad definition to mean by “gatekeepers” private parties who are able to prevent misconduct by withholding their cooperation from the wrongdoer.⁷²⁹ Examples of such gatekeepers are for example an investment bank that refuses to underwrite an issuer’s securities if it considers that the issuer’s representations about the securities are inaccurate and incomplete. According to *Kraakman*, there is a duty imposed on gatekeepers to prevent or disrupt misconduct by refusing to provide the support, the service or the certification that is essential for the wrongdoer to carry out its wrongdoing.⁷³⁰ The disruption of misconduct takes usually two forms: The first one is an outright refusal to transact with would-be wrongdoers, thus keeping them completely out of the market.⁷³¹ In this case, the person intending to commit wrongdoing is denied access through the gate, and therefore he is not able to defraud potential investors. The second form of disruption is when the gatekeeper refuses requests by wrongdoers for substandard or illicit performance during the course of a broader transaction.⁷³² In this second case, a person has already accessed the market through the gate by using the support or service of the gatekeeper, but after entering the market wishes to carry out wrongdoing. This type of disruption requires more intensive monitoring skills by gatekeepers as wrongdoing in these cases is more difficult to detect.⁷³³

In a similar vein, others refer to gatekeepers as “parties who sell a product or a service that is necessary for clients wishing to enter a particular market in certain activities.”⁷³⁴ Both definitions

729 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 53-4.

730 *Ibid.*, p. 54.

731 *Ibid.*, p. 63 uses the term “bouncer regimes” for this type of misconduct disruption.

732 *Ibid.*, p. 63. Also termed “chaperone regimes”.

733 *Ibid.*, p. 63.

734 Hamdani, *Southern California Law Review*, 2003, 53, p. 58.

rest on the assumption that the support or the service by the gatekeeper is necessary for entering a particular market or for carrying out the misconduct. The gatekeeper is in a position to oversee the gate that allows a particular person to carry out an activity. Both definitions see to the gatekeeper as a private policeman who has been given a key place in the process to prevent wrongdoing.⁷³⁵

2. The *information intermediary function of gatekeepers*

The second important role allocated to gatekeepers is that of helping to reduce information asymmetries between parties and economise on information costs in a transaction.⁷³⁶ They are allocated an important monitoring role by putting them in a position to decide whether to grant or withhold support. Without the support there would be no fraud, but in order to withhold the support, gatekeepers would need to engage in monitoring activities to ascertain the accuracy and the fullness of the representations made by the party wishing to carry out the transaction.⁷³⁷ In this respect, gatekeepers serve to ensure the quality of information distributed by the party wishing to carry out the transaction. In a securities issuing transaction, the investment bank as a gatekeeper serves to check the representations made by the issuer of securities before they reach the investing public.⁷³⁸ Gatekeepers function in this way as a valve in the channel of information flow sanctioning the accuracy of the representations made by the issuer. The interdiction strategy of gatekeeping functions when gatekeepers, due to accuracy concerns, decide to refuse to let the information flow to investors.⁷³⁹ This strategy however assumes that gatekeepers are an indispensable knot in the communication line which cannot be evaded by the issuers. In this respect, gatekeepers serve to inform the investing public. They reduce information asymmetries⁷⁴⁰ that exist, for example in a securities issuing transaction, by facilitating the verification of information provided by the issuer of securities. This is especially the case when the issuer is a new player in the market. On the one side, this issuer will find it difficult to convince investors about the worth of its securities and the truthfulness of his representations. Problems of reputation are pervasive in such a situation and for the issuer it would be prohibitively costly to educate each investor individually.⁷⁴¹ On the other side, also for the

735 Coffee, *Gatekeepers*, p. 2.

736 Gilson/Kraakman, *Virginia Law Review*, 1984, 549, p. 616.

737 Oh, *Journal of Corporation Law*, 2004, 735, p. 746

738 *Ibid.*, p. 790.

739 *Ibid.*, 735.

740 Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185.

741 Gilson/Kraakman, *Virginia Law Review*, 1984, 549, p. 619.

investor it is difficult and costly⁷⁴² to verify ex-ante the accuracy of the information provided by the issuer.⁷⁴³ Therefore, the gatekeeper as an information intermediary helps in solving the problem of information verification. By using its expertise and standardized procedures, the gatekeeper can process the information delivered by the issuer at a lower cost⁷⁴⁴ and could also externalize these costs more effectively to the future investors, resulting in overall savings in the production of information relevant to investors.⁷⁴⁵

Closely connected to the informational intermediary role of gatekeepers is the reputation of the gatekeeper. For the gatekeeper to perform the informational intermediary function effectively, the role of reputation is of essential importance. This reputational intermediary role of the gatekeepers is considered by some scholars as the most important contribution of gatekeepers in the enforcement strategy.⁷⁴⁶ When gatekeepers suffer reputational problems, the value of information and verification services declines,⁷⁴⁷ and thus of the market for gatekeepers risks collapse.

3. The *reputational* intermediary function of a gatekeeper

Coffee considered the definition by *Kraakman* as too broad because it would risk imposing a liability for failing on their gatekeeping duties on persons who are completely disconnected to the wrongdoer and with absolutely no possibility to detect and disrupt misconduct.⁷⁴⁸ Therefore in his definition, *Coffee* focuses on the reputational aspect of the gatekeeping role by defining “gatekeeper” to mean “a reputational intermediary who provides verification or certification services to investors.”⁷⁴⁹ This definition builds on the assumption that the gatekeeper has a

742 Husisian, *Cornell Law Review*, 1990, 410, p. 413.

743 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 472-3 referring to the benefits from a reduction in costs due to control and informational functions of auditors. See also *Kraakman*, *Journal of Law, Economics and Organization*, 1986, 53, p. 96 claiming that reputation is particularly important where buyers cannot verify ex-ante the quality of the goods prior to the purchase.

744 Choi, *Northwestern University Law Review*, 1998, 916, p. 946 considers the traditional gatekeeper to function as a centralized source of information.

745 Gilson/*Kraakman*, *Virginia Law Review*, 1984, 549, p. 619.

746 *Coffee*, *Gatekeepers*, p. 2.

747 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 493.

748 *Coffee* states that pursuant to the definition by *Kraakman*, gatekeeper liability would also be imposed on persons who sold pencils to Al Capone’s gang on the grounds that one could not run a brewery and tavern business without using the pencils to keep records. *Coffee*, in: *Ferrarini et al. Reforming company law*, p. 460. However, *Coffee* does seem to consider the requisite stipulated by *Kraakman* regarding holding a gatekeeper liable, namely that the gatekeeper should possess the ability to disrupt misconduct. *Kraakman*, *Journal of Law, Economics and Organization*, 1986, 53, p. 54.

749 *Coffee*, *Business Lawyer*, 2002, 1403, p. 1405 and *Coffee*, in: *Ferrarini et al. Reforming company law*, p. 460.

reputation to lose. Third parties that fit this definition are for example auditors, who certify the financial statements of a security issuer, or credit rating agencies that issue credit ratings to certify the level of creditworthiness of a certain person. The definition by *Coffee* puts the focus on the reputational aspect of the gatekeeper's service towards investors, without reference to the fact whether or not the investors need the service of the gatekeeper to finalize their transaction. Although one could derive from the definition that without the verification or certification services provided by the gatekeeper, the party wanting to carry out a transaction might not be able to initiate it at all in the first place, the definition by *Coffee* seems to concentrate more on the facilitative, rather on the disruptive, role that gatekeepers can play in the performance of a transaction by an interested party. For *Coffee*, gatekeepers essentially pledge their reputation to ensure investors as to the honesty and completeness, i.e. quality, of the "signal" sent through disclosures by the transacting party.⁷⁵⁰ Building reputational capital requires various⁷⁵¹ long-term investments by a market player. Gatekeepers as repeat players in the market accumulate reputational capital over the years and by serving many clients.

Central to this gatekeeping role is the assumption that a gatekeeper holds its reputation as a very important and precious asset, and that it is not willing to sacrifice it for the payment it will obtain from the wrongdoer. In the end, without reputational capital, a gatekeeper is not any longer credible⁷⁵², and the loss of credibility would practically mean the demise of the gatekeeper.⁷⁵³ In theory, this assumption should function so long as the value of the gatekeeper's reputation exceeds the expected gain from compromising its credibility. According to this theory, the gatekeeper would not be willing to sacrifice the reputation built through hard work and investment⁷⁵⁴ only for any single client or a modest fee. Because the gatekeeper draws only a limited payoff for the service provided as well as from the involvement in the misconduct, compared to the profit that the party carrying the transaction or the misconduct makes from the activity, it is assumed that the gatekeeper will not have the incentive to sacrifice its reputation and thus also its existence.⁷⁵⁵ This was also the essence of the analysis by *Williamson* who suggested long-term contracts, even in the absence of legal remedies, can be self-enforcing by the use of

750 *Coffee*, *Business Lawyer*, 2002, 1403, p. 1405; *Coffee*, in: Ferrarini et al. *Reforming company law*, p. 460; *Coffee*, *Gatekeepers*, p. 2.

751 Such as e.g. investments in recruiting qualified people, enacting procedures and standards to verify the accuracy of information, buying and using systems and software that assist the verification of information, etc.

752 *Coffee*, *Gatekeepers*, p. 3.

753 *Coffee*, in: Ferrarini et al. *Reforming company law*, p. 461.

754 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 70.

755 *Coffee*, *Gatekeepers*, p. 5.

bonding mechanisms that are created when a party making the representations in a contract offers a hostage as a security for the accuracy of its representations.⁷⁵⁶ Offering a hostage as a security is done for efficiency purposes as it reduce the cost of transaction for all the parties. Transposing the *hostage* model into the gatekeeping model, gatekeepers are considered to offer their reputation as hostage (the bonding mechanism) to vouch for the accuracy of their client's disclosures.

II. Loss of reputation as an incentive to deter misconduct

Considering the importance of reputational capital, gatekeeping could be an effective enforcement strategy when direct deterrence through legal rules fails or is ineffective. In a gatekeeping context, three principal-agent relationships are present:

- i) gatekeepers and their clients, such as for example the issuer of securities, where the gatekeeper is the agent and the client is the principal;
- ii) the gatekeeper and the investor, with the same agent-principal constellation as in the first agency relationship, and
- iii) the agency relationship between the client, who is the agent, and the investor, who is the principal.

In the client-investor agency relationship, investors face signification information asymmetry problems. Gatekeepers help mitigate these problems, where the threat of the loss of reputational capital provides a strong incentive for deterrence. As explained above, it is expected that the payoff the gatekeeper will receive from its principal will be substantially smaller than the gain its principal will obtain from its wrongdoing. However, the converse could be true when considering the proportion of losses suffered when wrongdoing occurs. Namely, the losses the gatekeeper as a reputational intermediary will suffer from wrongdoing might exceed the losses the principal will suffer.⁷⁵⁷ Considering these assumptions, it is expected that the agent has less incentives to cooperate with the would-be wrongdoer and commit misconduct and therefore it can be more easily deterred compared to the principal. It is the fear of losing or devaluing their reputation as gatekeepers that the gatekeeping strategy uses when it attempts to employ gatekeepers to interdict wrongdoing.⁷⁵⁸ Thus, the weakest link in the chain is used to detect and disrupt misconduct even if the principal wrongdoer is not effectively deterred through direct

756 Williamson, *American Economic Review*, 1983, 519. Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 61.

757 Coffee, *Gatekeepers*, p. 4 suggests that the collapsed auditing firm Arthur Andersen involved in the Enron scandal closed its doors less because of its criminal conviction in the accounting fraud than because its reputation was destroyed and could not be recovered.

758 *Ibid.*, p. 5.

deterrence.⁷⁵⁹ It is the role of gatekeepers as reputational intermediaries, as *Coffee* suggests, that helps investors trust in the gatekeepers' performance of monitoring the issuers, although the "watchdog [is] hired and paid by the party to be watched".⁷⁶⁰

III. The *public interest* element in the gatekeeping strategy

Who are the real recipients of the gatekeeper's services? In a first observation, one would conclude that based on contract law, the recipients of the services should be the person who hired the gatekeeper to perform the specific service. For example in the case of an auditor, the audited firm would logically be the client of the gatekeeper-auditor, or in the case of a securities analyst, the issuer would be the client. However, considering the gatekeeper's role only from a contract law point of view would present only half the picture. As already indicated above, in the modern informational business world gatekeepers serve as informational intermediaries. Based on the information they deliver, third parties at large⁷⁶¹ make important decisions with regard to investment in a firm. Certainly, the gatekeeper delivers the service, as well as the information that comes with the service, to the client. But when the client uses this information to send signals to the investing public, the recipient of the gatekeeper services is no longer only the client, but also the public at large.⁷⁶² It is the reliance of the public at large on the information provided by the gatekeepers that makes them into a "public watchdog".⁷⁶³ Referring back to the informational and reputational intermediary functions of gatekeepers, they reduce transaction costs⁷⁶⁴ by ensuring the investing public that the information on which they are relying is accurate.⁷⁶⁵ Their reputation serves as a seal for that accuracy.⁷⁶⁶ They exercise their functions not only for the benefit of their clients, but also in the public interest.⁷⁶⁷ As gatekeepers are usually needed when

759 *Ibid.*, p. 5.

760 *Ibid.*, p. 4

761 In the case of a gatekeeper that audits the financial statements of a firm, third parties relying in the gatekeeper's information for investment purposes include investors, creditors and shareholders who use the information to decide about the future of their investment in a firm, or banks, which use the information from the auditor to make lending decisions.

762 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 487 mentions the shareholders and other third parties as the real customers of an auditor. See also Sunder, *Die Wirtschaftsprüfung*, 2003, 141, p. 143.

763 Shore, *SMU Law Review*, 2000, 387, p. 417. See also Velte/Weber, *Betriebswirtschaftliche Forschung und Praxis*, 2011, 239, p. 6.

764 Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 186.

765 Shore, *SMU Law Review*, 2000, 387, p. 417.

766 Lang, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1988, 1001, p. 1006.

767 Ebke, in: Ferrarini et al. (Hrsg.), *Reforming company and takeover law in Europe*, 2004 (hereinafter "Ebke, in: Ferrarini et al. *Reforming company law*"), p. 517. See also for example the decision by the US Supreme Court in *United States vs. Arthur Young & Co* in 465 U.S. 805 (1984) stipulating in the

investors are cautious and sceptic, rather than when they are well informed or euphoric,⁷⁶⁸ gatekeepers help to ensure that disclosure to the public occurs, and that this disclosure is credible.

1. The question of liability towards third parties

However, despite the “public watchdog” role of gatekeepers, questions of liability for inaccurate or incomplete information toward third parties, beyond the contractual party, who rely on the gatekeeper’s information to make their investment decisions remain largely unclear. The question of liability seems less problematic when it is considered from a contract law perspective,⁷⁶⁹ on the basis of which a contractual party could hold the gatekeeper liable for damages when the practices followed by the gatekeeper while performing the contractual services are inadequate or wrong.⁷⁷⁰ Problems arise when attempting to impose liability on gatekeepers for damages suffered by third parties who do not stand in a contractual relation with the gatekeeper, but rely nevertheless on information produced by them to make economic decisions,⁷⁷¹ such as investment to buy or sell securities, or to enter in any other business relation with a firm. The difficulties in this particular context relate to the fact that the gatekeeper did not intend to deliver the information to any other party beyond the contractual one, as there was no contract between them, the gatekeeper does not even know the recipient of information and the information obtained from the third party was not against payment.⁷⁷² Nevertheless, as noted above, the real recipients of the gatekeeper’s services are not simply the parties who contract with them, but also the wide “investing” public, such as the shareholders or the various types of creditors of the contracting firm.⁷⁷³ The question of liability towards third parties reveals the

case of an auditor that the independent auditor assumes a public responsibility that transcends any employment relationship with the client, and thus owing allegiance to the corporation’s creditors and stockholders, as well as to the investing public.

768 Coffee, *Business Lawyer*, 2002, 1403, p. 1412.

769 Hirte, *Berufshaftung*, p. 18.

770 On the issue of liability for various gatekeepers, for German literature see e.g. Hirte, *Berufshaftung*, on the issue of third party liability by persons exercising free professions, such as lawyers, auditors or tax advisors; Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 199 ff. on issues of liability for credit rating agencies and Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 483 ff. on issues of liability for auditors. For English literature see Shore, *SMU Law Review*, 2000, 387, on auditor liability; Coffee, *Columbia Law Review*, 2003, 1293, on corporate attorneys liability; Coffee, in: Ferrarini et al. *Reforming company law* on auditor liability; Choi, *Northwestern University Law Review*, 1998, 916, and Hamdani, *Southern California Law Review*, 2003, 53, on general issues of liability; Partnoy, *Washington University Law Quarterly*, 2001, 491, and Partnoy, *San Diego Legal Studies Papers Series*, 2006, on rating agencies liability.

771 Hirte, *Berufshaftung*, p. 18; Witte/Hrubesch, *Zeitschrift für Wirtschaftsrecht*, 2004, 1346, p. 1351.

772 Lang, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1988, 1001, p. 1006.

773 Witte/Hrubesch, *Zeitschrift für Wirtschaftsrecht*, 2004, 1346, p. 1351.

assumption that reputation alone may not be sufficient an incentive for gatekeepers to avoid malpractice.⁷⁷⁴ The mechanism of reputational capital provides for the gatekeeper an incentive to prevent ex-ante malpractice, but it could fail as an incentivizing mechanism for avoiding misconduct where the gains ex-post exceed the costs from a loss of reputational. While gatekeepers cannot be rewarded for success in avoiding malpractice, because that is what is expected of them, there is a case that they be punished for failure to do that.⁷⁷⁵ Therefore, stronger incentives in the form of liability rules should supplement incentives related to reputation.⁷⁷⁶ However, scholars vary considerably in their opinions regarding the effectiveness of such liability rules. The key question in the discussion is whether and if yes, how, to justify the liability of gatekeepers for advice or information towards non-contractual third parties.⁷⁷⁷

a) Arguments in favour of liability towards third parties for gatekeeper malpractice

Gatekeepers are typically sophisticated market participants able to absorb and spread the cost of malpractice failure.⁷⁷⁸ They can buy insurance against professional liability and pass the costs of insurance further to their clients, who in turn will pass the increased costs of gatekeeper's services to the client's investors.⁷⁷⁹ This suggestion would fit the claim that the real recipients of the gatekeeper's services are the final investors of the client instead of the client himself. Furthermore, in the presence of competition pressure to lower the price for their services,⁷⁸⁰ gatekeepers will attempt to lower insurance premiums by increasing the control procedures that enable gatekeepers to detect material errors that lead to inaccurate or inadequate information.⁷⁸¹ Due to their specialized skills and expertise, they are in a better position to inexpensively avoid mistakes and thus avoid harm.⁷⁸² Risk of liability would thus play the role of a "scare"

774 Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 207. See also Coffee, *Gatekeepers*, p. 333 claiming that gatekeepers will not always seek to protect reputational capital.

775 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 60.

776 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 492. See also Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 61.

777 Hirte, *Berufshaftung*, p. 387.

778 Shore, *SMU Law Review*, 2000, 387, p. 420 discusses the question of a broad scope liability for auditors. However, the arguments are valid also for gatekeepers in general.

779 Hirte, *Berufshaftung*, p. 314.

780 Absent a competitive market for a certain type of gatekeeper's services, such as e.g. the market for rating services which is dominated by three rating agencies, gatekeepers might not feel the pressure to lower the price for their services, and instead pass the increased costs to the service recipients.

781 Shore, *SMU Law Review*, 2000, 387, p. 420.

782 Based on the least-cost avoider rationale. Husisian, *Cornell Law Review*, 1990, 410, p. 430. See also Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 490.

mechanism that would incentivize gatekeepers to increase the professional level of their services, and thus lower the potential for damages to third party investors. Additionally, the fear of liability for negligence towards third parties could result in a reduction of moral hazard on the side of gatekeepers as well as in an increase of professional independence of gatekeepers from their clients.⁷⁸³ More specifically, if gatekeepers would not be made liable for their malpractice, the consequences from such malpractice will be borne solely by the investors in the form of wrong investment decisions,⁷⁸⁴ and consequently also financial losses.⁷⁸⁵ In the absence of a competitive market for gatekeepers' services, the risk of moral hazard resulting from unpunished negligence would increase further. Therefore, where the threat of reputational capital loss does not provide strong incentives to gatekeepers to avoid malpractice, the threat of liability should serve as a complementary incentive. Moreover, threatening gatekeepers not only with the loss of reputational capital, but also with liability for damages could strengthen gatekeeper's independence from the management of the client who has hired their services, ensuring in this way a more accurate and adequate representation of the firm vis-à-vis the investing public. Calls for a third party liability of gatekeepers would seem justified also when building upon the already discussed proposition that the information provided by the gatekeepers is a matter of fact intended for the investing public⁷⁸⁶ and not simply for their clients.⁷⁸⁷ It seems therefore logical that the investing public, relying on the gatekeepers' expertise to provide the particular information⁷⁸⁸ should also be granted the right to sue gatekeepers for damages suffered from a gatekeeper' negligent behaviour when producing the information.

Considering the above, proponents of gatekeeper liability towards third party investors justify their arguments from a legal policy point of view on the need to provide a corrective mechanism for the performance of gatekeepers, especially there were legislation regulating their activity is absent.⁷⁸⁹ In the absence of competitive gatekeeper markets, self-regulation would not be

783 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 486 – 487.

784 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p.486. See also Witte/Hrubesch, *Zeitschrift für Wirtschaftsrecht*, 2004, 1346, p. 1351.

785 Shore, *SMU Law Review*, 2000, 387, p. 417.

786 Doralt/Hellgardt/Hopt/Leyens/Roth/Zimmermann, *The Cambridge Law Journal*, 2008, 62, p. 67.

787 Based on this proposition Witte/Hrubesch, *Zeitschrift für Wirtschaftsrecht*, 2004, 1346, states at p. 1351 that a question regarding third party liability of gatekeepers, in the specific case rating agencies, should receive an affirmative answer.

788 Lang, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1988, 1001, p. 1006. See also Hirte, *Berufshaftung*, p. 389.

789 Such would be the case of rating agencies whose rating procedures are not regulated.

insufficient to provide an incentive as well as an enforcement mechanism for gatekeepers to avoid lax performance.⁷⁹⁰

b) Arguments against liability towards third parties for gatekeeper malpractice

Opponents of the third party liability proposal point to the reputational intermediary role of gatekeepers. More specifically and as already discussed above, gatekeepers' most precious capital is the reputation they have built up over the years and by serving many clients. The market provides itself the mechanism for disciplining gatekeepers in case of malpractice by discounting their reputational capital. Therefore, the threat of reputation loss instead of threat of liability provides a more effective incentive to avoid malpractice. Moreover, the argument that gatekeepers are repeat players in the market⁷⁹¹ serves to reinforce the suggestion that the threat of reputation loss, and consequently of profit loss, provides an efficient incentive to avoid malpractice. Notwithstanding the validity of this argument, certain factors weaken the incentivising power of reputation. Thus, the failure of a gatekeeper due to negligence or malpractice to carefully keep the gate is usually made known after the gatekeeper has performed its services and already received payment for the those services.⁷⁹² Additionally, investors at large will either lack the information regarding the concrete services performed or the methodologies used by the gatekeeper to certify the quality of information as well as the capacities, being in time or expertise, to accurately evaluate ex-post the quality of the services performed. However, reputation and transparency go hand in hand. In the absence of transparency⁷⁹³ it would be difficult for the investors to judge the performance of the gatekeeper and to discount their reputational capital accordingly when malpractice occurs.⁷⁹⁴

The risk of personal liability for malpractice, according to opponents of the idea, could lead to gatekeepers performing their services in a defensive manner, i.e. in a way that does not aim to identify accurately the real situation of the client, but simply to ensure that they are safeguarded against personal malpractice liability.⁷⁹⁵ For fear of litigation, gatekeepers might be forced to charge additional, unnecessary services in order to reduce adverse outcomes in case of litigation

790 More thoroughly in Herfurth, *Die Regulierung von Ratingagenturen unter Basel II*, 1. Aufl. 2010 (hereinafter „Herfurth, *Ratingagenturen*“), p. 71-2.

791 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 500.

792 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 492.

793 Hunt, *Columbia Business Law Review*, 2009, 109, p. 138 defines two types of transparency: methodological transparency and performance transparency.

794 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 502.

795 Husisian, *Cornell Law Review*, 1990, 410, p. 434. See also Hirte, *Berufshaftung*, p. 325; Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 207.

and prevent clients from filing claims for malpractice so long as the costs of performing their role in a defensive manner are lower than the probable losses from litigation.⁷⁹⁶ The consequences for the clients are obvious: increase of costs not only for the additional efforts of the gatekeeper, but also for the unnecessary services performed by the gatekeeper just to make sure to avoid liability.

Additionally, granting third parties or investors at large a right to claim compensation for damages for negligence or malpractice would make it very difficult for gatekeepers to calculate potential liability risk,⁷⁹⁷ increasing in this way legal uncertainty.⁷⁹⁸ An increase in legal uncertainty regarding liability risk could, according to opponents of third party liability, force gatekeepers to abandon the market, and that in turn would increase tremendously the costs that market participants would pay for reliable information.⁷⁹⁹ However, a withdrawal from the market could be the case if the gatekeeper would not be able to pass on the costs of increased liability to the client in the form of higher fees.⁸⁰⁰ But this is not the case in practice. Gatekeepers do externalize the costs that fall upon them, and this leads to another argument brought forth by opponents of third party liability, namely that the threat of liability risk would increase the costs for gatekeeper's services. Should gatekeepers be held liable for malpractice to investors at large, they would feel compelled to externalize these added costs to their client, who on the other side will also pass these costs further to the investing public.⁸⁰¹ Therefore on a balance, opponents suggest, third party investors would not win much. Nevertheless, despite the merits of the argument, an increase in the price of the services is not a bad thing in itself, as long as also the quality of information also increases.⁸⁰² An investor who puts considerable value on the accuracy and quality of information will also be willing to pay more for that information. Moreover, the argument brought forward by opponents does not take into consideration the gains to investors from a general reduction of investment risk that results from the reliability on the company information and representations. Investors would charge a lower risk premium if they know that they can rely on the information disclosed, and this would also lower the cost of capital that a

796 Husisian, *Cornell Law Review*, 1990, 410, p. 434.

797 Hirte, *Berufshaftung*, p. 316.

798 Deipenbrock, *Betriebs Berater*, 2003, 1849, p. 1855.

799 However, Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 78 suggests that legal uncertainty regarding the level of liability could encourage instead of discourage the gatekeepers to place a premium on their monitoring capacities in order to avoid penalties.

800 Coffee, *Gatekeepers*, p. 489.

801 Bishop, *Law Quarterly Review*, 1980, 360, p. 369. See also Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 489.

802 Hirte, *Berufshaftung*, p. 315. A specific quality standard could necessarily result in a lower number of competitors for a certain service.

firm would have to pay. A lower investment risk means higher gains for investors.⁸⁰³ Additionally, when gatekeepers pass on the costs of increased liability to their clients, it will force the clients to ensure that they make accurate representations towards the gatekeeper. As a result, the firms making use of the gatekeeper's services to access the market will be those firms that value the access in the market for public funding more than the fraud. Thus, the logic goes that higher service fees will tend to prevent fraudulent firms from accessing the market for public funds.⁸⁰⁴ Notwithstanding this argument, it is also to be expected that an increase in the price of gatekeeper's services will not prevent only fraudsters from entering the market, but also honest and law-abiding firms due to a lack of price discrimination by the gatekeeper.⁸⁰⁵ When information is symmetric, gatekeepers will recognise the intentions of firms wishing to enter the market, and will price their services accordingly by taking into consideration the propensity of the firm to misconduct as well as the costs from the expected liability the gatekeeper will have to pay for potential failures in certifying the client's representations and disclosed information.⁸⁰⁶ However, in a real market information is asymmetric. Under these circumstances, the gatekeeper might not be able to price discriminate from the beginning the services offered to the client firms, but would demand a uniform fee based on the average likelihood of wrongdoing.⁸⁰⁷ Therefore, honest firms that do not attach large value to entering the market will decide against it if the price of the gatekeeper's services is too high.⁸⁰⁸

Another undesirable effect deriving from imposing third party liability on gatekeepers would be the increase in litigation costs for gatekeepers. Allowing an unlimited pool of potential plaintiffs⁸⁰⁹ the possibility to sue the gatekeepers for inaccurate information resulting from malpractice would confront gatekeepers with damaged investors that seek for deep pockets to recover their losses.⁸¹⁰ This would drive litigations costs of gatekeepers in the upper levels, who in turn would pass on the costs to their clients and eventually to the investors as large, thus putting into question the benefits from such liability. Critics of this argument point to the fact that pool of plaintiffs is not unlimited, as the potential plaintiffs will be the investors who are

803 Bishop, *Law Quartely Review*, 1980, 360, p. 369.

804 Hamdani, *Southern California Law Review*, 2003, 53, p. 60. See also Coffee, *Gatekeepers*, p. 492.

805 Thoroughly on this issue Hamdani, *Southern California Law Review*, 2003, 53, p. 63 ff.

806 Hamdani, *Southern California Law Review*, 2003, 53, p. 70.

807 *Ibid.*, p. 73. See also Coffee, *Gatekeepers*, p. 492.

808 Hamdani, *Southern California Law Review*, 2003, 53, p. 71.

809 Shore, *SMU Law Review*, 2000, 387, p. 418. See also Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 207.

810 Hirte, *Berufshaftung*, p.324; Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 488.

dealing with the firm. Additionally, the argument that litigation costs for gatekeepers would increase tremendously is only partially valid, depending on the jurisdiction or legal tradition where litigation takes place.⁸¹¹

2. Striking a balance on gatekeeper liability

The question of liability toward investing third parties for malpractice by gatekeepers is still open. Issues with respect to the real recipients of the gatekeepers' services, the duties of gatekeepers vis-à-vis the non-contractual investor, the determination of causality between the failure of the gatekeeper to disrupt misconduct and the damage suffered by the investor, calibration of the liability level or of the level of gatekeeper's malpractice towards the investing public, the identification of the investors who have suffered from the particular failure of the gatekeeper remain debatable.

Except in cases where the information published by the gatekeeper was intentionally inaccurate or incomplete in order to mislead the investing public, in which case liability would seem justified, in other cases liability for damages toward third parties would seem difficult to impose, as this could stretch the liability to uncontrollable limits.⁸¹²

As already noted, the major difficulties arise when one attempts to justify liability towards third party investors who are in no contractual relationship with the gatekeeper. Scholars disagree regarding the fact whether the information provided or the representations made by the gatekeeper are intended only for the client or as a matter of fact to other persons, such as to the shareholders, creditors or other investors at large who are or wish to enter into a business relation with the firm. In certain jurisdictions, such as in Germany for example, some scholars justify third party liability in the case of rating agencies by claiming that the contract between the rating agency and the client is also for the benefit of third parties, and therefore third parties should be able to hold gatekeepers accountable for their failure.⁸¹³ Other scholars however reject this suggestion that the contract between the gatekeeper and the client is for the benefit of third parties, and any such liability would blur the border between liability out of contract and liability out of tort.⁸¹⁴

811 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 488 points to the differences in litigation costs for auditors in the US and in Germany. In Germany, unlike in the US, the legislation on trial costs prevents the misuse of trial costs as a pressure for the plaintiff to reach a settlement.

812 Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 207.

813 Witte/Hrubesch, *Zeitschrift für Wirtschaftsrecht*, 2004, 1346, p. 1351 on the basis of §§ 311 Abs.3, 241 Abs.2 and 328 BGB.

814 Hirte, *Berufshaftung*, p. 390; Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p.207. See also Deipenbrock, *Betriebs Berater*, 2003, 1849. Moreover, gatekeeper liability toward non-contractual third parties, such as in the case of bank, is in Germany, de lege lata, not

There is also one other important factor to consider in the discussion regarding third party liability, namely that of the compensation function of the liability law.⁸¹⁵ The threat of a loss of reputation is a real threat, but it affects primarily the gatekeepers and their profit, but it does not help the investors to recover their losses from relying on false information provided by the gatekeepers. Therefore, liability law should not only sanction the malpractice of gatekeeper but also seek to compensate the victims of such malpractice.⁸¹⁶

What remains for sure is that a precise calibration of legislation to strike a balance between excessive liability and inadequate legal threat is probably impossible.⁸¹⁷

IV. What makes someone a gatekeeper?

In the context of gatekeeper's liability, gatekeeper is someone on whom a duty has been imposed to prevent misconduct by withholding support for the wrongdoer.⁸¹⁸ This duty is explicitly or implicitly imposed on the gatekeeper either by way of legislation or by virtue of the position that these gatekeepers have in relation to the would-be wrongdoer. It is this imposed duty to prevent misconduct that distinguishes subjects who could in reality be and of whom it is expected to be gatekeepers from subjects who theoretically could be gatekeepers, but in reality are not. For example, a computer producer could theoretically be a gatekeeper with regard to preventing illegal music or film downloads by refusing to sell computers to potential wrongdoers. However, in practice, a computer producer has no possibility to determine which computer buyer will use the computer for illegal music or films downloads, even if he spends large amount of resources to acquire information about existing or would-be wrongdoers. An internet provider, in contrast to a computer producer, has better chances to play the gatekeeping role to prevent illegal music or film download, albeit also in this case the costs of acquiring information could be high.

Thus, although all parties that can disrupt misconduct by withholding support to the wrongdoers are considered to be gatekeepers, this does not necessarily mean that all gatekeepers are likely to prevent misconduct.⁸¹⁹ The ability of the gatekeeper to prevent misconduct depends largely on several factors, such as the characteristics of the misconduct, the willingness of the gatekeeper

possible. Where there is no contract between a gatekeeper and a client to the benefit of non-contractual third parties, third parties have to insure themselves their own interests. See Masch, *Dritthaftung*, pp. 67-73.

815 Hirte, *Berufshaftung*, pp. 313 – 314. The compensation of damage and not the sanction of misconduct it the main thought of the law of damage compensation.

816 Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 493.

817 Coffee, *Gatekeepers*, p. 489.

818 See e.g. the definition of gatekeepers by Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 54 or by Coffee, *Gatekeepers*, p. 460.

819 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 66.

to engage seriously in gatekeeping and the available market for gatekeeping shopping.⁸²⁰ These factors as well as the question regarding the qualities of a gatekeeper are discussed below. Defining what makes someone a gatekeeper is an important and relevant issue with regard to the issue of gatekeeper liability.

1. The ability to disrupt misconduct

One of the criteria for determining whether a subject could be a gatekeeper, and further a successful gatekeeper relates directly with the likelihood that gatekeepers will uncover and prevent misconduct.⁸²¹ The focus is here on the ability as well as willingness of a gatekeeper to influence a wrongdoer to forgo misconduct.⁸²² Interdicting wrongdoing can take the form either of exclusion or prohibition of someone from entering a particular market or in the form of detecting and disrupting wrong behaviour after the subject has entered a particular market.⁸²³ In both cases, the ability of gatekeepers to play their interdicting role and how much wrongdoing will they prevent will depend on several factors.

a) The nature of contracting between gatekeeper and wrongdoer

Usually, the performance of a gatekeeping function will require a transaction, contractual or non-contractual, between the gatekeeper and would-be wrongdoer.⁸²⁴ Through the transaction, gatekeepers are in a position to access at low-cost information about existing or would-be wrongdoer and thus allow him to perform the monitoring role that is required from a gatekeeper. Since the gatekeeper is a repeat player and a reputational intermediary that has built up its reputation over a long period of time and by serving many clients, it is assumed that gatekeepers and their clients will aim long-term business relationships. The gains of long-term relationships are valid for both sides. On the one side, when developing long-term business relationships, gatekeepers can reduce their information costs due to becoming familiarized with the firm, and thus can refer to their past experiences when transacting for future deals.⁸²⁵ Additionally also the risk of liability for failure of the gatekeeper to detect misstatements or faulty representations by the client is also reduced because the long-term relationship facilitates more accurate monitoring. On the other side, developing long-term relationship with a gatekeeper provides for the client

820 *Ibid.*, p. 66.

821 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 62.

822 Kraakman, *Yale Law Journal*, 1983-1984, 857, p. 890.

823 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 62.

824 *Ibid.*

825 Williamson, *Journal of Law and Economics*, 1979, 233, p. 248. See also Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 486 in the context of auditing services.

the benefit of lower costs when “renting” the reputation of reputational intermediaries. A gatekeeper will require higher guarantees before pledging its reputation for new clients than for long-term clients. In long-term relationships, both gatekeeper and client make firm-specific investment on each other, and therefore the relationship grows more enduring, as the duration of their relation gives also a signal about their seriousness as market actors. In the meantime, when contracts grow more enduring, they become also more costly to break.⁸²⁶ Therefore, gatekeepers will perform their gatekeeping role to ensure that the reputation they pledge reflects the accurateness and truthfulness of the client’s representations, whereas the client will find it expensive to shop for gatekeepers who are willing to risk their reputation by vouching for their client’s false representations. However, this assumption is subject to two qualifications: the existing gatekeeper gains more from preserving its reputation⁸²⁷ than from giving in to the client’s requests for underperformance and the client’s gains from searching a compliant gatekeeper justify the cost of breaking the ties with the existing gatekeeper.

The encouragement of long-term business relationships between gatekeepers and clients should however consider also the potential conflicts of interests that arise thereof. More specifically, when gatekeepers develop a bonding relationship with a client through mutual investments, they tie themselves to the client’s success and face incentives to make decisions that align their interest with those of the firm they are monitoring.⁸²⁸ As a result, the gatekeeper might shift its focus from protecting the investing public to satisfying the client. This raises issues of gatekeeper’s independence.

b) *Gatekeeper’s independence and diversification of investment*

Can investors rely on the independence of gatekeepers to deliver accurate and free-from-conflicts-of-interests information when the gatekeeper is paid by the subject it is supposed to monitor?⁸²⁹ Could the watchdog “bark” against the one that one that feeds him? Here two assumptions are valid, albeit opposing each other. The first assumption is that the gatekeeper could fail to perform its gatekeeping role when it depends substantially on a client or retrieves major portions of its gains from few clients. The fear of losing these important clients if they do

826 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 63.

827 Coffee, *Gatekeepers*, p. 6 states a possible decline in the value of the gatekeeper’s reputational capital could lead to the result that gatekeepers will no longer protect their reputation as zealously as before.

828 Ebke, in: Ferrarini et al. *Reforming company law*, p. 525. See also Heukamp, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 471, p. 486.

829 Habersack, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 185, p. 195.

not acquiesce to the clients' misconduct exerts pressure on gatekeeper to underperform.⁸³⁰ The logical explanation behind this assumption seems to be that the gatekeeper can gain more in the short term from depleting its reputation than from protecting it. A related issue with this assumption, albeit not valid for all kinds of gatekeepers⁸³¹ is the case where a gatekeeper draws a larger portion of its earnings from related services provided to a single or fewer clients. A typical example to illustrate this problem are the consulting services provided by auditing firms, where firms use modest audit fees as a door opener for more attractive consulting business.⁸³² This raises concerns about the independence of auditors,⁸³³ who in order to retain lucrative contracts for consulting services may be more willing to accommodate demands from the management of audited firm to present the firm in a better situation than it really is.⁸³⁴

The second assumption is that the gatekeeper will perform its gatekeeping role accurately because in the long-term it can benefit more from protecting its reputation.⁸³⁵ In favour of this argument speaks also the fact that due to the principal-agent relationship between a gatekeeper and a client, the gatekeeper obtains only a small pay-off for its services compared to the gains that a client would make from misconducting and therefore has no interest in wasting his reputation for any single client. Additionally, a gatekeeper is interested in ensuring the longevity of their clients through careful examination of their information, because they depend on the clients' success and satisfaction for getting paid, and certainly for their existence.⁸³⁶ However, as practice has shown satisfying the client does not necessarily mean observing the interest of the public and gatekeepers will deplete their capital also for one single client.⁸³⁷ If it is suggested that dependence on a single or few clients could increase incentives to gatekeepers to acquiesce to a client's misconduct for fear of losing him, then a possible solution to this problem should

830 According to Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 71 this is the least costly and most likely bribe to gatekeepers, namely that of continuing or extending established business relationships.

831 More often seen at auditors or securities analysts.

832 Doralt/Hellgardt/Hopt/Leyens/Roth/Zimmermann, *The Cambridge Law Journal*, 2008, 62, p. 65.

833 Bratton, *European Business Organization Law Review*, 2004, 7, p. 8 "The auditors had sold their independence in exchange for consulting rents."

834 Ebke, in: Ferrarini et al. *Reforming company law*, p. 520 and Bratton, *European Business Organization Law Review*, 2004, 7, p. 12 and p. 28. However, Coffee, *Business Lawyer*, 2002, 1403, p. 1411 claims that with or without consulting services, an auditing firm is already conflicted by the fact that the client pays its fees. Moreover, the audit partner responsible for a large is particularly conflicted by the fact that he depends on this single client as if he were running a one-client practice. Nevertheless, the fear of losing a major client provides incentives to gatekeepers to underperform.

835 Coffee, in: Ferrarini et al. *Reforming company law*, p. 461.

836 Ebke, in: Ferrarini et al. *Reforming company law*, p. 518.

837 Coffee, *Business Lawyer*, 2002, 1403.

be a diversification of a gatekeeper's contracting. *Kraakman* suggests that diversified gatekeepers are less susceptible to corruption because they have less at stake in relationships with particular clients.⁸³⁸ Therefore, the loss of a single client or customer will not threaten substantially their returns whereas the reputational losses and the financial liabilities related to those losses would exceed all of the gatekeeper's profits and therefore provoke his demise.⁸³⁹ Although it sounds reasonable, this argument does not always hold. In explaining the demise of the auditing firm Arthur Andersen in 2002 after being involved in the accounting irregularities that lead to the collapse of the American company Enron in 2001, *Coffee* points out to the paradox that following the logic above, Arthur Andersen should have resisted temptation to acquiesce to Enron's misconduct because it was well diversified and it drew its profits from a larger clients base.⁸⁴⁰ However, despite the diversification of contracting and the fact that the reputational losses were larger than the fees it was getting from a single client, the gatekeeper failed to perform its monitoring role. According to *Coffee*, reasons for gatekeeper failure in these cases, apart from a reduction in the exposure to litigation,⁸⁴¹ might rest also on a decline of the value of gatekeeper's reputation especially in periods of market euphoria where investors manifest herd behaviour in believing that a course of events that has occurred in the past⁸⁴² will continue to occur also in the future.⁸⁴³ In such a context, gatekeepers are more interested in joining the crowd and making their portion of gains, even if that will mean risking their reputation.⁸⁴⁴

Additionally, another factor seems to affect a gatekeeper's ability to detect and disrupt misconduct, namely the size and structure of the of the gatekeeping firm.

c) Gatekeeper's size and structure – agency conflicts within the gatekeeper

(i) Gatekeeper's size

If diversified contracting seems to affect gatekeeper's ability to detect and disrupt misconduct, then it is reasonable to expect that large gatekeeping firms may be better gatekeepers than smaller

838 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 71.

839 *Ibid.*, p. 71.

840 Coffee, in: Ferrarini et al. *Reforming company law*, p. 461 points out to the fact that Arthur Andersen had approx. 2300 auditing clients, and each client paid a fee that was modest in proportion to the firm's overall revenues.

841 Coffee, *Gatekeepers*, p. 6.

842 E.g. extraordinary returns on investments.

843 Coffee, in: Ferrarini et al. *Reforming company law*, p. 473-6. See also Coffee, *Gatekeepers*, p. 325.

844 *Ibid.*, p. 475. "Put more bluntly, it is dangerous to be sane in an insane world."

gatekeeping firms or individual gatekeepers.⁸⁴⁵ The logical explanation for this assumption is that larger gatekeeping firms indicate considerable reputational capital and a large client base. As already noted above, considerable reputational capital provides the gatekeepers with the incentive to defend it because it is their most valuable asset, whereas a large client base ensures gatekeeper's diversification of investment to reduce reliance on few clients for a larger portion of their returns, hence increasing gatekeeper's independence. However, consider the following assumption: a large gatekeeper has more reputational capital to lose, and that's why it is incentivized to protect it. A smaller gatekeeper firm has less reputational capital to lose, but nevertheless, it depends in the same way as a bigger gatekeeper on the reputation for its economic survival. Therefore, also a smaller gatekeeper is incentivized to protect reputation, except when the gains from short-term underperformance substantially exceed the costs of depleting reputation. Nevertheless, this not a phenomenon limited only to smaller gatekeepers, but it is a problem that affects larger gatekeepers as well. One could go even further to assume that smaller gatekeeping firms are perhaps more incentivized to perform their gatekeeping role diligently because they have an interest in building their reputation further. Nevertheless, this assumption might be true only for gatekeepers who operate in a competitive market, but not for others who operate in near monopolistic markets.⁸⁴⁶

Other benefits from employing larger gatekeepers in the activity of disrupting misconduct relate to the fact that these gatekeepers could possess more know-how and expertise and therefore are in a better position to perform its role professionally. The concentration of the market in the hands of a few gatekeepers could produce specialisation that could in turn reduce misstatements by gatekeepers.⁸⁴⁷ However, this argument refers primarily to the professional capabilities of gatekeepers rather than to their incentives to perform their task professionally. The incentive or will to perform the gatekeeping tasks and the capacity of gatekeeper for such tasks are two different issues. For a successful performance, gatekeepers need to incorporate both elements.

Last but not least, the size of the gatekeeper influences gatekeeper's ability and willingness to monitor and interdict wrongdoing when seen from a moral hazard perspective. Thus, as with

845 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 72.

846 E.g. the market for credit rating market which is dominated by three firms or the market for auditing services which is dominated by the Big-Four. See Coffee, *Gatekeepers*, p. 35. However, see also Husisian, *Cornell Law Review*, 1990, 410, p. 441-2 suggesting that also between rating agencies there is a strong competition to preserve their considerable investments in their rating infrastructures. Additionally, smaller-sized competitors, willing to fill in the gap should the major rating agencies falter, exert pressure that major rating agencies keep their investment in accuracy near the optimal level.

847 Cunningham, *Columbia Law Review*, 2006, 1698, p. 1719.

larger banks, which experience moral hazard problems due to the “too-big-to-fail” approach, also larger gatekeepers can experience similar problems. These moral hazard problems tend to be experienced there where the gatekeeper market is concentrated and consequently allows for the dominance of only few market players with relatively large market shares. Should one or several of these few gatekeepers be allowed to fall, the gatekeeper market would be in danger of unravelling, which in turn would increase the risks in that market as well as the costs to market participants.⁸⁴⁸ The belief that a gatekeeper is too big to be allowed to fall could tempt the gatekeeper to think that they will not have to face the disciplining hand of the market when they fail to perform their gatekeeping tasks. In the absence of liability threats and reputational threat constraints, it is not obvious why these gatekeepers should worry to always get it right with their duties. On the contrary, the fear of fall because there will be no saving hand to rescue when they fail to perform their tasks diligently provides an incentive, although of a threatening nature, to smaller gatekeepers with no dominant position in the market. However, as already mentioned above, simply the threat of fall alone cannot provide sufficient motivation for gatekeepers to avoid malpractice, especially where the gains from lax monitoring behaviour exceeds the costs of failure. Moreover, the practice of rescuing “too-big-to-fail” gatekeepers would not only provide wrong incentives to these gatekeepers and encourage them to take more risk than the market would allow or to apply lax monitoring practices, but would also prejudice smaller gatekeepers’ interests by making it more difficult for them to compete with larger gatekeepers.⁸⁴⁹ Therefore, it is necessary that ex-ante restrictions are put in place to limit intervention by state bodies to rescue gatekeepers deemed as “too-big-to-fail”, and thus counter negative incentives to these gatekeepers for suboptimal performance.

(ii) *Gatekeeper’s structure*

With regard to the gatekeeper’s structure, attention is drawn here to the agency conflicts experienced within the gatekeeping firm. Larger gatekeeping firms who delegate gatekeeping tasks to individual partners or employees are presumably more prone to reputational capital loss than are smaller gatekeeping firms or individual gatekeepers. Thus, even if for the large gatekeeping firm it would be unreasonable to sacrifice its reputational capital, it might not be so for the individual employee.⁸⁵⁰ The reason for the misalignment of incentives might rest in the assumption that because the individual employee or partner in a gatekeeping firm receives only

848 *Ibid.*, p. 1699.

849 Cunningham, *Columbia Law Review*, 2006, 1698, p. 1723.

850 Coffee, *Gatekeepers*, p. 325.

a small fraction of the fees obtained by the gatekeeping firm,⁸⁵¹ they might be more willing to accept bribes if they would be sufficiently high to justify the personal costs they will suffer. Hence the earlier suggestion that the depletion of reputational capital is a reasonable decision by a gatekeeper⁸⁵² if the short-term gains exceed reputational losses plays out within the gatekeeping firm context. The incentives the gatekeeping firm faces in this case are valid also for the employee within the gatekeeping firm. If the gatekeeping is not able to adequately address agency conflicts within the firm and monitor its agents effectively, the problem of incentives misalignment might exacerbate further. Having this consideration in mind, a smaller gatekeeping firm or an owner-gatekeeper might make a better gatekeeper because of less agency problems⁸⁵³ or because being the owner himself, the gatekeeper will retain the whole profit and reputation building incentives are higher. Nevertheless, larger gatekeeping firms could offer advantages in reducing the risk of colluding with the client and thus improving their ability to disrupt misconduct because of two reasons. First, especially in gatekeeping firms that function as partnerships with partners bearing several and joint liability, partners become natural monitors of each other in order to reduce risk of liability, unless they all work for the same client and depend heavily on him for generating profit.⁸⁵⁴ Second, large gatekeeping firms could employ gatekeeping mechanisms within the firm to monitor their employees and partners to avoid collusion of individual persons with the client they are supposed to monitor.⁸⁵⁵

d) The market for gatekeeper's services – (non-)competitive markets and regulatory licences

(i) (Non)competitive gatekeeper markets

The assumption put forward suggests that in some gatekeepers' markets where there is absent competition for gatekeeper's services, the quality of the monitoring declines. As typical markets with absent or low competition are for example the auditing market for auditors delivering services at a global level to larger companies and the rating market. Both markets for these services are dominated respectively by the "Big Four" and the "Big Three".⁸⁵⁶ It is therefore argued that absent competition in the market for gatekeeper services, gatekeepers may have little

851 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 72.

852 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 498.

853 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 500.

854 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 72.

855 *Ibid.*, p. 72.

856 Perhaps even "Big Two", i.e. Moody's Ratings and S&P Ratings, if one does not consider Fitch Ratings as a big rating agency.

incentive to invest in improving their services and the quality of their information because they face no competition.⁸⁵⁷ Gatekeepers face thus the perverse incentive to underperform, because the client will return to them anyway, due to the limitation of choices in that market. There is nevertheless another side to the argument of competition. It has been suggested that competition could do more harm than good, in that it can force acquiescence instead of resistance to clients' demands because of fear that the client will choose a competitor gatekeeper who is willing to deplete some or all of its capital in return for sufficiently high gains.⁸⁵⁸ As a result a race-to-the-bottom could be the result of a more competitive gatekeeper market and gatekeeping standards will be lowered.⁸⁵⁹ Therefore, in a monopolistic market⁸⁶⁰ gatekeepers could be better positioned to resist pressure from the client to underperform, and therefore, they should do better gatekeepers.⁸⁶¹ Also, it has been suggested that in non-competitive gatekeeper markets, gatekeepers compete more on the basis of reputation for integrity than on the basis of price and quality of their services. Gatekeepers need to maintain their reputational capital if they want to be perceived by investors as credible.⁸⁶² This implies that gatekeepers have already invested considerably to build up their reputational capital before being able to acquire clients. Therefore, non-competitive markets increase instead of decrease the quality of gatekeeper's information. However, the collateral effect of considerable investment in reputation and infrastructure is that raises entry barriers into the gatekeeper markets. These high entry barriers are according to *Coffee* the real reason for the dominance in some gatekeeper markets by only few subjects.⁸⁶³

Considering the above, the benefits of competition regarding gatekeeper's incentives to perform accurately the gatekeeping role are uncertain. While in some markets, competition among gatekeepers could provide incentives for them to invest in building up their reputational integrity and serve as credible providers of information, in some other markets, increased competition

857 *Coffee, Gatekeepers*, p. 318.

858 *Ibid.*, p. 319.

859 *Coffee, Gatekeepers*, p. 320 mentions the market for attorneys' services or securities analysts as an example of competitive markets where acquiescence is higher than in the rating market. See also Deipenbrock, *Betriebs Berater*, 2003, 1849, p. 1854.

860 However Husisian, *Cornell Law Review*, 1990, 410, p. 442 suggests that even in seemingly monopolistic markets, such as rating services, gatekeepers are very competitive at protecting their considerable investments in reputation.

861 *Coffee, Gatekeepers*, p. 318. Nevertheless, this assumption is subject to the costs of gatekeepers if they choose to give in to client's pressure, either in the form of reputation loss or exposure to litigation from investors.

862 *Coffee, Gatekeepers*, p. 319. See also Choi, *Northwestern University Law Review*, 1998, 916, p. 961.

863 *Coffee*, *European Corporate Governance Institute Working Paper Series in Law*, 2010, p. 55.

could lead to lower gatekeeping standards among gatekeepers for losing the client to a gatekeeping competitor willing to exchange reputation for sufficient gains.

(ii) *Regulatory licences*

An alternative view to the reputational capital model allocates the success of some types of gatekeepers to the fact that they are granted the right to issue regulatory licences for the services they perform. According to this view, if regulation imposes costs on a certain market player, and obtaining a certification from a gatekeeper will reduce those costs, the gatekeepers will sell those regulatory licences to allow the market player to reduce these costs.⁸⁶⁴ That does not represent a problem as long as the regulation allows for many gatekeepers on the same market. Problems arise when only a few gatekeepers are allowed to operate or when the entry barriers for new gatekeepers on the market are sufficiently high to make it very difficult or almost not possible to enter the gatekeeper market. In a limited market, gatekeepers will be able to acquire market power when selling regulatory licences because of their monopolistic or oligopolistic position.⁸⁶⁵ These suggestions point to the assumption that gatekeepers are less of reputational intermediaries and more of holders of rights, in the form of regulatory licences that “enable them to exploit their quasi-governmental power for self-interested purposes.”⁸⁶⁶ Therefore, these gatekeepers remain profitable despite their investment in reputational capital. It results that these gatekeepers might face lower competitive pressures to improve the accuracy of their information, because their clients are “guaranteed” through the regulatory licences granted to them. The most typical gatekeepers that are paid to issue regulatory licences and thus become part of the financial supervisory⁸⁶⁷ system are the rating agencies. The rating market is very limited in its offer and dominated by only three major agencies providing bond and credit rating services. Rating agencies enjoy a “quasi-regulatory body” status because of the regulatory dependence on credit rating created especially by way of securities, banking, and insurance regulation. For these types of gatekeepers, the regulatory licences model suggests that they will be able to remain profitable even if they do not provide optimal private third party certification or monitoring.⁸⁶⁸ Therefore their gatekeeping skills are negatively influenced because the rating agencies have fewer incentives to provide more timely monitoring of their clients after they have rated them. Their

864 Partnoy, Washington University Law Quarterly, 1999, 619, p. 682.

865 Partnoy, Washington University Law Quarterly, 1999, 619, p. 682.

866 Coffee, European Corporate Governance Institute Working Paper Series in Law, 2010, p. 3.

867 Höfling, in: DJT, *Verhandlungen des 68. Deutschen Juristentages*, 2010, p. F 40.

868 Partnoy, Washington University Law Quarterly, 2001, 491, p. 511.

revenue resources are certain and therefore the raters' interest in maintaining or expanding their reputational capital is not such that it would induce them to expend resources in this direction. As a matter of fact, so long as a gatekeeper is able to willing to maintain its reputational capital and credibility, and also so long as the gatekeeper can pass on the costs related to the maintenance and expansion of reputational capital to its clients and investors, a gatekeeper does not need regulatory licences to remain profitable. It results, that regulatory licences are useful when reputational capital is costly to maintain. In the absence of mechanisms, such as liability for malpractice, gatekeepers will experience perverse incentives to reduce their gatekeeping skills, because reputation is not essentially the asset that keeps them floating. Simply the fact that certain gatekeepers are prospering and are much required by the market is not necessarily an indication that these gatekeepers are performing valuable gatekeeping functions.⁸⁶⁹ This is also the main thought of the regulatory licence model regarding the ability of gatekeepers to detect and disrupt misconduct. Probably a useful example to illustrate the regulatory licence model above is the recent credit and financial crisis of 2008. Credit rating agencies have been sharply criticised for their decisions to rate with best rating grades financial products of suspicious nature, the value of which collapsed when the credit crisis broke out in the spring of 2007 as a result of the breakdown of the subprime credit market in the US.⁸⁷⁰ However, despite being blamed as one of the causers for the credit crisis, and also despite suffering considerable reputational loss due to their failure to rate accurately, rating agencies neither shut down nor did they reduce their business. Their ratings are so much a part of financial regulation, private contracts and investors' guidelines, that issuers of securities will demand their services because they need to fulfil regulatory requirements, even if they do not believe that the rating is a high-quality assessment of creditworthiness.⁸⁷¹ The example helps therefore illustrate the fact that not only rating agencies, but also other gatekeepers face strong incentives to deplete their reputation when the benefits are sufficiently high and factors, such as the regulatory dependence on their services, creates wrong incentives or at least removes healthy incentives for gatekeepers to perform their monitoring roles accurately. The right to issue regulatory licences, when coupled with a lack of threatening mechanisms, such as personal gatekeeper liability, could produce ineffective third party gatekeepers, whose reputation is not of much value, and probably so also their use. Nevertheless, this argument does not intend to debunk the usefulness of the

869 Partnoy, *Washington University Law Quarterly*, 2001, 491, p. 510; Coffee, *Gatekeepers*, p. 322.

870 Hunt, *Columbia Business Law Review*, 2009, 109, p. 123 puts the figure of wrongly rated financial products which defaulted when the crisis broke out at 36% (equalling 200 billion USD) of all Collateralized Debt Obligations that were issued in the US.

871 Hunt, *Columbia Business Law Review*, 2009, 109, p. 143.

gatekeeping concept to provide needed monitoring and policing services. Rather, it points to the need for regulation to ensure that mechanisms are in place to induce gatekeepers to perform their role adequately and according to what is expected of them.

2. An enforceable duty to disrupt misconduct

Many subjects could be gatekeepers, but not many are in reality gatekeepers. The issue of gatekeeper liability for failure to detect wrongdoing is tightly related to the question whether the gatekeeper had in the first place such a duty? Additionally, the duty has to be an enforceable duty that allows damaged parties to hold the gatekeeper accountable for failure to observe gatekeeping requirements.⁸⁷² Without this precondition, the effectiveness of the enforcement mechanism delivered by the gatekeeping concept is severely curtailed. The only costs to the gatekeeper would be those that relate to reputation, and as it has been already discussed, the threat of reputation loss is in itself a limited threatening mechanism. Without the enforceability of the gatekeeping duty, the implicit or explicit gatekeeper might lack the incentives to perform its monitoring role in detecting and disrupting misconduct, where reputational concerns fail to provide sufficient motivation and incentives. However, determining whether there is an explicit or implicit enforceable duty on gatekeepers to detect and disrupt misconduct is far from being a simple task.

a) Public gatekeepers

Gatekeepers could be created by operation of the law that charges a public body, and sometimes also a private person, to prevent or disrupt misconduct when they detect it. A typical example of direct deterrence by public gatekeepers are the public bodies that authorise for instance a firm to operate as a bank subject to the fulfilment of defined criteria, or typically the securities commission that allow the issue of securities by a firm subject to the approval of the prospect.⁸⁷³ Alternatively, gatekeepers could arise also by virtue of market mechanisms that allow a private subject to exercise gatekeeping function due to their position in relation to wrongdoing third parties. A typical example of this kind of gatekeepers in the financial market would be the rating agencies or banks.

Direct deterrence or deterrence of misconduct by public bodies in charge of monitoring market players is the normal strategy for enforcing legal norms.⁸⁷⁴ In the case of public gatekeepers,

872 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 57.

873 E.g. the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin) in Germany or the Securities and Exchanges Commission (SEC) in the US.

874 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 56.

there is normally a clear mandate on these gatekeepers to prevent misconduct by the subjects they are supposed to monitor. The duty to perform the gatekeeping tasks is enforced on them through regulation, and that should eliminate conflicts of interests or lack of incentives by the public gatekeepers to perform their tasks optimally.

The performance of tasks by public gatekeepers is motivated by pre-defined social goals⁸⁷⁵ and in this respect these gatekeepers provide a public good. The benefits of pursuing social goals while performing public gatekeeping functions are several. To mention just a few, considering that public gatekeepers are not motivated by the pursuit of profit, they are better positioned to perform gatekeeping free from conflicts of interest,⁸⁷⁶ which in turn increases their credibility as watchdogs. Moreover, public gatekeepers are independent of the subjects they monitor, and therefore able to critically evaluate the information presented to them and give unbiased opinions.⁸⁷⁷ They do not depend on the subjects they monitor for the generation of their incomes, and therefore do not need to align their interest with the monitored subjects for fear of losing important clients. Being independent from the subjects they monitor normally allows public gatekeepers to keep uncompromised their capacity to grant or withhold support impartially.⁸⁷⁸ Additionally, these gatekeepers are not subject to competition pressure, due to being mandated by law to keep the gate, and therefore do not need to compromise their performance for fear of losing market share when the subjects they are monitoring do what is called “opinion shopping”. Being independent from the subjects they monitor, public gatekeepers are also in a position to monitor a broader class of subjects than just those that pay for the gatekeeper’s services.⁸⁷⁹ In this perspective, public gatekeepers should present a more economical solution to ensure enforcement than private gatekeepers.

b) *Private gatekeepers*

On the other side of the spectrum are the private gatekeepers, who perform their gatekeeping tasks not because they are mandated by law to deter misconduct, but because they are in a position to prevent wrongdoing due to their relation vis-à-vis potential wrongdoers, who need their service to conduct their business. Private gatekeepers face powerful market-based

875 Oh, *Journal of Corporation Law*, 2004, 735, p. 758.

876 *Ibid.*, p. 759.

877 See Laby, *Brooklyn Journal of Corporate, Financial & Commercial Law*, 2006, 119, on the differentiation between dependent and independent gatekeepers.

878 Oh, *Journal of Corporation Law*, 2004, 735, p. 759.

879 *Ibid.*, p. 760.

incentives⁸⁸⁰ to perform gatekeeping functions, i.e. incentives to maximize their own gains against the costs of detection and disruption of misconduct.⁸⁸¹ They are typically employed in the enforcement process when direct deterrence fails to avert a market failure.⁸⁸² Thus, instead of directly deterring the wrongdoer, the private gatekeeper theory aims at deterring the gatekeeper himself, who in turn will be incentivised to deter the potential wrongdoer.⁸⁸³

In the case of private gatekeepers, whose gatekeeping performance is not mandated by legislation, one could speak of implicit gatekeepers. Despite the lack of an explicit duty mandated by law, also from private gatekeepers, it is expected that they will expend efforts to detect and disrupt misconduct in the market where they operate. As already discussed above with respect to the intermediary role of gatekeepers, market actors rely on the information provided by the various private gatekeepers to make their investment decisions. The reputational theory of the gatekeeping model imposes also on the private gatekeepers an enforceable duty to disrupt wrongdoing.

It should be therefore irrelevant for the purposes of enforcing a duty of gatekeeping, and in the same time for the purposes of expecting that this duty will be consciously carried out, whether a subject is a public gatekeeper appointed by law or a private gatekeeper that became such due to the operation of, for example, market mechanisms.

What is relevant is the fact that the gatekeeper subject is an informational and reputational intermediary, on whose information and reputation third parties rely to make important investment and other business decisions. It is this reliance by the investing public that makes the performance by the gatekeeper of their interdicting role an important mechanism in the enforcement practice. Whether they carry out the gatekeeping tasks for free or against payment should not play a decisive role when judging their responsibility or liability towards the public. One could probably say that the gatekeepers have become a “victim” of their own success.

Moreover, the fact whether a subject is a private or a public gatekeeper is irrelevant with regard to the question whether or not such a subject has a duty to perform its tasks with care and professionalism. In either case, it is expected from the gatekeeper that it will perform its duty of disrupting misconduct either by refusing to cooperate from the start or by discontinuing further support for the wrongdoer.

880 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, p. 62.

881 Oh, *Journal of Corporation Law*, 2004, 735, p. 758.

882 Kraakman, *Journal of Law, Economics and Organization*, 1986, 53, pp. 61-62.

883 Coffee, *Columbia Law and Economics Working Paper* Nr. 191, 2001, 1, p. 1.

§ 6 The Nature of Banks

In a perfect world with no information asymmetry and no transaction costs⁸⁸⁴, and where economic actors would have complete confidence on each other, banks would be redundant.⁸⁸⁵ Economic actors, capital-providers and capital-users, would transact directly with each other without the intermediation of a bank. Market information about where to best invest free capital would be available immediately and at no costs, and therefore capital would be used efficiently by investing it there where it is mostly needed as well as economically beneficial. This would result in a balanced supply and demand of capital.⁸⁸⁶ Because of the perfect confidence between the economic actors, the creditor would not need to expend money and time to monitor the behaviour of the borrower, while the borrower would need to provide guarantees to secure the claims of the creditor. Both parties would thus reduce the costs of the transaction and invest the savings in economically beneficial projects.⁸⁸⁷

However, in a real world economy, the role of banks has become an indispensable one, although not irreplaceable.⁸⁸⁸ In its simplest form, a bank is an institution that borrows money from the public in the form of deposits and lends the monies thus raised in the form of credits or loans.⁸⁸⁹ Seen from this consideration, a bank is not only a place of exchange where supply and demand meets, but also a market participant of its own. By accepting deposits from lenders and granting credits to borrowers, banks enter into financial contracts to exchange claims and liabilities with the respective parties, thus it trades with these parties. However, a bank is more than just a vehicle enabling the coordination between the supplier and the users of capital. As a matter of fact, the coordination of capital suppliers and capital users could be performed also outside the banking system, for example in the capital markets.⁸⁹⁰ In the same way, also the allocation of capital function, through which demand and supply of capital is balanced in order to ensure an efficient use of capital is not an exclusivity of banks. Banks, in their role as financial intermediaries⁸⁹¹ in the financial markets perform the functions highlighted above in competition

884 Leland/Pyle, *Journal of Finance*, 1977, 371; Diamond, *Review of Economic Studies*, 1984, 393.

885 Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 306; Hartmann-Wendels et al., *Bankbetriebslehre*, p. 11.

886 The “allocation function” of markets.

887 Zimmer, in: DJT, *Verhandlungen des 68. Deutschen Juristentages*, 2010, p. G14.

888 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 2.

889 Kashyap/Raghuram/Stein, National Bureau of Economic Research Working Paper Series, 1999, p. 1. However, a bank today performs increasingly more complex tasks than simple deposit-taking and lending.

890 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 4.

891 *Ibid.*, p. 3 distinguishes between “financial intermediaries” in the narrow sense of the word and in the broad sense of the word. Accordingly, commercial banks are financial intermediaries in the narrow

with other market players who carry out same or similar functions. It is the purpose of this chapter to present a summary of functions performed by banks seen from the perspective of legal and economic reasons for the existence of banks. However, this chapter does not aim at making yet another contribution to the discussion as to which market player performs more efficiently functions performed also by banks in their role as financial intermediaries.

A. The functions of banks as financial intermediaries

Banking theory and practice sees banks as performing several important business services, such as the provision of capital to enterprises, the offering of investment possibilities, as well as the negotiation, transformation and the taking over of various risks related to crediting activities.⁸⁹² At least two crucial functions of banks derive from such activities. The first function is the provision of liquidity, while the second one relates to the transformation function of banks.

I. The liquidity provision function and the management of the payments systems

Money is provided to the borrowers primarily in two ways: through the capital markets or through banks and other financial intermediaries. The simplistic view of bank presents a financial enterprise functioning as a typical enterprise with a production function, i.e. the production is based on the input-output relation.⁸⁹³ In the case of a bank, deposits accepted from capital-providers represent the input, whereas the credits given to capital-users represent the output. Banks provide liquidity on demand in two ways. First, banks provide liquidity to investors who deposit money with the bank.⁸⁹⁴ By holding deposits banks are required to provide liquidity to the investors who have the right to withdraw the deposits on demand at any time.⁸⁹⁵ Second, banks provide liquidity on demand to borrowers, for example by extending a credit line. By providing liquidity to depositors and to borrowers,⁸⁹⁶ banks provide liquidity on both sides

sense of the word as they accept capital from depositors and give it in the form of credits to entrepreneurs. Unlike commercial banks, investment banks are “financial intermediaries” in the broader sense of the word, because they enable trading in the financial markets between various financial intermediaries.

892 See Bhattacharya/Thakor, *Journal of Financial Intermediation*, 1993, 2, Diamond/Rajan, *American Economic Review*, 2001, 422, and Becker/Peppmeier, *Bankbetriebslehre*, 8. Aufl. 2011 (hereinafter “Becker/Peppmeier, *Bankbetriebslehre*”), p. 22.

893 Although in the case of banks the answer how much output will result from the input is not as straightforward as in the case of a manufacturing enterprise. See Hartmann-Wendels et al., *Bankbetriebslehre*, p. 13.

894 Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 306.

895 Kashyap/Raghuram/Stein, *National Bureau of Economic Research Working Paper Series*, 1999, p. 1.

896 Diamond/Rajan, *National Bureau of Economic Research Working Paper Series*, 1999, p. 2

of the balance sheet.⁸⁹⁷ Actually, there is a correlation between the deposit taking and the lending. According to *Kashyap et al*, the more a bank does deposit taking, the more it will also do lending.⁸⁹⁸ It is by offering both services that bank can make better use of the liquidity they create. However, by accepting deposits and granting credits, banks do accept a mismatch in the terms of structure of its assets and liabilities,⁸⁹⁹ as a result of accepting short-term liabilities against long-term assets. To tackle this maturity mismatch, in order to avoid a liquidity crisis bank need continuous access to funding sources.⁹⁰⁰ The ability of a bank to solve the maturity mismatch between assets and liabilities in its balance sheet points to one the main functions of banks, that of maturity transformation.

Moreover, an indispensable service to the provision of liquidity and to the transformation of maturity is the performance of payment services. Banks manage the payment systems. Due to the interconnectedness of banks, a well-functioning payments system is an important factor to ensure that bank not only provide liquidity on demand, but that banks also avoid insolvency and thus disruptions in the financial markets where the bank fails to manage the maturity mismatch between assets and liabilities for reasons that are external to a bank's business.⁹⁰¹ The quick and reliable electronic transmission of money has become today a cornerstone of economic development. In their role as financial intermediaries, the operation and further development of payments systems constitutes a critical task of banks.⁹⁰²

II. The transformation functions

Banking law and supervision literature⁹⁰³ allocate banks, in their role as financial intermediaries, three so called "transformation" functions: a) liquidity transformation; b) risk transformation; and c) information transformation.

897 Macey/O'Hara, FRBNY Economic Policy Review, 2003, 91, p. 97.

898 Kashyap/Raghuram/Stein, National Bureau of Economic Research Working Paper Series, 1999.

899 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2010, 1, p. 10.

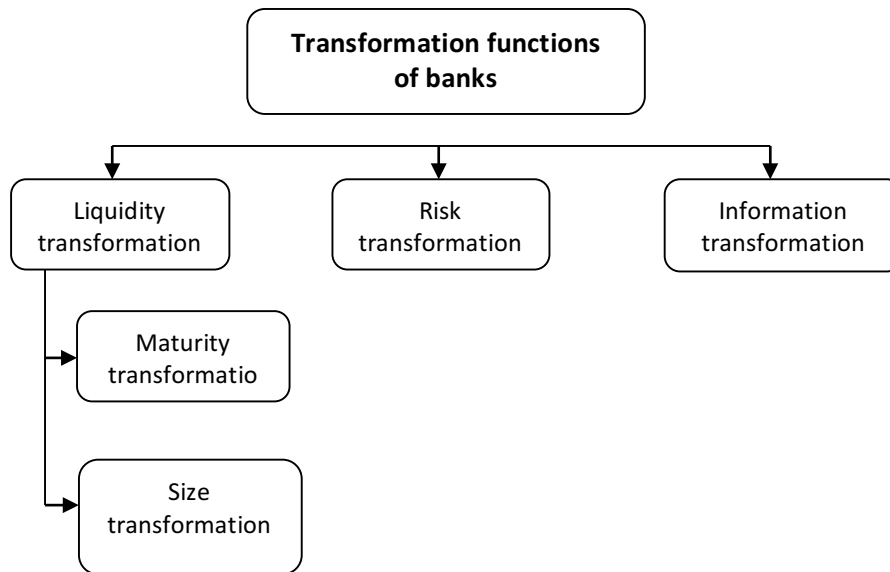
900 These funding sources may include not only deposits, but also inter-bank funding or also funds from a central bank as a lender of last resort. Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2010, 1, p. 10. See also Macey/O'Hara, FRBNY Economic Policy Review, 2003, 91, p. 97.

901 E.g. in case of bank runs due to perceived threat of failures.

902 Becker/Peppmeier, *Bankbetriebslehre*, p. 26.

903 Büschgen/Börner, *Bankbetriebslehre*, 4. Aufl. 2003 (hereinafter „Büschgen/Börner, *Bankbetriebslehre*“); Becker/Peppmeier, *Bankbetriebslehre*; Hartmann-Wendels et al., *Bankbetriebslehre*; Goodhart/Hartmann/Llewellyn/Rojas-Suarez/Weisbrod, *Financial regulation. Why, how and where now?* Repr. 1999 (hereinafter “Goodhart et al., *Financial regulation*”); Allen/Carletti, *Financial Institutions Center Papers*, 2008, Available at <http://fic.wharton.upenn.edu/fic/papers/08/0819.pdf>; Fischel/Rosenfield/Stillman, *Virginia Law*

Figure 1: Transformation functions of banks



1. The *liquidity transformation function*

In the liquidity transformation function, banks appear as vehicles for the management and the steering of capital.⁹⁰⁴ They serve to balance the differing supply and demand for capital. This is necessary when considering that capital investors and the capital users pursue different goals, i.e. investors are more risk-averse and are interested in getting their deposits back on demand therefore preferring short-term investments, whereas the users of capital are more interested in long-term borrowing and in the participation of capital investors in case of default risk.⁹⁰⁵ The liquidity transformation function of banks includes:

a) *Size transformation*

The need for capital by the capital users does not always match the supply of capital by investors. Many individual depositors have smaller amounts of capital to supply while a single entrepreneur needs a large sum of capital, or vice versa.⁹⁰⁶ The volume of capital supplied from the capital demanded may vary and do usually vary. Therefore, a bank can help bring these volumes into a balance through a quantitative adjustment of capital amounts.⁹⁰⁷ A bank can pool together the

Review, 1987, 301.

904 Becker/Peppmeier, *Bankbetriebslehre*, p. 22.

905 *Ibid.*, p. 22.

906 Edwards/Fischer, Banks, finance and investments in Germany, 1994 (hereinafter “Edwards/Fischer, *Banks*”), p. 35.

907 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 14; Becker/Peppmeier, *Bankbetriebslehre*, p. 22.

different needs of capital investors and capital users and realize in this way an efficient allocation of capital.

b) Maturity transformation

The maturity transformation function of banks is described as the function of balancing differing time horizons⁹⁰⁸ as an intermediary between capital investors and capital users. According to this perception, a bank is a mechanism for intertemporal resource allocation.⁹⁰⁹ More specifically, on one side, investors of capital deposit their money in such a way that allows them quick access to their funds when needed. Thus, capital committed to the banks in the form of deposits is often short-term. On the other side, users of capital often wish to borrow long-term, for example when making long-term investments. The function of banks is therefore to transform short-term deposits into long-term credits.⁹¹⁰ Banks benefit from the maturity transformation in that they charge a premium on the capital borrowed by capital users, which is higher than the costs that banks have to pay for their refinancing, for example, through deposits.⁹¹¹ However, maturity transformation brings also risks for banks.⁹¹² Thus, banks need to ensure that there will be no liquidity problems arising during the maturity transformation process.⁹¹³ More concrete, banks face liquidity problems in the case of bank runs, where bank liquid assets are reduced as a result of sudden deposit withdrawals from depositors.⁹¹⁴ Bank runs are exacerbated due to the prisoner's dilemma⁹¹⁵ that dispersed depositors face. Lack of confidence in a bank as well as information asymmetries can make also solvent banks face liquidity risks and consequently insolvency when depositors collectively run to the bank to withdraw their investments.⁹¹⁶ Banks can reduce the risk of withdrawal demands by pooling the deposits of a broad number of capital

908 Büschgen/Börner, *Bankbetriebslehre*, p. 22.

909 Gleeson, *International regulation of banking*, p. 3 “Bank is simply a mechanism by which money is borrowed from the future and lent in the present.”

910 Hopt, European Corporate Governance Institute Working Paper Series in Law, 2011, 1, p. 3; Becker/Peppmeier, *Bankbetriebslehre*, p. 22.

911 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2010, 1, p. 10.

912 Hellwig, *Journal of Institutional and Theoretical Economics*, 1998, p. 329. See also Hellwig, in: DJT, *Verhandlungen des 68. Deutschen Juristentages*, 2010 (hereinafter “Hellwig, in: *Verhandlungen des 68. DJT*”), p. E38 with respect to risks faced by banks in the maturity transformation process in the context of the recent financial crisis.

913 Banks are different from other financial intermediaries in that a high percentage of their liabilities, deposits payable on demand, are liquid, while a high percentage of their assets, long term commercial loans are illiquid. Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 306.

914 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 15; Hopt, European Corporate Governance Institute Working Paper Series in Law, 2011, 1, p. 3.

915 Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 308.

916 Mülbart, European Corporate Governance Institute Working Paper Series in Law, 2010, 1, p. 12.

investors.⁹¹⁷ By pooling the deposits, banks can build up various investment portfolios that will reduce in general the risk coming from maturity transformation.

2. The *risk transformation function*

A bank serves not only as a conduit for passing and creating credit, but also as a vehicle for taking and transforming risk.⁹¹⁸ As a matter of fact the economic existence of a bank itself necessitates the taking of risk for the generation of profit.⁹¹⁹ As financial intermediaries, banks serve to mediate the different risk appetites of capital investors and capital users. More precisely, in performing the risk transformation function, a bank needs to transform unsure credits into sure deposits. Capital investors wish to invest their funds in secure deposits, carrying if possible no risk. However, the users of capital cannot provide the owners of capital with a risk free investment. They can offer to the capital investors only a promise to pay, which the capital investors, due to their strong risk-aversion would not be willing to accept.⁹²⁰ As a result capital would not be allocated for economically beneficial projects.⁹²¹ In these circumstances banks step in to address the discrepancies in the wish for risk-taking, by taking the role of a risk intermediary. In this way, banks are on the one side willing to offer depositors almost sure deposits by reducing substantially the default risk that depositors would face should they deal directly with the borrower and on the other side they willingly accept the borrower's unsecure promise to pay in return for a premium on the capital lent to them.⁹²²

The process of risk transformation presents banks with risks⁹²³ the management of which is realized through a variety of mechanisms, such as i.a. risk diversification among borrowers, bank's own equity capital, and credit rating and monitoring mechanisms.

917 Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 307.

918 Gleeson, *International regulation of banking*, p.3; Baltensperger/Milde, *Theorie des Bankverhaltens*, 1987 (hereinafter "Baltensperger/Milde, *Bankverhalten*"), p. 5.

919 Gleeson, *International regulation of banking*, p. 4.

920 E.g. private persons and newly established enterprises would have major difficulties to obtain credits due to their higher credit risk. Becker/Peppmeier, *Bankbetriebslehre*, p. 24.

921 This simplistic explanation of the risk transformation function of banks, where capital investors are pictured as highly risk-averse investors, is only for expositional purposes to explain the role of banks in mediating the differing risk wishes of capital investors and capital users. In a real case scenario, capital investors are willing to accept and usually do accept a certain risk for their deposits. For example, although bank deposits are not 100 percent insured to whatever amount, depositors still deposit money with a bank beyond the amount insured by deposit insurance schemes.

922 Diamond and Dybvig emphasize this economic role of banks calling it the "transformation of illiquid assets into liquid liabilities". See Diamond/Dybvig, *Journal of Political Economy*, 1983, 401, p. 402.

923 Hellwig, *Journal of Institutional and Theoretical Economics*, 1998, p. 329.

3. The *information* transformation function and the reduction of information assymetries

In the absence of banks, the capital investors and the capital users would have to expend financial resources as well as time to collect information about the market partner with whom they would like to enter into a financial contract. Capital investors would need to collect information not only regarding the size and the maturity of the capital preferred by the capital user, but also about his creditworthiness, i.e. their ability to repay the lent capital. These information costs would increase substantially the higher the number of capital investors or capital users is. Each capital investor would wish to get informed about the financial situation of the capital user before deciding to lend him capital. In a scenario with a high number of small capital investors, the incentive to collect information about the capital user is low due to higher costs that would not justify the value of their investment. Additionally, free riding would exacerbate the collective action problems faced by these investors. Further, capital users on the other side would need to expend efforts, in the form of time and money, to convince each capital investor individually about the ability to repay the funds when due. Information asymmetries would be prevalent in this setting, adding more to the costs that each party has to pay for entering into a contract. Under these circumstances, information costs would spike, when taking into consideration also the costs for negotiating the financial contract. To address the need of capital investors and capital users for information, banks intervene to bundle the information supplied by each party in order to obtain a clearer view of their financial needs and financial situation. As a financial intermediary, a bank steps in as a market player of its own to replace both, either the multitude of capital investors or the multitude of capital users. More specifically, informational needs of capital investors are transformed⁹²⁴ in that they do not need to collect information about the capital users, but only about the bank. In the same way, capital users do not need to convince the capital investors individually about their ability to repay the funds, but only the bank. Therefore, banks play an important role in reducing information costs for both depositors and borrowers.

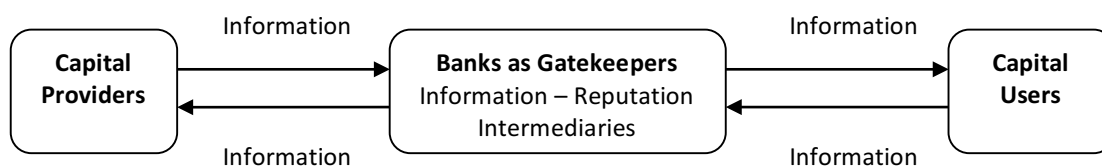
Moreover, banks contribute also in the reduction of information asymmetries that arise between depositors and borrowers. Because the depositors cannot check the accuracy and adequacy of information supplied by the borrower without incurring high costs,⁹²⁵ they rely on banks to perform this function. Banks are better placed to perform this function because of the infrastructure they possess, for example rating or monitoring systems, but also due to their

924 Büschgen/Börner, *Bankbetriebslehre*, p. 21.

925 As indicated above, these costs can be both in time and money, but can also be in the form of costs for acquiring the needed expertise to assess the information supplied by borrowers.

expertise in assessing borrower-supplied information. Consequently, they can lend more efficiently to borrowers than depositors would do. By reducing information costs, banks contribute also in the reduction of transaction costs between the capital investors and capital users.⁹²⁶ According to *Fischel*, banks owe their existence to information and transaction costs.⁹²⁷ Their very *raison d'être* could well be the role that banks play in mitigating information asymmetries by performing screening and monitoring of borrowers.⁹²⁸ This however indicates another function that banks perform, namely the selection function. While serving as a financial intermediary, banks can limit the participation of certain market players into a financial transaction. More concrete, banks would bring together only those capital investors and capital users that meet certain requirements regarding, for example, the creditworthiness of the borrower. Banks become in this way informational intermediaries serving as a channel for communication, but in the same time also checking the accuracy and adequacy of that information. In carrying out these actions, banks are transformed into gatekeepers. They verify and certify the information of would-be market participants to decide whether to allow them access to the financial resources. The credibility of bank's actions as a gatekeeper relies on bank's reputation. This argument is strengthened by the fact that banks are reputational institutions, which depend on market confidence to avoid phenomena, such as bank runs and contagion risks that would put their existence into danger. The existence and maintenance of reputation is critical for informational intermediaries to remain credible vis-à-vis the market and their customers. Hence, in performing information transformation functions, banks serve as informational as well as reputational intermediaries. In this way, banks can credibly reduce information as well as transactions costs between the capital providers and the capital users. A more detailed analysis of the gatekeeping role of banks follows in the next chapter.

Figure 2: Banks as gatekeepers: informational and reputational intermediaries



926 Baltensperger/Milde, *Bankverhalten*, p. 5.

927 Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301, p. 306. See also Baltensperger/Milde, *Bankverhalten*, p. 5.

928 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 7-8.

B. Are banks special and if yes, why so?

It was noted earlier that banks are mechanisms for taking risks in order to generate profits. In this sense, banks are no different from any other business entity. Increased profits would come at the expense of increased risks.⁹²⁹ This is however not a particularity of banks only. Further, banks borrow from depositors and lend to borrowers needing capital. As it was already highlighted above when discussing the risk transformation function of banks, it is almost sure that banks would have to repay the deposits, but it is not sure whether the borrowers will repay them.⁹³⁰ This can pose critical problems for banks, which could result in insolvency. However, the risk that the counterparty will not perform fully its financial obligations, which in the case of banks is known as the credit risk, is not limited only to banks. Also non-financial businesses face the risk that once they have their part of the contract, the counterparty will not deliver the respective product or will not pay for the product obtained. Moreover, when a bank goes insolvent for reasons related or not to its business decisions, not only the bank shareholders face losses, but also a large number of bank depositors face the prospect of losing a part of their investment.⁹³¹ Even in this case, the risk of losses faced by creditors, in the bank's case the depositors, is not a phenomenon limited to banks only. Also when a non-financial firm suffers insolvency, the creditors of the firm will suffer losses when the firm lacks sufficient assets to meet the liabilities.

Nevertheless, despite showing similar characteristics with other non-financial firms, banks are heavy regulated institutions, subject to many regulatory requirements that norm in detail the way how banks are founded, how they are managed, how they take risk as well as how much risk they're allowed to take, and recently even how banks should "die" by describing this in their "living wills."⁹³² So what makes banks indeed special that necessitates a special regulation for them?

There are four characteristics⁹³³ about the nature of banks and how they operate that assign them a special importance and make them subject to public sector regulation.

929 Gleeson, *International regulation of banking*, p. 4. Tarullo, *Banking on Basel*, p. 17.

930 Gleeson, *International regulation of banking*, p. 4.

931 Normally, bank deposits are guaranteed up to a certain amount.

932 Financial Stability Board (former Financial Stability Forum), *Reducing the Moral Hazard Posed by Systemically Important Financial Institutions*, 2010, Available at www.financialstabilityboard.org/publications/r_101111a.pdf, p. 2. See also Hughes FT vom 13.10.2011.

933 See also Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2010, 1, for a catalogue of bank characteristics that distinguishes banks from non-financial firms.

I. Bank's crucial role in the payments systems

As financial intermediaries, banks not only serve as a major source of capital for a large number of borrowers, but they also operate and manage the systems for making possible the payments of such funds as well as other payments to and from borrowers.⁹³⁴ Were these systems to suffer interruption or collapse, the consequences would be serious not only for the banking system, but also for the real economy, which relies on capital supply by banks and on a frictionless transfer of payments to meet its financial obligations.

II. Banks are prone to runs and contagion problems

Banks are reputational intermediaries that rely substantially on the confidence of the markets and of their customers for the frictionless performance of their functions and operations. Moreover, ensuring the confidence of the markets and of their customers is for banks a matter of existence. The high-sensitivity to the volatility in confidence is to be traced back to the problem of information asymmetries that banks are subject to. As already briefly mentioned above, the role as well as the existence of banks can be explained under the assumption of information asymmetries and imperfect markets.⁹³⁵ Although banks as financial intermediaries contribute in reducing informational asymmetries between the providers and the users of capital, banks could face difficulties to transmit credible information to the markets or its customers when such transmission of information would be essential for its existence. Thus information asymmetries arise between the bank on one side and the markets and depositors on the other, which when not adequately and timely addressed could threaten the existence of banks. More specifically, it is suggested that bank's balance sheets are notoriously opaque and the quality of their assets, mainly loans, is not readily observable or measurable.⁹³⁶ A typical feature of financial contracts is that the exchange of performances between the contractual parties does not take place simultaneously.⁹³⁷ Financial contracts offered by banks have the same feature. Namely, banks offer near-certainty full-money deposits on the basis of assets with uncertain value⁹³⁸ because the repayment of loans is not guaranteed. The future performance of these contracts is unsure and entails risks that banks need to assess. However even banks themselves

934 Goodhart et al., *Financial regulation*, p. 11.

935 See Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301. See also Goodhart et al., *Financial regulation*, and Hartmann-Wendels et al., *Bankbetriebslehre*.

936 Morgan, *American Economic Review*, 2002, 874, p. 881. See also Mülbert, *European Corporate Governance Institute Working Paper Series in Law*, 2010, 1, p. 11.

937 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 98.

938 Goodhart et al., *Financial regulation*, p. 11.

find this assessment sometimes very difficult.⁹³⁹ This “black-box” nature of banks makes them susceptible to losses in cases of confidence fluctuations.⁹⁴⁰ As a result banks suffer runs, which due to contagion fears could spread to other banks as well. Depositors, rational or irrational, demonstrate in these situations herd behaviour, irrelevant whether the failure of a bank is real or only perceived. The contagion problem is exacerbated further due to the interconnectedness of banks in a financial system through inter-bank loans and the payment system.⁹⁴¹ Thus, it becomes clear that the failure of one bank could wreak havoc in the whole financial system and cause systemic failure, and risks spilling over into other markets as well.

III. The nature of bank contracts

The nature of bank contracts is such that the repayment of the deposits by banks, in the time and amount demanded by the depositor, does not depend from the performance of the bank and the value of its assets.⁹⁴² Apart from the one feature of financial contracts referred to above, namely that the performances of contractual parties do not occur simultaneously, a second feature of financial contracts is that the repayment of loans by the users of capital is influenced by a number of factors the characteristics of which are not wholly known to the providers of capital.⁹⁴³ Hence, the value of bank assets is uncertain. Coupled with problems of information asymmetries already explained earlier, banks will face difficulties to dispose of assets, where the customer-specific information is difficult to evaluate. As a result, even solvent banks from a balance-sheet perspective, could run into difficulties and may be forced to sell assets at a loss.⁹⁴⁴ Fire-sale of bank assets could bring about not only the insolvency of an otherwise solvent bank, but also depress assets prices in general, thus causing major losses not only to financial institutions but also to individuals.⁹⁴⁵

939 Mülbert, European Corporate Governance Institute Working Paper Series in Law, 2010, 1, p. 11.

940 Morgan, *American Economic Review*, 2002, 874, p. 874.

941 Diamond/Dybvig, *Journal of Political Economy*, 1983, 401, p. 401.

942 Goodhart et al., *Financial regulation*, p. 11.

943 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 99.

944 Goodhart et al., *Financial regulation*, p. 11.

945 E.g. when bank fire-sales immovable properties used as collateral in mortgage loans, a general fall in asset values will result, and individuals who have borrowed using their immovable property as collateral will suffer losses in the form of higher costs for serving the loans. Such was for example the case in the US during the last financial crisis, where the housing market was suddenly saturated with houses which banks had repossessed from borrowers who could not repay their loans.

IV. Banks are subject to moral hazard problems

It was earlier explained that banks are subject to contagion risks and bank runs, which can cause banks to collapse and in worst cases could also lead to the collapse of the whole financial system. To prevent this kind of collapses with devastating consequences for the depositors, safety nets⁹⁴⁶ are put in place by the state or by the banks themselves that insure that repayment of deposits. However, these safety nets are not without costs. They create moral hazards for banks as well as for the depositors. For banks, because their participation in the safety nets is in the form of deposit insurance schemes through fixed premia which does not reflect the risk level of their banking operations. For depositors, the moral hazard comes in the form of lower incentives to monitor the bank. When depositors obtain full insurance for their deposits, they have none or little incentives to monitor the behaviour of the bank, and eventually to take measures to discipline the bank when it behaves opportunistically.

Additional moral hazards are created because of the wrong expectations regarding the health of a bank that is supervised through a public regulatory body. Thus, when a bank is established and adopts the regulatory rules regarding its operations, there is an understanding both on the side of the banks and the bank's creditors that from that moment on the monitoring of the bank's activities is done by the regulatory body. One talks of an implicit contract, between the regulatory authority and the provider of the financial services, the bank in our case.⁹⁴⁷ The expectation is thus created that as long as the bank is authorised and supervised by the regulatory authorities, the bank is safe. Therefore, the consumers of the financial services provided by the banks do not need to exert care to monitor the behaviour of the bank. Implicit contracts create moral hazard problems also for banks. Thus, when banks perform their operations by simply adhering to the regulatory requirements established by a regulatory body, the danger exists that banks will adopt a box-ticking rather than a prudent approach to the carrying out of their business. A box-ticking approach would result in a mechanical adherence to the rules and create the impression that as long as the single rules are adhered, the institution is safe. This kind of approach would reduce the incentive of banks for a more proactive attitude towards banking regulation and would create a false sense of security in bank's solvency. This risk, when coupled with implicit "too-big-to-fail" guarantees, creates even bigger moral hazard problems typically for large and systemically important banks. The expectation that public funds will come at the rescue of failing systemically important banks, because as the term denotes, the fall of such a bank would endanger the stability

946 E.g. deposit insurance schemes.

947 Goodhart et al., *Financial regulation*, p. 15.

of the financial system, creates negative incentives for opportunistic behaviour by banks.⁹⁴⁸ Larger banks, believing in their own invulnerability will expand their risky activities whereas medium-size banks will increase their risky activities and their balance sheets in order to join the club of ‘specially treated banks’. The principle of limited liability serves only to exacerbate this problem. The result could be a more fragile financial system prone to systemic crises.

C. Banks as critical factors for the stability of the financial system

From the presentation above of the four characteristics regarding the nature of banks one realizes that all these characteristics have one thing in common: namely the potential for destabilising the financial system when banks fail to behave appropriately in the light of these characteristics. The stability of the financial system requires stable financial institutions⁹⁴⁹ that form the structure of the system. This is not to say that the guarding of the financial system stability is solely a matter of guarding exclusively the stability of banks.⁹⁵⁰ However, failures particularly of large banks could result in a cascade of other defaults and consequently endanger the whole system.⁹⁵¹ Banks therefore constitute a crucial element of the financial system, and therefore their stability receives a particular attention.

I. Defining financial stability

Financial literature defines three key functions that a financial system needs to perform satisfactorily and simultaneously for the system to be considered as stable.⁹⁵² All these three functions are closely related to the functions performed by banks as financial intermediaries. More specifically, these three functions include: (1) the efficient and smooth intertemporal allocation of resources from capital savers to capital users (size and maturity transformation function of banks); (2) forward-looking risk assessment and management (the risk transformation function of banks); (3) comfortable absorption of financial shocks (risk transformation and management function of banks).

948 *Ibid.*, p. 58: “Like or not, the doctrine of too big to fail is perceived as a central plank of the current financial system.”

949 Patra, *Economic and Political Weekly*, 2003, 2271, p. 2273.

950 Allen/Wood, London School of Economics Financial Market Group Special Paper Series, 2005, 1, p. 9. Additionally, the recent financial crisis showed that due to the interconnectedness of various financial institutions through the invention of complex financial products or through the advancement of credit risk transfer methods, such as e.g. securitization, the instability of financial institutions other than banks, e.g. insurance companies, almost provoked a standstill of financial activity risking to destabilise the financial system at large.

951 Patra, *Economic and Political Weekly*, 2003, 2271, p. 2273.

952 Schinasi, *Safeguarding financial stability. Theory and practice*, 2006 (hereinafter “Schinasi, *Financial stability*”), p. 82.

In a definition of systemic risk by the Group of Ten Report, the adverse real economic effects from systemic risks⁹⁵³ were considered as arising from disruptions to the payments systems, to credit flows, and from the destruction of asset values.⁹⁵⁴ All these three adverse effects are strongly related to the well-performance and stability of banks, the occurrence of which could bring about serious repercussions for the stability of the financial system.

II. Financial system stability as a public good

Although discussions about collective or public goods do not usually refer to the financial sector,⁹⁵⁵ arguments about the positive and negative externalities of the stability or instability of financial institutions on the public interest form the basis for a special regulation of these institutions. Problems that are characteristic of financial institutions, such information asymmetries and moral hazard pose serious dangers to banks because the way how these problems are handled has repercussions for the rest of the system.⁹⁵⁶ According to a simple case scenario, the insolvency of a bank could cause the insolvency of other banks due to domino and confidence effects. Bank runs and bank panic considerations, as well as breach of confidence between market players could result in a breakdown of financial intermediation, the direct effects of which would be felt also in the real economy in the form of less capital for investment and job creation.⁹⁵⁷ The current financial crisis that started to materialise in the early 2008 is a point in case as it showed how financial instability exacerbated due to confidence concerns spilled over into the real economy because of the credit crunch that resulted when banks stopped lending not only to each other but also to the corporate as well as other type of borrowers. In this respect, financial stability as a collective good is not a particular good or service that is sold and bought, but is rather a system, where banks are a particular part of it.

1. Defining public goods

As an extreme form of positive externality, a public good has two distinctive characteristics: (1) non-excludable in supply; and (2) non-rival in consumption.⁹⁵⁸ The first characteristic, non-excludable in supply implies that the producer of the good cannot exclude anyone from

953 Understand financial system instability.

954 Group of Ten, Report on consolidation in the financial sector, 2001, p.126.

955 They do usually refer to e.g. national defence, maintenance of social law and order, redistribution of resources to achieve social justice, etc. See Schinasi, *Financial stability*, p. 51.

956 Patra, *Economic and Political Weekly*, 2003, 2271, p. 2273.

957 Crockett, *Journal of Banking and Finance*, 2002, 977, p. 979.

958 Schinasi, *Financial stability*, p. 50.

benefiting from the consumption of the good.⁹⁵⁹ This is so because the producer cannot control who is benefiting, as such control would be either impossible or prohibitively costly. The second characteristic, non-rival in consumption means that the consumption of the good by one person does not affect the benefits in consuming the same good by others. Thus, the same good is provided to an additional consumer at zero costs.⁹⁶⁰ With these considerations in mind, financial stability is a public good. When the financial system is stable, the supply of benefits from stability is non-rival in that it is irrelevant how many persons profit from its consumption. The stability of the system does not depend on how many persons make use of it, but rather whether the elements that make up the system function appropriately. Moreover, no one can be excluded from accessing the benefits resulting from financial stability. As a public good, financial stability impacts not only the financial system but also the real economy. Therefore, no one can be excluded from enjoying the benefits of a stable and efficient economy.⁹⁶¹

Further, not only the provision but also the maintenance of financial stability is a public good. It was mentioned earlier that financial systems are prone to confidence and domino effects. The costs, both public and private, from an instable or collapsed financial system are higher than the costs for ensuring its stability. Therefore it is in the interest of everybody that stability is maintained. However, a distinctive characteristic of public goods is free riding. Everyone agrees that financial stability is a public good, but due to high private costs included in providing systemic stability, everyone expects that someone else will take care of that. Hence, everyone wants to enjoy it, but no one wants to pay for it. The actions that individuals take, reflect their own personal interests, although these actions have direct or indirect repercussions on the whole system. However, even when financial stability is provided by one particular individual, due to free riding, all individuals will reap the benefits from it without diminishing the value of it.

2. Banks as providers of public goods

Finance is about uncertainty and risk, because it is based upon a not-so-stable foundation, such as human trust. The stability of the financial system is therefore strongly dependent on the confidence of the participants in the well performance of the system. One of the most important participants of the financial system, banks, is itself subject to confidence effects. Serving as an intermediary between capital savers and capital users, they rely on the trust of their depositors

959 *Ibid.*, p. 50.

960 *Ibid.*, p. 50

961 *Ibid.*, p. 58.

to enable them to perform their functions adequately, ensuring in this way a stable banking system, and consequently a stable financial system.

Further, banks rely also on the promise of its borrowers to meet their repayment obligations when they fall due. However, a promise is never a sure thing, and it can be broken. A broken promise means risks for banks. Therefore, banks have developed ways to identify, quantify and transform such risks in order to efficiently spread them so that they will not endanger their existence. Although, these mechanisms for identifying, quantifying and transforming these risks are not and cannot be perfect, they play an important role in mitigating the information asymmetries between capital savers and capital users, and thus enable the use of free capital for economic beneficial projects. When banks are able to identify, quantify and transform risks adequately they contribute to the stability of the system; they become a source of financial stability. If financial stability is a public good, then banks are providers of public goods.

The reverse is true when banks fail to perform adequately those functions. Failure to adequately identify and price risk, as well as failure to carefully monitor the performance of capital users in meeting their repayment obligations can have negative repercussions not only for the bank alone, but as it was argued above, also for the whole financial system and beyond. Thus, banks could become also a source of instability. Therefore, one could say that the performance of banks with respect to the stability of the financial system could be a “maker or breaker” for the system. It is for this reason that banks, as significant participants of the financial system, are delegated the important role of ensuring financial stability.

§ 7 Banks' incentives as financial intermediaries to monitor borrowers

In the previous chapter it was explained that banks are financial intermediaries who typically serve as middlemen between the capital savers and the capital users. Through debts contracts which, they issue to investors when they borrow capital (in the form of bank deposits) and the debt contracts they are issued by a diversified category of borrowers that they fund through bank loans, banks perform a number of transformation functions.⁹⁶² These transformation functions allow for an efficient resource allocation in the economy. Further it was also mentioned that banks dedicate their existence to information asymmetries and market imperfectness. More specifically, financial intermediation by banks is justified on the basis that banks are in a position to reduce information asymmetries between investors and borrowers, and are able to produce information needed for entering a debt contract as well as for monitoring it at a lower cost than it would be the case if the investor contracted directly with the borrower. This is also the core of the financial intermediation theory as developed by *Diamond*⁹⁶³. *Diamond* suggests that financial intermediaries, such as banks, have an advantage in performing monitoring at a lower cost because of their ability to collect borrower-related information in a cost-effective way.⁹⁶⁴ Banks become in this way “delegated monitors” on behalf of the investors. The purpose of this chapter is to investigate more specifically the reasons why banks may make better monitors. The results of the investigation will be used later when looking at the role of banks as gatekeepers in general, and as gatekeepers in the financial system in particular.

A. Banks as “delegated monitors” on behalf of investors

The theory of financial intermediation is founded on the premise that the intermediary has an advantage in the cost production of information as well as in monitoring costs.⁹⁶⁵ More specifically, in the presence of symmetrical information and perfect market conditions with monitoring costs close to zero, the role of intermediaries would be made redundant and the capital users could contract directly the capital savers for obtaining investment capital. This form of direct contracting takes place also in the presence of information asymmetries and imperfect market conditions, but it is limited primarily to a “one capital saver – one capital user” context

962 Diamond, FRBR Economic Quarterly, 1996, 51, p. 52.

963 Diamond, Review of Economic Studies, 1984, 393.

964 *Ibid.*, p. 393. See also Chemmanur/Fulghieri, Review of Financial Studies, 1994, 475, p. 476.

965 See e.g. Leland/Pyle, Journal of Finance, 1977, 371,; Chan, Journal of Finance, 1983, 1543; Harris/Raviv, Journal of Economic Theory, 1979, 231; Holmström, Bell Journal of Economics, 1979, 74; Shavell, Bell Journal of Economics, 1979, 55; Diamond, Review of Economic Studies, 1984, 393; Diamond, FRBR Economic Quarterly, 1996, 51. For German literature see Hartmann-Wendels et al., *Bankbetriebslehre*; Büschgen/Börner, *Bankbetriebslehre*.

and it is not viable for a bank⁹⁶⁶. In a different context, namely where an investor needs capital sums which exceed the savings of a single depositor, the investor would need to contract simultaneously with many depositors to obtain the needed capital. The same conditions apply also in a scenario where no depositor would be willing to invest large sums of capital with a single investor for fear of suffering major loss in case of insolvency, and therefore he takes measures to diversify its investment. In these scenarios, information costs for investors would become prohibitively high. The higher the number of lenders, the higher also the costs for the production of information, which the investor might need to personalize according to the demands of the lenders. In a multiple-lenders scenario, the costs for monitoring the investor could increase substantially too if each lender would monitor individually.⁹⁶⁷ Alternatively, due to potential high monitoring costs, the lenders might attempt to free-ride on each other, in which case little or no monitoring would take place.⁹⁶⁸

With these considerations in mind, a cooperation problem⁹⁶⁹ between investors and depositors would arise as a result of a lack of trust on the will and capacity of the investor to make good on its promise to repay the loan. The existence of the cooperation problem would inhibit the efficient use of free resources for economically beneficial projects, and as a consequence both, investor and depositor would suffer. Therefore, they are both interested in finding a solution that would reduce information asymmetries. Financial intermediaries, such as banks, help mitigate or eliminate this problem because of the cost advantages they enjoy with respect to collecting the information needed to exercise borrower monitoring and to enforce debt contracts.

According to the model presented by *Diamond*, in order to reduce altogether monitoring costs, the reasonable thing for multiple lenders to do is for some lenders to monitor on behalf of others.⁹⁷⁰ This is also the situation with a bank where depositors hold deposits. The bank provides intermediary services and monitors on behalf of bank depositors the borrowers who borrow from the bank.⁹⁷¹ More specifically, the bank raises funds from the savers and pays them returns, while

966 Diamond, *Review of Economic Studies*, 1984, 393, p. 400.

967 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 96. "Verschiedene Personen oder Institutionen können unterschiedlich viele Informationen über entscheidungsrelevante Sachverhalte besitzen."

968 Diamond, *Review of Economic Studies*, 1984, 393, p. 393. See also Hellwig, in: Giovannini/Mayer, *Financial Integration*, p. 46.

969 Hartmann-Wendels et al., *Bankbetriebslehre*, p. 109.

970 Diamond, *Review of Economic Studies*, 1984, 393, p. 394.

971 Edwards/Fischer, *Banks*, p. 36 reasons that there should be economies of scale in the acquisition of information for the purposes of deciding which firms should obtain funds and for monitoring these firms once the funds have been provided.

it supplied the raised funds to firms and spends resources to monitor and enforce financial contract with borrowing firms which are more efficient than those contracts without monitoring.⁹⁷² Therefore, it can be said that banks are delegated the task of costly monitoring of loan contracts written with investors who borrow from it.⁹⁷³

I. The agency relations of banks

Although on the one side delegating monitoring to one agent reduces monitoring costs because it avoids duplication, on the other side it causes incentive problems for the delegated party.⁹⁷⁴ Providing the appropriate incentives for the delegated party to exert monitoring are the costs related to delegation. Therefore for the delegated monitoring to function properly, these incentive issues for the delegated party need to be addressed before. These incentive issues arise out of the agency relations⁹⁷⁵ that banks have respectively with the investors and with the depositors.

First, banks stand in an agency relationship with the depositors, where the bank is the agent and the depositor is the principle. The main problem in such an arrangement is for the depositors to ensure that the bank would be able to repay them the money with the interest agreed as well as pay the deposited funds on demand when the depositor so wishes. The depositor would not have to monitor the performance of the investor who borrows capital from the bank, as this monitoring is done now by the bank as a financial intermediary, but the depositor would need to monitor the performance of the bank as its agent. However, as long as the depositor's claims (i.e. deposits) are (almost) risk free, the depositor does not need to expend resources to monitor the bank, because the bank bears full responsibility for the borrower's failure.⁹⁷⁶ Depositors can "issue" debt contracts to borrowers without having to monitor neither the borrower's actions directly, nor its soft or hard information.⁹⁷⁷ In this agency arrangement, it is considered efficient for the depositors to employ a financial intermediary to monitor the investor, as in this case the depositors do not have to monitor neither the investor, nor the bank. As already explained in the previous chapter, current banking regulation⁹⁷⁸ that aim to ensure the stability of the financial

972 Edwards/Fischer, *Banks*, p. 37.

973 Diamond, *Review of Economic Studies*, 1984, 393, p. 399.

974 Diamond, *FRBR Economic Quarterly*, 1996, 51, p. 59.

975 See articles by Harris/Raviv, *Journal of Economic Theory*, 1979, 231; Holmström, *Bell Journal of Economics*, 1979, 74; Shavell, *Bell Journal of Economics*, 1979, 55.

976 Diamond, *Review of Economic Studies*, 1984, 393, p. 402.

977 Diamond, *FRBR Economic Quarterly*, 1996, 51, p. 55.

978 Especially regulation with regard to the deposits insurance schemes and the lender of last resort approach of central banks when large banks considered as too big to fail face financial liquidity

system create incentives for the depositors not to engage in monitoring⁹⁷⁹ the financial intermediaries, because their deposits with the banks are almost risk free. However, the question arises about what incentives banks have to monitor on behalf of the depositors when the latter does not share in the risk of borrower's failure. This question is answered when considering the second agency relationship where a bank is in the role of the principal. This is the agency relationship between the bank and the borrower. In this arrangement the main issues for a bank are the classical ones: namely, that it needs to ensure that the borrower will not cheat ex-ante on the information regarding the ability to repay the loan and on the chances of the investment project to succeed, as well as that the borrower will not behave opportunistically ex-post by pursuing projects riskier than what was agreed ex-ante. To ensure the repayment of the loan, the bank needs to monitor the borrower both ex-ante and ex-post. Because the bank will bear the full responsibility for the failure of the borrower and risk liquidation in order to repay the depositors, banks have an incentive to monitor the borrower. Liquidation is a suboptimal solution for the bank, among others, also because bank's assets in liquidation are worth less than when bank is a going concern.⁹⁸⁰ Therefore, when liquidation is a credible threat, banks will try to avoid it by monitoring to ensure the debtor will repay.

However, not only the threat of liquidation provides the necessary incentive for the banks to monitor. Bank's ability to diversify will reduce the probability of liquidation by cross-subsidizing the losses from non-performing loans with performing loans.⁹⁸¹ The more sufficiently diversified a bank is, the lower will the liquidation probability be, with liquidation costs reaching zero when a bank is perfectly diversified.⁹⁸² When liquidation costs are close to zero, banks will obtain net profits by providing low cost delegated monitoring.⁹⁸³ Therefore, banks benefit also financially from delegated monitoring through portfolio diversification. With these considerations in mind, it seems logical that banks as financial intermediaries have an interest to monitor the borrowers on behalf of the depositors.

problems.

979 Furfine, *Journal of Business*, 2001, 33, p. 35.

980 Goodhart et al., *Financial regulation*, p. 11.

981 Diamond, *FRBR Economic Quarterly*, 1996, 51, p. 62.

982 See model by Diamond in Diamond, *FRBR Economic Quarterly*, 1996, 51.

983 Diamond, *Review of Economic Studies*, 1984, 393, pp. 409-10.

II. Delegated monitoring in a multiple-principals agency relationship

The model above presents an agency relationship where the bank is the single principal. In this agency relationship, banks alone obtain the benefits from the improved monitoring of borrowers. However, in a real case scenario, banks are not the only principals of a borrower.⁹⁸⁴ A single borrower may have many principals in the same time, whose claims vary in size as well as in maturity. This is the case for example when a firm engages with multiple lenders or when it borrows from a bank and in the same time borrows through contracting with other third party creditors, such as suppliers, employers, etc., for other services or goods. In these scenarios free-riding problems are widespread and could affect the quality of monitoring by banks, as the benefits from qualitative monitoring accrue to all creditors, whereas the costs are primarily borne by banks. For the purposes of understanding the role of banks as delegated monitors also in these cases, it is important to look into the incentives of banks to monitor a borrower in the presence of additional principals.

1. “One bank, several third party creditors” scenario

In such a scenario, a debtor firm has a borrowing relationship with a single bank, and in the same time it maintains various contractual relations with third party creditors, most typically with various suppliers of goods and services, and certainly with employees. In this type of creditors’ constellation, banks are typically larger creditors holding claims that are large in size⁹⁸⁵ and often longer in maturity.⁹⁸⁶ Because of these characteristics, banks are frequently secured creditors, i.e. they obtain collateral or security interests as a means to ensure the repayment of the loan. According to *Levmore*, it is the holding of security interests on the debtor’s assets that helps banks to mitigate free-riding problems related to the monitoring of the debtor firm.⁹⁸⁷ Especially smaller creditors who own claims that are comparably small to bank’s claims face strong free-riding problems, because the size of their claims does not justify the monitoring costs. Therefore, these smaller creditors prefer to rely on the monitoring of larger creditors, such as banks. As secured creditors, bank’s interests are directly connected to the availability and quality of the debtor’s assets and therefore they are incentivized to monitor the firm’s assets, although the benefits from such monitoring accrue as a matter of fact to all the creditors,⁹⁸⁸ including those

984 Kahn/Mookherjee, *RAND Journal of Economics*, 1998, 443, p. 443.

985 Compared to claims held by suppliers.

986 Although this is not always the case. For example, retirement claims held by employees are normally longer in maturity than bank loans.

987 *Levmore*, *Yale Law Journal*, 1982, 49, p. 56.

988 For example, all the creditors of a debtor firm benefit from a reduction in the overall insolvency risk of the firm.

creditors who do not expend efforts to monitor. In this way, banks perform delegated monitoring on behalf of third party creditors too, although the delegation is implicit rather than explicit.

However, it would be exaggerated to point here to an altruistic behaviour of banks in performing delegated monitoring also for third party creditors, despite the fact that also the latter benefit from such monitoring. The lack of altruism by banks in providing monitoring is most probably to be observed in the quality of the monitoring that banks provide. Simply the fact that banks have an incentive to monitor the debtor does not necessarily warrant for a qualitative monitoring that would benefit all creditors, despite the fact that banks appear to be qualified monitors, as they possess financial expertise, are experienced in financial transactions and enjoy economies of scale in producing information needed for monitoring.⁹⁸⁹ Simply the freedom from free-riding problems may not provide an incentive sufficiently strong for banks to perform quality monitoring.⁹⁹⁰

Nevertheless, as a summary, it can be said that even in the presence of several principals acting as creditors of a borrower, banks as major principals have incentives to monitor the borrower. Bank's financial interests in the borrower are usually sufficiently large to overcome free-riding temptations and to warrant borrower monitoring, despite the possibility that benefits from such monitoring will accrue to the remaining creditors who are not willing to expend resources for adequate debtor monitoring.

2. “Several banks, several third party creditors” scenario

Under this scenario, the debtor firm has multiple lending relations with several banks, and in the same time maintains contractual relations with various third party creditors as in the previous scenario. Third party creditors are left out of the analysis in this scenario, because it is assumed that they, as in the previous scenario, benefit from the monitoring carried out by banks. In this second scenario, it is particularly relevant to understand whether, and if yes, how banks coordinate with one another to monitor the debtor firm, assuming that they are all secured creditors. It seems fairly reasonable to suggest that also in this constellation of creditors, free-riding is widespread, not only among unsecured creditors, but also among the secured ones.⁹⁹¹ While unsecured creditors free-ride on the monitoring by secured creditors, the issue of free-riding among secured creditors can create suboptimal results with regard to debtor monitoring

989 Levmore, *Yale Law Journal*, 1982, 49, p. 56.

990 See also the arguments by Levmore regarding the incentives of secured creditors to monitor. Levmore, *Yale Law Journal*, 1982, 49, p. 57.

991 *Ibid.*, p. 68 ff. See also Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1114.

due to coordination problems. The creditor doing the monitoring has fewer incentives to acquire and use additional information because he does not get the added benefits from such monitoring.⁹⁹² In multiple lenders scenarios, coordination problems among lenders become more acute when the borrower is facing financial distress.⁹⁹³ Therefore, free-riding causing coordination problems⁹⁹⁴ among creditors need to be tackled in order to avoid that no monitoring occurs at all in the worst case. *Levmore* suggests as an option for resolving free-riding issues among creditors the allocation to each creditor of an asset of the debtor as collateral. In this way, a creditor would not have other creditors having security interests in the same collateral, and therefore there would be no temptation to freeride on monitoring.⁹⁹⁵ Each creditor would monitor its “own” asset, and as a result, the debtor firm as a whole would be monitored. Additionally, by allocating collateral as well as seniority among the secured creditors, a run on the borrower’s assets is avoided when the borrower faces financial distress.⁹⁹⁶ This proposal would supposedly solve coordination problems among creditors when borrower is experiencing financial distress or is approaching insolvency since it gives to the most senior secured creditors the incentive to monitor the distressed borrower in terms of deciding whether to renegotiate the debt or let her go insolvent.

However, this solution has its own limitations that directly affect lenders’ incentive to monitor the borrower. Thus, when the value of the collateral remains unaffected after the borrower has been funded, then the lender sees no need to investigate borrower’ financial position before the funding occurs.⁹⁹⁷ Moreover, a fully collateralized lender faces a moral hazard since he is immunized from the actions of the borrower, no matter how opportunistic they may be, and thus has no incentive to monitor the borrower after the funding occurs.⁹⁹⁸ Both kinds of bank behaviours may have negative consequences on the financial stability of the bank.

992 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1114.

993 Elsas/Krahnén, *Center for Financial Studies Working Papers*, 2002, 1, p. 1.

994 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1127.

995 *Levmore*, *Yale Law Journal*, 1982, 49. See also study by Cerqueiro/Ongena/Roszbach, *Sveriges Riksbank Working Paper Series No. 257*, 2012, Available at http://www.riksbank.se/Documents/Rapporter/Working_papers/2012/rap_wp257_120224.pdf, finding that collateral is important for the bank and valuable for the borrower, and that banks holding collateral preserve their incentives to monitor borrowers.

996 Elsas/Krahnén, *Center for Financial Studies Working Papers*, 2002, 1, p. 1.

997 Niinimäki, *Helsinki Center for Economic Research Discussion Papers*, 2007, Available at <http://ethesis.helsinki.fi/julkaisut/eri/hecer/disc/181/doescoll.pdf>, p. 1.

998 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1136. See also Niinimäki, *Helsinki Center for Economic Research Discussion Papers*, 2007, Available at <http://ethesis.helsinki.fi/julkaisut/eri/hecer/disc/181/doescoll.pdf>, p. 16.

Furthermore, the allocation of collateral as an incentivizing mechanism to lenders would solve monitoring problems mainly when the firm's assets allocated as collateral are crucial⁹⁹⁹ to the firm, i.e. they are crucial to the business of the firm and their performance provides important information or signals about the financial stability of the debtor. Additionally, assigning collaterals to secured creditors to mitigate free-riding problems would not solve satisfactorily coordination problems among the secured creditors. More specifically, a secured creditor, while monitoring the assigned asset, may gain important information about the financial stability of the firm, which is not known to other creditors, and may want to use this information to extract additional advantages or benefits from the debtor firm. In another case, in the course of monitoring, the creditor might obtain crucial information regarding imminent financial distress to be faced by the debtor firm and as a result might take steps to liquidate its claim or reduce exposure before the debtor is actually hit by financial difficulties and the value of its assets decrease. It becomes thus obvious that monitoring also by secured creditors can be used for self-serving purposes to secure own interests, even if that would mean that other creditors would suffer losses.

This example points to another limitation of the model when monitoring is delegated to secured creditors, namely how monitoring-relevant information is disseminated to other principals in a multi-principal agency relation. Literature on delegated monitoring and agency problems¹⁰⁰⁰ points often to the fact that when monitoring is delegated, the delegated party collects private information about the debtor firm, which he is not willing to share with others.¹⁰⁰¹ This is often the case especially when the creditor wants to avoid losing a good debtor to a competitor.¹⁰⁰² Moreover, private debtor information helps banks to strengthen lending relationships with borrowers as it improves lender's control over the borrower and reduces overall monitoring costs.¹⁰⁰³ Bearing these considerations in mind, one is not surprised if banks as delegated

999 "Focal points". See Levmore, *Yale Law Journal*, 1982, 49, at p. 58.

1000 See Harris/Raviv, *Journal of Economic Theory*, 1979, 231; Holmström, *Bell Journal of Economics*, 1979, 74; Shavell, *Bell Journal of Economics*, 1979, 55, and also Leland/Pyle, *Journal of Finance*, 1977, 371; Chan, *Journal of Finance*, 1983, 1543; Diamond, *Review of Economic Studies*, 1984, 393, *Journal of Political Economy*, 1991, 689, *FRBR Economic Quarterly*, 1996, 51; Boot, *Journal of Financial Intermediation*, 2000, 7.

1001 Diamond, *FRBR Economic Quarterly*, 1996, 51, p. 55. See also Diamond, *Review of Economic Studies*, 1984, 393.

1002 Petersen/Rajan, *Journal of Finance*, 1994, 3, p. 36. See also Fischer, *Hausbankbeziehungen als Instrument der Bindung zwischen Banken und Unternehmen: eine theoretische und empirische Analyse*, 1990.

1003 The concept of "relationship banking" is not clearly defined in literature, but various authors agree that such relationship is not limited simply to bank lending, but it includes also the provision of other financial services by the bank to the lender, especially of information intensive services. Thus, two important elements in a "relationship banking" are proprietary borrower's information that goes beyond

monitors prefer to be sole creditors/principals in a lending relationship, instead of “sharing” the borrower with other banks.¹⁰⁰⁴ Maintaining a close lending relationship with the borrower helps lenders to reduce overall lending costs, including monitoring costs, and provides them with information monopoly which they can use to their advantage,¹⁰⁰⁵ for instance by charging higher interest rates. In the presence of multiple banking relationships, the value of borrower’s proprietary information that each bank holds reduces, and as a result lending relationships become less attractive and benefiting for banks.¹⁰⁰⁶ As a result, monitoring incentives might reduce as well.

As a summary, it can be said that also in the presence of several banks as principals, banks as secured creditors have incentives to monitor the debtor, but the monitoring may be limited to the performance of the asset they hold as collateral,¹⁰⁰⁷ especially when that collateral is a focal asset and the value of the collateral is stable over time and sufficiently high to satisfy the claims of the bank in case of debtor’s default. Secured creditors use collateral not only as a means to hedge against risk of default, but also as a mechanism to strengthen their bargaining power during debt contract’s renegotiations when the borrower is facing financial distress.¹⁰⁰⁸ Monitoring may be fragmented and coordination problems among creditors may lead to suboptimal results. When monitoring is conducted, it is useful to the banks performing it, but not necessarily to other secured or non-secured creditors. When a strong creditor chooses to take actions to discipline the borrower, there is no guarantee that the results will be optimal for the other creditors as well.¹⁰⁰⁹

Additionally, when a debtor maintains multiple banking relationships, lender-borrower ties become weaker as banks perceive the gathering and producing of borrower’s private information as too costly relative to its uses. If lending relationships are short and rather transaction-oriented,

what is available publicly and multiple interactions between the borrower and the lender. Petersen/Rajan, *Journal of Finance*, 1994, 3, p. 34; Boot, *Journal of Financial Intermediation*, 2000, 7, pp. 7-11. See also Ramakrishnan/Thakor, *Review of Economic Studies*, 1984, 415; Rajan/Winton, *Journal of Finance*, 1995, 1113, and Diamond, *Review of Economic Studies*, 1984, 393.

1004 However, see also arguments by Carletti/Cerasi/Daltung, Center for Financial Studies Working Papers, 2004, 1, on the benefits to banks to engage in multiple-lending as a way to improve diversification.

1005 Petersen/Rajan, *Journal of Finance*, 1994, 3, p. 35.

1006 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 21. See also Cole, *Journal of Banking and Finance*, 1998, 959, and Chan/Greenbaum/Thakor, *Journal of Banking and Finance*, 1986, 243.

1007 Levmore, *Yale Law Journal*, 1982, 49.

1008 Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1, p. 33-35. Bargaining positions of creditors are especially strong when the collateral held by the bank is highly liquid.

1009 Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1, p. 35.

banks may find it less worthwhile to acquire costly proprietary information by “getting to know” the borrower.¹⁰¹⁰ As a result, it could be expected that banks would do more of a limited debtor monitoring for private reasons,¹⁰¹¹ than a delegated monitoring, the benefits of which would accrue to third party creditors as well.

III. Which borrowers do banks monitor?

1. Low reputation firms

The theory on corporate finance and financial intermediation suggests that younger firms or older firms which perform poorly rely more heavily on bank loans as a source of investment capital.¹⁰¹² These firms are typically opaque firms facing difficulties to disseminate information about their investment chances¹⁰¹³ and thus have low or no reputational capital. By contrast, firms with valuable investment opportunities or older firms with sizeable reputational capital rely on the capital markets for investment capital by issuing private debt. Because of the build-up of reputation these firms enjoy, they are in a position to avoid intermediation and rather contract directly with investors in the capital markets. It follows therefore that younger firms with no accumulated reputational capital and/or older, low performing firms that rely on bank lending for obtaining investment capital will be the typical debtor firms that banks will monitor for the duration of the lending contract.

The focus of the theory of financial intermediation, as developed in the model presented by *Diamond*, rests on the ability of the borrowing firm to generate credible information about its creditworthiness and to transmit this information to the public.¹⁰¹⁴ In the model by *Diamond*, banks are able to assist borrowing firms to build-up their reputational capital by offering

1010 Chan/Greenbaum/Thakor, *Journal of Banking and Finance*, 1986, 243, and Boot, *Journal of Financial Intermediation*, 2000, 7, p. 18.

1011 These results are in line with scholars suggesting that the existence of a bank-borrower relationship bring added value and increases the value of the debtor firm. The duration of the bank-borrower relationship speaks for the quality and the strength of the relationship as well as for the mutual trust between the parties. A long and stable bank-borrower relationship is also an indication of debtor's stability and thus of lower insolvency risk. See e.g. Petersen/Rajan, *Journal of Finance*, 1994, 3; Boot, *Journal of Financial Intermediation*, 2000, 7; Chan/Greenbaum/Thakor, *Journal of Banking and Finance*, 1986, 243; Hoshi/Kashyap/Scharfstein, National Bureau of Economic Research Working Paper Series, 1993; Diamond, *Journal of Political Economy*, 1991, 689.

1012 Diamond, *Review of Economic Studies*, 1984, 393; Diamond, *Journal of Political Economy*, 1991, 689; Hoshi/Kashyap/Scharfstein, National Bureau of Economic Research Working Paper Series, 1993; Petersen/Rajan, *Journal of Finance*, 1994, 3; Chemmanur/Fulghieri, *Review of Financial Studies*, 1994, 475; Boot, *Journal of Financial Intermediation*, 2000, 7.

1013 Berger/Udell, *Journal of Business*, 1995, 351.

1014 Diamond, *Review of Economic Studies*, 1984, 393, and Diamond, *Journal of Political Economy*, 1991, 689.

monitoring services, including verification and certification services.¹⁰¹⁵ Monitoring is interpreted in the broader sense to include all activities undertaken by banks to ensure the repayment of the loan by mitigating or avoiding opportunistic behaviour by the borrower. This includes also, for example, the ability of banks to renegotiate debt contracts when the borrower is facing financial distress.¹⁰¹⁶

Literature on relationship lending suggests that information about renewal or renegotiation of debt contracts by banks sends a positive signal about firm's financial situation and credibility.¹⁰¹⁷ Thus, monitoring by banks helps firms to build up their reputational capital. However, because the credibility of the borrower's information about its creditworthiness stands in a positive relation with her reputation, and because reputation is not gained overnight, it results that younger firms and older, low performing firms will depend on bank lending until their reputational capital allows them to issue debt privately in the capital markets.¹⁰¹⁸

2. Small firms

In his analysis, *Fama* adds another category of firms, namely small firms,¹⁰¹⁹ which will rely on bank debt as a source of capital and thus be subject to bank monitoring.¹⁰²⁰ Although *Fama* too relies for his analysis on "borrower's information" as a factor that facilitates or makes borrowing more difficult, his explanation why smaller firms rely on bank loans for investment capital is based on information costs rather than on the need of these borrowers to build up their reputation.¹⁰²¹ Thus, he suggests that for this category of borrowers, it is cheaper¹⁰²² to give the bank direct access to the inside information that reveals borrower's ability to repay the loan, than to produce a range of public information required by the capital markets in order to provide

1015 Diamond, *Journal of Political Economy*, 1991, 689. See also works by Chemmanur/Fulghieri, *Review of Financial Studies*, 1994, 475, and Petersen/Rajan, *Journal of Finance*, 1994, 3.

1016 Burghof/Henschel, Center for Financial Studies Working Papers, 1998, 2, p. 2.

1017 Berger/Udell, *Journal of Business*, 1995, 351, p. 352; Dahiya/Saunders/Srinivasan, *Journal of Finance*, 2003, 375, p. 376.

1018 Diamond, *Journal of Political Economy*, 1991, 689, p. 690 suggests that borrowers with credit ratings toward the middle of the spectrum will rely on bank loans. It derives that borrowers with higher credit ratings will approach the capital market directly for funds. See also Berger/Udell, *Journal of Business*, 1995, 351.

1019 *Fama* mentions also individuals as a category of borrowers that rely on bank lending and thus submit to bank monitoring, but this category is not dealt with in this paper as it is not the focus of the paper.

1020 *Fama*, *Journal of Monetary Economics*, 1985, 29, p. 37. See also study by Petersen/Rajan, *Journal of Finance*, 1994, 3, stating that bank debt is the single largest source of external finance for small U.S. firms with less than 500 employees.

1021 *Fama*, *Journal of Monetary Economics*, 1985, 29, p. 37.

1022 Although the interest rates for bank loans could be higher than interest rates for public debt.

capital.¹⁰²³ Producing this information is for these borrowers more expensive than allowing the bank to access proprietary borrower's information and to exert monitoring over them.

3. Firms borrowing long-term

Based on concerns to provide sufficient incentives to lending banks to monitor borrower it is suggested that banks would have greater incentives to monitor firms that borrow long-term than firms borrowing short-term. Referring back to the explanation of what monitoring by banks is primarily meant to imply, various studies¹⁰²⁴ suggest that collection and production of borrower information by banks for monitoring purposes is for costs reasons not justified when lending is short-term. Since the information needed for conducting monitoring by banks cannot be gathered over night, but over the years and through a continuous relationship with the borrower, it follows that lenders involved in short-term lending base their lending decisions, which affect also their monitoring incentives, on different factors than borrower's proprietary information.¹⁰²⁵

Berger and Udell in their study suggest that banks not investing in gathering borrower's proprietary information for evaluating borrower creditworthiness base their lending decisions on "hard" information, which is easily available and obtainable at the time of the loan origination and not costly.¹⁰²⁶ Such information includes borrower's financial statement, availability and quality of collateral and borrower's credit scoring. Lending on "hard" information is characteristic of transaction lending, a lending technology based on individual single transactions between a bank and borrower, and the lending relationship has a short-term horizon. This is also in line with findings by other studies that suggest that short-term lending is usually made to larger, safer, and established firms with good financial ratios that do not have information problems that can be addressed through stronger bank-borrower relationships that imply information-intensive relationships.¹⁰²⁷

IV. Bank's collection of private debtor information

The term "monitoring" is used throughout the text primarily to imply the collection and production of private information regarding borrower's financial situation to enable a bank to

1023 Fama, *Journal of Monetary Economics*, 1985, 29, p. 37.

1024 Rajan/Winton, *Journal of Finance*, 1995, 1113, and Berger/Udell, *The Economic Journal*, 2002, F32–F53.

1025 Borrower's proprietary information implies information that is private to borrowers and inaccessible to the public. This information does not include e.g. firm's annual accounts or profit and loss statements, which are obtainable by the investing or non-investing public.

1026 Berger/Udell, *The Economic Journal*, 2002, F32–F53, p. F36.

1027 Cole, *Journal of Banking and Finance*, 1998, 959; Berger/Udell, *Journal of Business*, 1995, 351.

react timely and adequately to an impairment of the financial situation of the borrower with the purpose to ensure the repayment of the loan. It was previously explained that banks as financial intermediaries are better placed to collect that information efficiently, reducing in this way information asymmetries. The reduction of information asymmetries allows banks to monitor debtors at lower costs. Monitoring by banks is a two steps process, involving ex-ante and ex-post collection of information, taking as a reference point the moment when the funds could be or have been provided to the borrower by the bank.

1. Collecting information ex-ante: screening

Ex-ante monitoring by banks takes place before the lending contract is agreed to and serves to sort out “bad” debtors¹⁰²⁸ and hence to reduce the proportion of would-be problematic or non-performing loans. This process is known as *screening* and it involves an information-gathering exercise for the purpose of deciding whether to provide funds for the firm’s investment.¹⁰²⁹ Because this exercise takes place before the funds are provided, both kinds of borrowers, “good” and “bad” are subject to it. However, this process is aimed primarily at low performing, poor reputation borrowing firms, which have nothing to lose from defaulting by cheating the bank ex-ante or acting opportunistically ex-post. The monitoring role of banks with regard to these debtors is to sort them out by refusing to lend to them. The ex-ante monitoring in this case includes a bank collecting borrower information that allows her, the bank, to assess the credibility of the borrower and evaluate the probability of default. Pursuant to the intermediation theory described above, banks are able to collect and assess debtor information in a cost-effective way, and therefore qualified to perform the monitoring task.¹⁰³⁰ Despite the fact that freeriding problems are widespread among the various creditors contracting with the same debtor, our prediction is that banks have sufficient incentives to overcome these problems and provide debtor monitoring because of the sizeable piece of debt they hold as well as due to their ability to diversify their investment.¹⁰³¹ Moreover, the role of banks in the screening process is that of a typical gatekeeper in the information chain who filters the information coming, in the particular case, from the borrower to ensure that only potential borrowers meeting certain agreed standards pass the gate to access the required funds and that the funds made available reflect the financial

1028 Hellwig, in: Giovannini/Mayer, *Financial Integration*, p. 46.

1029 Edwards/Fischer, *Banks*, p. 37.

1030 See Diamond, *Review of Economic Studies*, 1984, 393, and Diamond, *FRBR Economic Quarterly*, 1996, 51.

1031 Diamond, *Review of Economic Studies*, 1984, 393. See also Hoshi/Kashyap/Scharfstein, *National Bureau of Economic Research Working Paper Series*, 1993, p. 5.

situation of the borrower. In their capacities as screeners, banks play the role of information as well as reputation intermediaries.

Therefore, assuming, as above that bank monitoring is beneficial to both the bank and the firm, pursuant to the gatekeeping theory elaborated in the previous chapters, banks shall have an interest in protecting their reputation capital which they have built up over the years by investing considerable resources. This shall provide banks with the needed incentives to screen potential borrowers carefully.

2. Collecting information ex-post: monitoring

Bank monitoring ex-post takes place after the lending contract has been agreed to and during the execution of the contract. The purpose of this monitoring is to ensure that the borrower will adhere to the terms of the contract and eventually to punish “bad” behaviour by the debtor¹⁰³² that might lead to a non-fulfilment of the loan terms and endanger the interests of the lender, especially when the debtor takes on more risk than it was previously contracted for. This form of monitoring serves to improve the performance of the debtor by providing incentives for the debtor’s managers to act in the interests of capital savers.¹⁰³³ In this sense, the collection of information by the bank is beneficial in so far as it helps the bank to influence debtor behaviour by exerting indirect control over the actions of the debtor’s managers.¹⁰³⁴

The most difficult question that banks face when monitoring ex-post is whether they should continue to lend to the borrower that faces default risks with the purpose of forestalling default or whether they should terminate the lending relationship to avoid higher costs? In these situations banks face what is known in financial literature as the *soft budget constraint* problem, which implies a lack of ability on the bank’s side to enforce debt contracts.¹⁰³⁵ In such a situation the lending bank needs to decide which approach is less costly and that will enable her to recover the largest portion of the funds loaned. Letting the borrower go bankrupt carries with it not only reputational effects for the monitoring bank¹⁰³⁶ but also the risk that borrower’s assets will devalue at insolvency and therefore will not suffice to repay the loan. However, providing further funds to the borrower facing default with the hope that it would recover previous loans if the borrower is successful in turning the situation around is also a risky approach. Not only would

1032 Hellwig, in: Giovannini/Mayer, *Financial Integration*, p. 46.

1033 *Ibid.*, p.46; Edwards/Fischer, *Banks*, p. 37.

1034 *Ibid.*, p.38. See also Broecker, *Econometrica*, 1990, 429.

1035 See e.g. Boot, *Journal of Financial Intermediation*, 2000, 7, p. 16.

1036 Edwards/Fischer, *Banks*, p. 177.

could this approach create a spiral of forced lending just to recover the previous loan, but it could also create perverse incentives for the borrower not to spend sufficient efforts to prevent a bad business outcome.¹⁰³⁷ If the borrower perceives that renegotiation of the debt contract will take place ex-post with a relative ease because the lending bank would like to avoid bankruptcy, then the borrower might lack the proper incentives to exercise care ex-ante to avoid behaviour that would cause the firm to face financial distress. To avoid the creation of such disincentives, banks make use of their advantages as financial intermediaries and engage in producing borrower information in order to evaluate the future prospects of the debtor firm, namely the probability of borrower's default and insolvency. This information should help the bank to decide whether to extend further credit to debtor firms facing financial difficulties or allow them to go insolvent.

Chemmanur/Fulghieri argue that banks as long term players are interested in gaining a reputation for financial flexibility, i.e. for making the "right" decision for renegotiating the debt versus liquidation.¹⁰³⁸ The effort to gain this reputation and further to maintain it provides banks with incentives to expend more resources to acquire information about firms in financial distress, and this should enable banks to perform a better monitoring.¹⁰³⁹ It is the reputation not only for the credibility of the information produced but also making the right decision with regard to borrower's potential financing that makes banks into gatekeepers. It was already noted above that without (good) reputation, the existence of the gatekeepers would be put to question. It is the need to maintain the reputation as credible gatekeepers that should provide banks with the incentives to careful ex-ante as well as ex-post monitoring.

B. Summary

Sufficient and accurate borrower's information is one of the most important tools that banks employ to monitor the borrower. Banks use various sources to obtain the needed information. The prudential banking rule of "Know your customer" points exactly to the efforts that banks need to make in order to be able to mitigate or reduce credit default risk that would endanger the solvency of a bank. Knowing the customer is part of the monitoring process that banks undertake, ex-ante as well as ex-post, and in this process banks take the role of the gatekeepers in the financial system. Because of their nature as financial intermediaries facilitating access of borrowers to financial capital, with their acts and omissions banks play an indispensable role in maintain the stability of the system. Their ability, expertise, resources, financial and

1037 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 16.

1038 Chemmanur/Fulghieri, *Review of Financial Studies*, 1994, 475, p. 477.

1039 *Ibid.*, pp. 476 – 477.

informational, to monitor borrowers as well as their ability to signal the market about the results of the monitoring allocates banks an important place in the financial system structure.

The key role of banks in the stability of the financial system is amplified by the fact of banks being reputational intermediaries. Building up a reputation and investing continuously to maintain it is a key characteristic of gatekeepers. It is the reputation of a financial institution that supports market's confidence thereon, and market confidence is for banks a necessary condition to avoid situations that would threaten their existence, such as bank runs or contagion. Additionally, reputation is a necessary ingredient for the credibility of the bank's signals. Without credible signals banks as gatekeepers would fail to exercise adequately their verification and certification role. Therefore, it was concluded above that banks have an interest in building up and maintaining their reputation as efficient gatekeepers.

Reputation building and borrowers' monitoring are two processes that go hand in hand in the case of banks. As it was identified above, banks are able to collect and produce borrower's information¹⁰⁴⁰ in a cost effective way as well as to use this information to monitor borrowers with the purpose to ensure repayment of loans. However, theory on financial intermediation suggests that good borrower's information that is crucial for an adequate monitoring is time-intensive and requires bank's willingness to invest in building up relationships with borrowers. Information-intensive relations are a characteristic of relationship lending. Financial literature suggests that relationship lending provides advantages both to the lender and the borrower. To the lender in terms of monitoring to avoid credit risk, and to the borrower in terms of obtaining needed funding at reasonable costs. The main features of relationship lending as well as the role that relationship lending could play in improving creditor protection are presented in the next chapter.

1040 With borrower's information here it is implied the information about borrower's financial position showing its ability to meet financial obligations deriving from a debt contract.

§ 8 Relationship lending: bank monitoring of borrower's performance

According to the standard theoretical framework of the role of financial intermediaries,¹⁰⁴¹ information asymmetry and moral hazard problems are inherent in financial transactions, due to the borrower having internal information,¹⁰⁴² which the bank does not have but wishes to acquire. Acquiring this information allows a bank to make efficient decisions when dealing with a borrower. The key issue that banks need address is whether to continue funding a borrower facing financial difficulties or to allow her to go insolvent. However, it can often be the case that when banks need to decide regarding the further financing of the distressed borrower, bank's flexibility is strongly limited and either decision, namely to renegotiate debt or to send borrowers to insolvency, bears with it substantial costs for the bank.¹⁰⁴³ It is for this reason that banks maintain with borrowers banking relationships that help them reduce information asymmetries regarding borrower's ability to repay the loan and thus be able to act timely in case of an impairment in the financial situation before it has to make one of the two decisions stipulated above. The closeness of the relationship between the bank and the borrowing firm allows the bank to price default risk more accurately and thus reduce situations of financial distress.¹⁰⁴⁴ One of the most important ways for banks to monitor borrowers and reduce information asymmetries is by using relationship lending.¹⁰⁴⁵ The following sections provide a summary of the literature on relationship lending, its main characteristics, as well as a discussion on the costs and benefits to lenders and borrowers from relationship lending. Furthermore, this chapter stresses the importance of relationship lending with respect to the protection of third party creditors achieved when banks as relationship lenders perform their screening and monitoring tasks.

1041 See seminal work by Diamond, *Review of Economic Studies*, 1984, 393, and Diamond, *Journal of Political Economy*, 1991, 689. See also Edwards/Fischer, *Banks*.

1042 About the possible success chances of its own projects for which the borrower is obtaining financing.

1043 Renegotiating debt could bring with it costs for the bank in the form of forgone profits in the short term as a result of prolonged term for the repayment of the loan and sometimes also reduced rates as the borrower cannot assume higher debt or interest burden. Nevertheless, debt renegotiation is not a guarantee that the debtor will succeed in repaying the loan. The other option, namely of allowing a borrower to go insolvent is not without costs to the bank either. It is generally accepted that debtor's assets in bankruptcy are worth less than in going concern. The risk is that the liquidated assets will not satisfy the creditor's claims.

1044 For more arguments see Diamond, *Review of Economic Studies*, 1984, 393. See also Ewert/Schenk/Szczesny, *Schmalenbach Business Review*, 2000, 344, p. 348.

1045 Bhattacharya/Thakor, *Journal of Financial Intermediation*, 1993, 2; Petersen/Rajan, *Journal of Finance*, 1994, 3; Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317; Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283; Boot, *Journal of Financial Intermediation*, 2000, 7. See also Berger/Udell, *The Economic Journal*, 2002, F32–F53, p. F32.

A. What is relationship lending?

A lot of information about how the future will look like may be found in the past. In the same way, banks often use the repayment history of a firm as a source of information to judge on the firm's ability to meet future financial obligations.¹⁰⁴⁶ Where the firm is new and is a *de novo* potential borrower, banks make use of other sources or types of information to assess firm's ability to repay loans, such as information gathered through the provision of other banking services (e.g. deposit accounts), information about the firm owner, the local community or local market where the firm operates.¹⁰⁴⁷ The information gathered will be used by the bank to design the appropriate terms and conditions of the loan contract with the future borrower by taking into account borrower's riskiness and probability of default. Theory suggests and empirical studies¹⁰⁴⁸ have shown that the types and quality of information financial intermediaries need to reduce information asymmetries in a lending transaction is gathered best through relationship lending.

Relationship lending¹⁰⁴⁹ implies a relationship between a lender and a borrower which goes beyond a single lending transaction, i.e. it extends over multiple transactions and is accompanied by a continuous accumulation by the lender of proprietary information pertaining to the borrower. As opposed to transaction lending, which focuses on the single transaction with a borrower and implies an arms' length relationship between the parties in the transaction, relationship lending emphasizes the building between the lender and the borrower of a usually long-term relationship, which is typically information-intensive.¹⁰⁵⁰ A number of authors have attempted to describe relationship lending in the context of relationship banking, with the latter going beyond lending to include also other financial services.¹⁰⁵¹ Although a clear definition on

1046 Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90, p. 93.

1047 Berger/Udell, *The Economic Journal*, 2002, F32–F53, p. F38.

1048 Petersen/Rajan, *Journal of Finance*, 1994, 3; Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407; Berger/Udell, *Journal of Business*, 1995, 351; Berger, *Proceedings*, 1999, 390; Berger/Udell, *The Economic Journal*, 2002, F32–F53; Boot, *Journal of Financial Intermediation*, 2000, 7; Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90; Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317; Elsas/Krahn, *Journal of Banking and Finance*, 1998, 1283.

1049 According to Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, p. 1 bankers and financial economists mean different things when they speak of relationship lending probably hinting in this way at the difference existing between theory and reality. Thus, when bankers speak of relationship lending they mean selling the customer a whole range of financial products, whereas financial economists mean the building of a close relationship between a firm (understand borrower) and its banker, in which the banker has intimate knowledge about the firm's affairs, built up over years of lending.

1050 Boot/Thakor, *Journal of Finance*, 2000, 679, p. 679.

1051 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 9.

relationship lending has not been provided, authors agree on the critical element of such a relationship as being the proprietary information, i.e. the information not normally available to the public, which the lender gathers through various sources over the duration of the relationship with the borrower, and which remains confidential to the lender. *Boot* defines relationship banking,¹⁰⁵² of which lending is a component, as a relationship where:

- i) The intermediary, in our case the bank, gathers information beyond what is readily available public information;
- ii) The gathering of information takes place over time through the carrying out of multiple transactions with the borrower, and
- iii) The information gathered remains confidential, i.e. proprietary to the borrower.

Although the gathering of borrower's proprietary information by the bank is not needed solely for her lending activities but for her banking activities in general, the paper will focus on the gathering of borrower's information for lending purposes considering that lending activities constitute for banks engaging in relationship lending considerable, if not the largest, source of risk. Moreover, it is suggested by various authors that banks engaging in relationship lending use this lending technology to provide funding to informationally opaque firms,¹⁰⁵³ which are also a special object of research for creditor protection purposes.

It was already pointed out earlier that banks acquire the essential information for lending in the process of screening and monitoring, i.e. before and after the loan agreement is concluded. Building on the "proprietary information" element of relationship lending, this lending technology develops certain characteristics in relation to the borrower that give banks an advantage with regard to managing credit default risk arising in a lending relationship. A number of authors suggest that it is in these characteristics that one can find the arguments why banks could make for qualified creditors to carry out efficient debtor monitoring. A summary of these characteristics is presented below.

1052 *Boot*, *Journal of Financial Intermediation*, 2000, 7, p. 10. See also *Berger*, *Proceedings*, 1999, 390.

1053 Especially informationally-opaque firms rely on bank loans for debt finance, and these firms are the most to benefit from relationship lending due to lower costs for producing information needed to borrow at reasonable rates. See *Stiglitz/Weiss*, *American Economic Review*, 1981, 393; *Berger*, *Proceedings*, 1999, 390, and *Boot*, *Journal of Financial Intermediation*, 2000, 7. See also *La Torre/Martínez Pería/Schmukler*, *Journal of Banking and Finance*, 2010, 2280.

B. Main characteristics of relationship lending

Among the characteristics of relationship lending, the following four stand out with regard to the impact that they have on the issue of improved borrower monitoring by banks. A presentation of these characteristics and the benefits and costs to both borrower and lenders follows below.¹⁰⁵⁴

I. Information-intensive and proprietary information

According to conventional wisdom, relationship lending is characterized by a continuous flow of information about the borrower to the lender. The information about borrower's financial position and ability to meet future financial obligations includes usually the collection of the so-called "soft" data.¹⁰⁵⁵ By "soft" data is meant proprietary information about the firm¹⁰⁵⁶ (e.g. business strategy, location, managerial capacities, etc.) as well as the firm owner (e.g. character and reliability of the firm's owner).¹⁰⁵⁷ However, this is not to say that banks base their lending decisions solely on this information. Rather, it implies that the closeness of relationship lending allows banks to acquire information, which is otherwise not accessible to the public. Hence, the notion of proprietary information. The information is enriched over time not only as a result of the length of the relation, but also due to the fact that often relationship lending is accompanied by a number of other services which banks provide additionally to the lender. More on this characteristic of relationship lending is to be found below.

Regarding the proprietary nature of the information, the borrower-specific information is usually available only to the intermediary, i.e. bank in this case, and to the customer providing this information.¹⁰⁵⁸ The proprietary information reaches the bank during the screening exercise, i.e. before the loan is extended and during the negotiations of the bank with the potential borrower, as well as during the monitoring exercise, i.e. after the loan has been extended and the borrower has an obligation to repay the loan.¹⁰⁵⁹ The bank will use the proprietary information acquired when it needs to make decisions over time about future financing possibilities, adaptation of the contract terms and in designing monitoring and enforcement strategies to ensure the repayment of the loan by the borrower. The information is usually not passed on by the incumbent lender

1054 See also Elsas/Krahnen, Center for Financial Studies Working Papers, 2003, 1, p. 18 for a different categorisation of characteristics pertaining to relationship lending.

1055 Berger/Udell, World Bank Policy Research Working Papers Series, 2005, 1, p. F37.

1056 Hennrichs, Zeitschrift für Unternehmens- und Gesellschaftsrecht, 2006, 563, p. 378.

1057 Berger/Udell, The Economic Journal, 2002, F32–F53, p. F38.

1058 Boot, Journal of Financial Intermediation, 2000, 7, p. 10.

1059 Ramakrishnan/Thakor, Review of Economic Studies, 1984, 415, p. 423 ff; Diamond, Review of Economic Studies, 1984, 393, p. 393 ff; Winton, Journal of Financial Intermediation, 1995, 158, p. 165 ff; Boot, Journal of Financial Intermediation, 2000, 7, p. 10.

to other potential lenders. Even for the borrower is difficult to pass on to other potential lenders information that the incumbent bank has already produced, as the transfer is not costless.¹⁰⁶⁰ As a matter of fact, incumbent banks prefer to obtain a monopoly over the proprietary information of the borrower as this creates lock-in effects to the benefits of the lender in the form of higher interest rates.¹⁰⁶¹

1. Benefits from information-intensive lending relationships

The information-intensive characteristic of relationship lending can help narrow information asymmetries wedges existing between lenders and borrowers. It was stated above that borrower information to the lender remains proprietary and confidential in the sense that the bank, as the lender, will not pass this information not only to her own competitors, namely other lenders, but also not to the borrower's competitors. This situation allows the borrower to reveal more hard as well as soft information to the lender than it would be willing to reveal if it borrowed directly from financial markets from fear of passing valuable firm information to own competitors.¹⁰⁶² Thus "two audiences" signalling problem is thus solved through relationship lending since borrower proprietary information will not spill over to an audience other than then relevant lender.¹⁰⁶³ From the lender's perspective, obtaining borrower proprietary information helps create a monopoly over this information and in the same time provide her with an information advantage over competing lenders.¹⁰⁶⁴

Additionally, being often enduring and dominant lenders, especially of small and medium enterprises,¹⁰⁶⁵ provides banks with better incentives to invest in collecting and producing qualitative borrower information needed for monitoring. *Chan/Greenbaum/Thakor* address the issue of information reusability that lenders obtain in the course of lending.¹⁰⁶⁶ According to their view, a bank experiences stronger incentives to invest sufficient resources to obtain accurate and qualitative borrower-specific information when it can reuse¹⁰⁶⁷ the information for

1060 Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90, p. 93.

1061 See Sharpe, *Journal of Finance*, 1990, 1069, and Rajan, *Journal of Finance*, 1992, 1367.

1062 Bhattacharya/Chiesa, *Journal of Financial Intermediation*, 1995, 328, p. 330 ff.

1063 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 13.

1064 This information advantage for lenders is further discussed below. (Section 4. Cross-selling)

1065 See e.g. Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90; Petersen/Rajan, *Journal of Finance*, 1994, 3, Berger/Udell, *The Economic Journal*, 2002, F32–F53, and Qian/Strahan, *Journal of Finance*, 2007, 2803, *Journal of Finance*, 2007, 2803, on the issue of the size of bank financing for SMEs and of the durable bank lending relations.

1066 Chan/Greenbaum/Thakor, *Journal of Banking and Finance*, 1986, 243.

1067 Information reusability includes both information durability (i.e. it can continue to inform the bank through time regarding borrower's financial status) and lender solvency. Chan/Greenbaum/Thakor,

future transactions as well, implying the existence of long-term relations with the borrower. The lender gains an information surplus, compared to its competitors, when it decides to screen borrowers more carefully and in the same time benefits from the selection of better quality assets or projects for investing through lending.¹⁰⁶⁸

2. Costs from information-intensive lending relationships

On the costs side, hold-up problems are said to be very common and empirically proven. Hold-up problems occur when the borrower is informationally captured because of the information monopoly generated by the lender in the course of lending.¹⁰⁶⁹ This information monopoly, which implies the existence of long-term and information-intensive lending relationships, allows banks to charge ex-post loan interest rates above lending costs, and thus higher than what it charged in the beginning of the lending relationship, cashing in in this way additional profits despite a reduction in the credit risk of the borrower.¹⁰⁷⁰ This is due to the increased bargaining power that the bank gains due to information monopoly, since the borrower cannot disseminate quickly and without costs the same amount of information that the incumbent lender possesses to other potential lenders. With regard to lending costs issues due to hold-up situations in a relationship lending, some authors point to the existence of competitive or non-competitive loan markets as factors that could mitigate or exacerbate a borrower's situations. Thus, where loan markets are non-competitive and banks do not fear the losing of their customers to competitors, loan rates start low at the beginning of the lending relationship, increase ex-post when bank gains information monopoly and fall relatively slowly over the life of the lending relationship compared to the pace with which borrower credit risk falls. In contrast to that, in highly competitive loan markets, the loan rates charged ex-ante start high, but fall more quickly over the life of the lending relationship as the borrower credit risk falls.¹⁰⁷¹ However, increased competition might have the downside effect of decreasing relationship lending since bank rents from lending reduce.¹⁰⁷² In turn, a decrease of relationship lending could result in a deterioration

Journal of Banking and Finance, 1986, 243, p. 244.

1068 Chan/Greenbaum/Thakor, Journal of Banking and Finance, 1986, 243, p. 244.

1069 Boot, Journal of Financial Intermediation, 2000, 7, p. 17.

1070 See e.g. Rajan, Journal of Finance, 1992, 1367, and Berlin, Business Review of the Federal Reserve Bank of Philadelphia, 1996, 1, p. 3.

1071 Petersen/Rajan, Quarterly Journal of Economics, 1995, 407, p. 407 and Berlin, Business Review of the Federal Reserve Bank of Philadelphia, 1996, 1, p.4. However, competition in loan markets is a two edged sword. While it can reduce rents that banks extract from borrowers, it can also create difficulties for building long-term relationship and also reduce credit availability, especially for de novo or risky borrowers. See also Boot/Thakor, Journal of Finance, 2000, 679, p. 681.

1072 Petersen/Rajan, Quarterly Journal of Economics, 1995, 407, p. 439-42.

of borrower credit quality due to deterioration in bank screening and monitoring, although unambiguous evidence regarding this correlation is still incomplete.¹⁰⁷³

II. Long-term relations and flexibility in renegotiations

The longevity of the relation is another distinctive characteristic of relationship lending. It stands in a direct and close correlation to the first characteristic, namely information-intensive and proprietary information. Since proprietary information is not generated overnight, information-intensive lending relationships will be long-term in duration.¹⁰⁷⁴ Considering the fact that lenders use relationship lending to reduce information asymmetries, it is reasonable to suggest that the longer the lending relationship, the more effectively are information asymmetries overcome as a result of the variety as well as the accuracy of information acquired over time.¹⁰⁷⁵ The lender will base her borrower-related decisions on a broader scope of information allowing her to gain a thorough view of the borrower's financial standing and ability to meet financial obligations. The information privilege created as a result of a long-term relationship serves both parties to commit to the lending relationship.¹⁰⁷⁶ Thus, banks will commit to fund needs of the borrower for capital over a long period of time, whereas the borrower commits to avoid opportunistic behaviour that would threaten the repayment of the loan.

Moreover, long-term loan contracts imply also flexibility in the renegotiations of the contract terms. Due to the closeness existing between the lender and the borrower, following the regular flow of information from the borrower to the lender, relationship lending creates more flexibility to amend contract terms when debtor's conditions change. Considering that banks lend using often covenants as instruments to ensure the mitigation of agency problems¹⁰⁷⁷ and conflicts of interest, the renegotiation of covenants could be in practice easier, due also to the limited number of parties involved, than when a borrowing is done through a sale of bonds and the renegotiations have to be conducted with various groups of bondholders.

1. Benefits from long-term lending relations

a) Improved credit availability and liquidity insurance

In a very easy-to-read illustration of the evolution of lending relations between a bank and a borrower, *Berlin* explains that long-term exclusive lending relationships yield benefits to

1073 Rajan, *Journal of Finance*, 1992, 1367, p. 1393.

1074 Elsas/Krahn, *Center for Financial Studies Working Papers*, 2002, 1, p. 1.

1075 Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90, p. 93.

1076 Elsas/Krahn, *Center for Financial Studies Working Papers*, 2002, 1, p. 4.

1077 Berlin/Mester, *Journal of Financial Intermediation*, 1992, 95, p. 96 ff.

borrowers not only in the form improved loan terms and rates, but also in the availability of credit when conditions in the loan market otherwise deteriorate.¹⁰⁷⁸ It is typical in this type of lending relationships that loan terms are stringent, including restrictive covenants, at the beginning of the relationship, but they soften over time, once the creditworthiness of the borrower as well as the quality of her projects are established.¹⁰⁷⁹ This conclusion about exclusive lending relationship seems to be in line with findings in other studies that claim that the value of borrower proprietary information is highest when the borrower does not diversify her borrowing sources.¹⁰⁸⁰ Since exclusive long-term lending relationship imply an information-intensive relationship between borrower and lender it is reasonable to suggest the presence of relationship lending in this case. However, although borrowers seldom maintain exclusive lending relationships,¹⁰⁸¹ studies suggest that the benefits from long-term lending relationships exist also when the lending bank is the premier lender of the borrower, but not necessarily the exclusive one.¹⁰⁸² For example, *Elsas/Krahnen* in their analysis define the premier lender as the borrower's "housebank",¹⁰⁸³ being equipped with more relevant and timelier information about the borrower than any "normal" non-housebank institution.¹⁰⁸⁴ They find that even in the presence of competition from other lenders, housebanks provide a kind of liquidity insurance in situations where the borrower faces an unexpected deterioration of her rating,¹⁰⁸⁵ supporting thus suggestions made earlier that borrowers benefit from credit availability.

1078 Berlin, Business Review of the Federal Reserve Bank of Philadelphia, 1996, 1, p. 2-3.

1079 *Ibid.*, p. 3.

1080 See e.g. Petersen/Rajan, *Journal of Finance*, 1994, 3.

1081 Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283, p. 1286.

1082 See e.g. Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283.

1083 Housebank relationships are typical in Germany. See Edwards/Fischer, *Banks*; Brackschulze, *Funktionen und Strategien von Hausbanken unter Basel II*, 2009 (hereinafter „Brackschulze, *Hausbanken unter Basel II*“), p. 1.

1084 Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283, p. 1284. See also Elsas, *Die Bedeutung der Hausbank. Eine ökonomische Analyse*, 1. Aufl., 2001 (hereinafter "Elsas, Hausbank"), p. 12 for a more detailed description of the characteristics of a housebank relationship. Apart from informational advantages, other characteristics include the larger (dominating) part of credit that housebanks hold compared to other lenders, the long term nature of the lending relationship as well as the special trust relationship existing between the lender and the borrower, and last but not least the "special responsibility" that the relationship lender carries when the relationship borrower faces a financial crisis.

1085 Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283, p. 1285. However, the liquidity insurance is not unconditional and it will depend on the magnitude of the change of the creditworthiness. For changes up to one notches, relationship lenders will continue to provide funding, whereas if the credit rating deteriorates by two or more notches, financial commitment from lenders is interrupted, including also relationship lenders.

b) Lower loan rates

Further studies have found also a negative correlation between loan rates and the duration of the lending relationship, suggesting that long-term lending relationships reduce information asymmetries between borrowers and lenders, and contribute thus in the reduction of borrower's credit risk.¹⁰⁸⁶ Moreover, long-term relationships might result beneficial also when a debt renegotiation is necessary. A number of authors suggest that a long-term commitment of a borrower facilitates debt renegotiations by lenders who might be willing to forfeit profit in the short run in return for sufficient compensation in the long run.¹⁰⁸⁷ The same approach to loss subsidisation, known also as an "intertemporal smoothing of contract terms"¹⁰⁸⁸ can be observed also when banks lend to *de novo* borrowers. However, this might be true for non-competitive loan markets. In highly competitive loan markets 'banks do not have the luxury of taking temporary losses in the expectation of charging relatively high interest rates in the future'¹⁰⁸⁹ since they need to cover lending costs on a period by period basis.

c) Flexible debt contracts

Regarding the flexibility of debt contracts, the fact that parties involved in a loan agreement is limited compared to a bond issue and that the relationship is close and information-intensive, it should enable the parties to draft contracts that reflect their concerns. Covenants accompanying loan agreements can be drafted in such a way as to contain the requirements that both lender and borrower find necessary to guide their relationship. Moreover, due to the continuous flow of borrower information, covenants may be altered to reflect the changes in the borrower's financial situation.

2. Potential costs from long-term lending relations

a) Soft-budget constraint problem

On the costs side, the so-called soft-budget constraint problems are typical. Lenders, who maintain a long-term and close relationship with the borrower, might find it difficult to deny credit to a borrower that is facing financial distress. Although the question whether or not to

1086 See e.g. Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317, on the reduction of information asymmetries and Boot/Thakor, *International Economic Review*, 1994, 899, and Berger/Udell, *The Economic Journal*, 2002, F32–F53, on the negative correlation between loan rates and length of lending relationship. However, see also Petersen/Rajan, *Journal of Finance*, 1994, 3, who find no significant influence of the length of the lender's relationship with the borrower on the rate of loan.

1087 See e.g. Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407; Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317, and Boot, *Journal of Financial Intermediation*, 2000, 7.

1088 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 15.

1089 Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, p. 4.

provide debt capital to a financially distressed borrower arises in every situation and not only in a relationship lending situation, the question in the present case, i.e. in a long-term lending relationship, gets trickier. This is due to the fact that the long-term lender has already loaned funds to the borrower in the past and the loan might be outstanding. In this situation the lender is faced with the difficult dilemma whether to lend further to avoid eminent default with the hope of a successful turnaround, which would enable the borrower to repay both past and new loans, or let the borrower go insolvent in order to prevent further losses.¹⁰⁹⁰ Both options carry risk. On the one side, providing further funds to a distressed borrower might create moral hazards since the borrower might perceive it relatively easy to renegotiate debt contracts ex-post and this could lead in turn to a reduction of incentives for borrowers to assess carefully ex-ante the quality of their projects or business decisions. On the other side, allowing the borrower to go bankrupt carries with it the risk that the value of assets in liquidation will not satisfy bank's claims, since borrower's assets are usually more valuable when the firm is a going concern than in liquidation. Additionally, although letting a firm go bankrupt is part of the monitoring exercise,¹⁰⁹¹ lending banks could suffer reputation losses when they make wrong decisions regarding debt renegotiation or liquidation.¹⁰⁹² These reputation losses come on top of reputation losses already incurred by banks for failing to realize earlier enough that the borrower was in a dire financial situation, since monitoring is a process, rather than a single event. If the borrower suddenly becomes financially distressed, this implies that the lender has not spend sufficient efforts to monitor the borrower carefully.

It was mentioned above that detailed covenants can introduce flexibility when designing the terms of the loan agreement. However, no perfect contract is perfect enough. Detailed covenants can be as much a useful tool as it can be an ineffective one. Determining that a covenant has been breached can be difficult since verifiable information could be costly and it may require time to gather or the information gathered is unverifiable and imperfectly related to the covenant terms.¹⁰⁹³ On the basis of such information, it is difficult for banks to make accurate decisions about liquidating a borrower or providing additional funding, although the liquidation option would likely be the most efficient decisions.

1090 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 16.

1091 Rauterkus, *Are Bank Lending Relationships Always Beneficial? The Case of Germany*, 2005 (Available at: <http://www.diw.de/sixcms/detail.php/43207>) (hereinafter "Rauterkus, *Lending Relationships*"), p. 3.

1092 Chemmanur/Fulghieri, *Review of Financial Studies*, 1994, 475, p. 478 ff.

1093 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1115.

b) Risk of lender liability

Last but not least, under certain circumstances, banks could even face liability for either decision, namely for granting further funding to a distressed borrower or for refusing to provide additional funding to a financially distressed firm. In the first case, a bank could face liability for delaying insolvency of a firm, thus adding potentially to the losses of creditors, when notwithstanding the additional funding, the borrower firm fails to turn the situation around and consequently faces unavoidable bankruptcy.¹⁰⁹⁴ Certainly liability can result for the bank in this case when the eventual delay of the insolvency serves the interests of the bank but not those of the borrowing firm or of the other creditors of the firm. This form of lender liability is especially likely when the granting of new credits by the lender is tied with stringent conditions, typically found in covenants, which could limit the business flexibility of the firm or grant the lender with larger powers to influence firm management decisions.¹⁰⁹⁵ Due to this strong limitation in the management decision-making powers, it could result that the real management power lies with the bank and not any longer with the firm. Hence, also the liability for failure could lie with the lender.¹⁰⁹⁶ In the second case, a bank could be held liable for compensation for damages when it decides to terminate a loan agreement with a firm in financial distress and because of that, the firm goes bankrupt.¹⁰⁹⁷ In situations when a debtor relies primarily on the bank services and support, including lending, for the carrying out of its business, an immediate interruption of bank services to the distressed borrower would add extraordinary difficulties to the borrower's operations and would seriously endanger her survival. In these cases, it is expected from the

1094 Regarding the circumstances for this type of bank liability see Schäffler, *Betriebs Berater*, 2006, 56, p. 2-4; Müller/Liebscher, in: Thierhoff/Baetge (Hrsg.), *Unternehmenssanierung*, 1st. Aufl. 2010 (hereinafter „Müller/Liebscher, in: Thierhoff/Baetge, *Unternehmenssanierung*“), p. 327; Portisch, *Sanierung und Insolvenz aus Bankensicht*, 2. Aufl. 2010 (hereinafter „Portisch, *Sanierung und Insolvenz*“), p. 359.

1095 For literature on lender liability see Hass, *University of Pennsylvania Law Review*, 1987, 1321, Fischel/Rosenfield/Stillman, *Virginia Law Review*, 1987, 301; Berlin/Mester, *Journal of Financial Intermediation*, 2001, 108; for German literature see Schäffler, *Betriebs Berater*, 2006, 56; Thierhoff and Baetge, *Unternehmenssanierung*, 1. Aufl., 2010; Portisch, *Sanierung und Insolvenz*. For literature on the difficulties and risk of liability to lenders deriving from covenants see Servatius, *Gläubigereinfluß durch Covenants*; Thießen, *Zeitschrift für Bankrecht und Bankwirtschaft*, 1996, 19,); Wittig, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 1996, 1381.

1096 Müller/Liebscher, in: Thierhoff/Baetge, *Unternehmenssanierung*, p. 330 mentions also the liability of banks for misusing the large managerial powers granted to them through covenants by passing a disproportionate risk to other creditors of the borrowing firm, thus ignoring the interests of other creditors to their advantage.

1097 Müller/Liebscher, in: Thierhoff/Baetge, *Unternehmenssanierung*, p. 329.

bank that it would consider also the interests of the borrower, instead of solely her own interests, so long as these interests allow it.¹⁰⁹⁸

III. Non/collateralized lending

It is certain that the presence of collateral as a means of securing lending¹⁰⁹⁹ is not typical only in relationship lending scenarios, since also lenders engaging transaction lending use collateral as an instrument to minimize losses arising from the risk of default. However, it seems that due to the fact that relationship lending is long-term in duration, as well as information-intensive and close in nature, the use of collateral serves purposes which are typical for relationship lending and are not observed in transaction lending. A number of authors¹¹⁰⁰ have attempted to study the possible correlations between collateral and the intensity of lender-borrower relations. The cited authors confirm in their studies that collateral plays an important role in a lending relationship not only as a means of securing lending and reducing information asymmetries, but also as a means of strengthening the bargaining position of lenders vis-à-vis the borrower, especially in the presence of multiple lenders as well as when the borrower is facing financial distress.¹¹⁰¹ These authors find also a direct correlation between the intensity of the lending relationship and the reduced collateralization of the loans. More specifically, they find that obtaining collateral is typical at the beginning of a lending relationship, but conclude that the longer and more intensive the relationship between the lender and the borrower, characteristics of a relationship lending, the less collateral lenders demand from borrowers.¹¹⁰² These observations follow the model that the risk of default a lender faces at the beginning of a lending relationship decreases through a reduction in the information asymmetries existing in the lending relationship. The reduction in the information asymmetries can be credited to the higher level of trust between the parties due to increased closeness, transparency and maturity in their relationship.¹¹⁰³

1098 *Ibid.*, p. 329.

1099 See Armour, Center for Business Research Working Papers, 2008, 1, p. 1 ff. for a concise discussion on the meaning of secured lending, rights and duties allocated to the creditors through it, as well as the prevailing theories of secured lending.

1100 Cole, *Journal of Banking and Finance*, 1998, 959; Boot/Thakor, *International Economic Review*, 1994, 899; Berger/Udell, *Journal of Business*, 1995, 351; Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317; Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1; Cerqueiro/Ongena/Roszbach, Sveriges Riksbank Working Paper Series No. 257, 2012, Available at http://www.riksbank.se/Documents/Rapporter/Working_papers/2012/rap_wp257_120224.pdf.

1101 Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1, p. 24.

1102 Boot/Thakor, *International Economic Review*, 1994, 899, and Berger/Udell, *Journal of Business*, 1995, 351. However, see also Machauer/Weber, *Journal of Banking and Finance*, 1998, 1355, p. 1357 who find no significant relation between collateralization and borrower's risk.

1103 Berger/Udell, *Journal of Business*, 1995, 351, and Boot/Thakor, *International Economic Review*, 1994,

1. Benefits from loan (non-)collateralization

a) *Mitigates moral hazard problems*

It was mentioned above that obtaining collateral helps lenders to mitigate losses from credit defaults. Obtaining security for lending has also been linked to a reduction in the level of interest rates that borrowers pay for their loans, a result which goes in the same line with the adverse signalling hypotheses.¹¹⁰⁴ Thus, lenders use collateral as a useful instrument to deal with moral hazard and adverse selection problems present in a loan agreement.¹¹⁰⁵

b) *Incentives to monitor borrowers and providing signalling to creditors*

However, collateral serves the lender not only to secure the loan, but also to obtain information necessary to monitoring the debtor actions. *Rajan/Winton* suggest that in a long-term lending relationship obtaining collateral provides lenders with incentives to monitor the actions of the borrower.¹¹⁰⁶ Since collateralization increases with the increase of the default risk, the lender will need to monitor the debtor's actions and the performance of the loan beforehand in order to assess whether additional collateral or collateral at all is needed. Moreover, *Rajan/Winton* point also to the signalling effects that a bank's actions with respect to collateralization have with regard to the actions of other creditors¹¹⁰⁷ in their further dealings with the borrower. Like covenants, also the performance of the collateral needs to be monitored if the lender wishes to obtain useful information, in order to accurately evaluate the ability of the borrower to repay the loan.¹¹⁰⁸ If the effective monitoring of the covenant depends on the closeness between the lender and the borrower¹¹⁰⁹, then relationship lending should provide the necessary environment for an effective monitoring. The positive relation between collateral and credit risk implies positive effects also for borrowers with less physical assets and more intangible assets. When the demand for collateral reduces as a result of factors mentioned above that are related to relationship lending, borrowers with more intangible assets are released from the pressure of having to provide assets as a guarantee, since firm assets are finite (and firms cannot always provide

899.

1104 Ewert/Schenk/Szczesny, *Schmalenbach Business Review*, 2000, 344, p. 355.

1105 Manove/Padilla/Pagano, *RAND Journal of Economics*, 2001, 726, p. 726; Boot, *Journal of Financial Intermediation*, 2000, 7, p. 14.

1106 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1115.

1107 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1115. See also Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, on the signalling effects of bank decisions regarding loan renewals on the creditworthiness of a borrower.

1108 The need for monitoring collateral is especially strong when it is made up of inventory or accounts receivables.

1109 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 14.

collateral as an exchange for a loan). This means that creditworthy firms may still obtain needed funding despite low collateralisation, thus improving the availability of credit to them.

c) *Incentives for lenders to engage in the reorganisation of distressed borrowers*

In a contribution on the role of collateral in relationship lending, *Elsas/Krahnen*¹¹¹⁰ analyse the impact that collateral plays when banks are put in front of a situation where they have to decide whether to continue funding or simply liquidate a distressed borrower.¹¹¹¹ They differentiate between inside collateral (such as firm machinery, buildings, etc.) and outside collateral (such as a guarantee by a third party), stating that inside collateral serves to allocated seniority among multiple bank lenders when the firm has more than one lender.¹¹¹² The allocation of seniority among multiple lenders is necessary to avoid a creditors' run on the borrower's assets, which could endanger the existence of the viable debtor.¹¹¹³ By allocating seniority, collateral determines not only the priority among lenders over the future cash flows, but in the same time serves to allocate bargaining power among various lenders, especially when the firm faces financial distress, since the decisions of the prime collateralized lender to fund or liquidate the borrower affect the wealth of other lenders as well.¹¹¹⁴ According to this hypothesis, relationship lenders are more collateralized than transaction or arm's length lenders, mainly not for the sake of securing their lending,¹¹¹⁵ but rather for the sake of securing a stronger negotiating position that will allow them to avoid lender's coordination problems when the decision whether to fund further or liquidate needs to be taken. Collateral is thus considered as a complement to relationship lending. Due to the long-term horizon and information-intensive nature for the debt contracts in relationship lending, obtaining collateral will grant relationship lenders with the needed instrument to monitor debtors effectively. The study by *Elsas/Krahnen* provides evidence that collateralized relationship lenders are more willing to engage in the risky

1110 Their study conducted with data from the German banking system and considers the behaviour of „*hausbanken*“, a type of bank that is taken as an example of a relationship lender.

1111 *Elsas/Krahnen*, Center for Financial Studies Working Papers, 2002, 1, p. 1.

1112 *Ibid.*, p. 3.

1113 A creditors' run occurs when liquidation rights are not allocated to any particular lender. In such a scenario, each lender attempts to satisfy her claim against the debtor, grabbing the debtor's assets before other lenders do the same. These actions could precipitate an otherwise viable debtor firm into sure liquidation. Franks/Sussman, *Review of Finance*, 2005, 65, p. 70. See also Hart, *Firms, Contracts, and Financial Structure*, Paperback ed., reprint. 1995 (hereinafter "Hart, *Firms*"), p. 158. However, the study by Franks/Sussman, *Review of Finance*, 2005, 65, p. 88 show that debt dispersion does not create a creditors' run since all junior creditors would share in the liquidation and not only the one who exercises the first move.

1114 *Elsas/Krahnen*, Center for Financial Studies Working Papers, 2002, 1, p. 4.

1115 Since the amount of collateral does not always reflect the amount of credit risk.

reorganisation of a distressed borrower, since these lenders will be the first to benefit from a successful turnaround.¹¹¹⁶ Pursuant to this finding, collateral shall play an important role in solving coordination problems between multiple lenders when the borrower faces financial distress, and thus avoid a run on the borrower's assets that could exacerbate further the already fragile situation. However, the evidence provided in the study above is concerned primarily with the frequency of relationship lender's engagement in the reorganisation of the distressed borrower, but not with the success of this engagement.¹¹¹⁷ The decisions of a lender, be those also of a better-informed relationship lender, might not necessarily prove beneficial for other lenders or other third creditors too.

2. Costs from loan (non-)collateralization

a) Collateralized lenders could behave self-interestedly

It has been mentioned above in several occasions that closeness between borrower and lender in a relationship lending can lead to "lock-in" situations where the borrower is informationally captured and the lender can use the situation for its own enrichment at the costs of the borrower's interest or the interests of other lenders. In a multiple lenders scenario, which seems to be also the typical scenario, where a borrower maintains several lending relationships, but one of them is information-intensive¹¹¹⁸ of the type resembling to a relationship lending, the collateralized prime (relationship) lender is in a position to call the shots and tilt the balance on either way when the borrower is facing financial difficulties. Being in a stronger bargaining position, when determining whether to fund the borrower further or liquidate him, the bank might be led by her own narrow interests, rather than those of the borrower or of the other creditors.¹¹¹⁹

It was stated above that obtaining collateral in the context of a relationship lending provides banks with incentives and information to monitor borrower's performance. However, not every amount of collateral will provide incentives for the lender sufficient enough to invest in borrower monitoring. Gathering the necessary information for adequate borrower monitoring requires expending resources from the lender. These resources, however, shall not exceed the gain that the lender expects to obtain from the monitoring. It seems therefore that the incentive of the

1116 Elsas/Krahn, Center for Financial Studies Working Papers, 2002, 1, p. 24.

1117 *Ibid.*, p. 25.

1118 *Ibid.*, p. 6.

1119 See e.g. paper by Bolton/Scharfstein, *Journal of Political Economy*, 1996, 1, on inefficient decisions by collateralized creditors.

lender to monitor is maximized when the claim, and consequently the collateral obtained, is as large as possible.¹¹²⁰

However, in a study regarding the value of bank lending for borrowing firms in Germany the authors found out that firms with higher amounts of bank debt¹¹²¹ were more likely to be liquidated in a financial distress situation.¹¹²² The study goes on to state that although according to the conventional wisdom bank debt should facilitate renegotiations and that banks tend to prefer debt restructuring over liquidation,¹¹²³ banks behave differently in an environment where they do not face competition for their financing services and are allowing to hold equity in competitors of the borrowers.¹¹²⁴ Despite the fact that the study does not consider whether or not the banks in question were collateralized, it seems that the issue of collateral would not alter the situation for better. On the contrary, it could exacerbate it due to more severe hold-up problems.¹¹²⁵ However, bank behaviour when the borrower becomes financially distressed does not depend solely on the fact whether or not it has obtained collateral, but also on other factors, such as the creditor rights in a particular bankruptcy regime. A number of studies¹¹²⁶ provide evidence that secured credit provides strong incentives for banks to engage in out of court restructuring of distressed firms, maintaining firms' going concern nature and enjoying higher recovery rates for their loans. These incentives are stronger in bankruptcy regimes that grant strong enforcement powers for the creditors.

b) *Incentives for lenders to become "lazy"*

In an study by *Hart*, it is suggested that when the liquidation rights, due to collateralized lending, are concentrated in the hands of a main lender, for example a bank, the lending bank may decide against engaging in elaborate rescue efforts to keep the borrowing firm as a going concern, because it does not see the increased benefits from such efforts. Moreover, if the bank decides to sell the borrowing firm as a going concern, she will not push for the highest value, but simply

1120 Rajan/Winton, *Journal of Finance*, 1995, 1113, p. 1121. Otherwise, it is expected that the lender will attempt to free-ride on other larger lenders.

1121 In this occasion, banks were not holding equity in the borrowing firms.

1122 Rauterkus, *Lending Relationships*, p. 4-5.

1123 See e.g. Davydenko/Franks, *Journal of Finance*, 2008, 565, p. 592.

1124 Rauterkus, *Lending Relationships*, p. 14.

1125 Thus, if a bank holds equity in a competitor firm to the borrower, it might face strong incentives to liquidate the borrower where it holds collateral, thus favouring the competitor firm.

1126 See empirical studies by Franks/Sussman, *Review of Finance*, 2005, 65, Djankov/Mcliesh/Shleifer, *Journal of Financial Economics*, 2007, 299, Davydenko/Franks, *Journal of Finance*, 2008, 565, and Armour, Center for Business Research Working Papers, 2008, 1.

for a value that will cover her claim, since increased benefits by the bank's efforts to achieve maximal value will be accrued to the firm's owner and unsecured creditors.¹¹²⁷ In another study highlighting the "lazy banking" hypothesis as classic potential drawback of collateralized lending, *Manove et al.* describe a scenario of lender – borrower relationship where lenders are "lazy" to screen carefully the quality of loan applicants' projects when these applicants post sufficient collateral and the lending bank can repossess collateral at relative ease.¹¹²⁸ Another contribution on the topic by *Franks/Sussman (2005)* uses the "lazy banking" hypothesis to stress more the assumption that collateralized lending induces banks to liquidate distressed borrowing firms prematurely and thus achieve suboptimal results, rather than provides incentives for banks to insufficiently screen borrowers' applications for credit.¹¹²⁹ In all the scenarios described above, security interest or collateral would not have any signalling effect regarding the creditworthiness of the borrower, since the borrower offers security as a hostage to demonstrate her serious commitment in repaying the debt.¹¹³⁰

Based on the potential drawbacks of the "lazy banking" hypothesis, *Manove et al.* suggest that there will be more careful screening, and therefore a lower average default rate of borrowers, in jurisdictions in which borrower's ability to post collateral is limited vis-à-vis those jurisdictions where creditors have extensive rights to repossess and liquidate collateral.¹¹³¹ However, these authors do not advocate a weakening of creditor rights with respect to enforcing their claims, but rather striking a balance between protecting creditors' rights and creating incentives for these creditors to screen qualitatively the quality of borrower's projects, despite holding collateral. Although the analysis in this study does not consider whether the lending bank is a relationship or transaction lender, the empirical findings support the findings regarding the role of collateral in a relationship lending. Thus, the authors state that bank's incentives to engage in quality borrower screening appear to differ depending on whether the bank faces strong competitive pressures or whether it masters a great degree of market power. Thus, in the presence of competitive pressure, lenders will require more collateral and do less screening, because they will have to bear alone the costs of screening which are non-contractible. Although screening is a value-enhancing activity because it can prevent inefficient investment projects by refusing to fund them (the gatekeeping function), lenders prefer to obtain collateral and screen inefficiently

1127 For a more elaborate discussion see Hart, *Firms*.

1128 Manove/Padilla/Pagano, *RAND Journal of Economics*, 2001, 726.

1129 Franks/Sussman, *Review of Finance*, 2005, 65, p. 71.

1130 Bester, *European Economic Review*, 1987, 887, p. 898. See also Armour, Center for Business Research Working Papers, 2008, 1, p. 3.

1131 Manove/Padilla/Pagano, *RAND Journal of Economics*, 2001, 726, p. 738.

or not at all. However, incentives change once the lender enjoys a greater degree of market power. Because such lender will be the one to benefit the added value from successful investment projects, she is also willing to screen potential borrowers carefully, since she will also be able to pass on the screening costs to the borrower.¹¹³² Being more or less a prime, if not exclusive, lender to the borrower, allows the bank to establish closer long-term relationship with the firm. In such a situation, which resembles to relationship lending, the lender demands less collateral since moral hazard problems and problems of information asymmetries are tackled through an intensive information flow.¹¹³³

On the drawback of inefficient liquidation as an aspect of the “lazy banking” hypothesis *Franks/Sussman* find mixed evidence. They find that even when bank are sufficiently collateralized, they do not automatically choose liquidation over rescue or debt reorganisation. Banks are sensitive to firm’s efforts to reorganise through a replacement of their management, and this sensitivity indicates banks’ preference for a reorganisation instead of outright liquidation when the firm becomes financially distressed. Where liquidation occurs, usually it does not take place immediately when the firm becomes distressed, but after a period of time¹¹³⁴ during which the bank has attempted to turn the firm around. In the absence of a successful turnaround, the reasonable solution would normally be the winding-up of the firm to avoid further losses. This statement gets some support from the fact that bank recovery rates are never 100 per cent.¹¹³⁵

Nevertheless, the high recovery rates of collateralized banks indicate also the fact that banks will liquidate the firm when the value of collateral nears the value of the debt. This type of bank behaviour depends certainly on the interests of the bank. If the bank is facing herself financial difficulties, it could push her towards quick liquidation to minimize losses in the short-term instead of attempting a turnaround with potential long-term benefits. This could be the case also when the bank pursues other goals than the long-term maximisation of her profits. Such a situation could result when a bank would need to re-adjust for regulatory capital purposes by

1132 Manove/Padilla/Pagano, *RAND Journal of Economics*, 2001, 726, p. 739.

1133 This findings are consistent with the findings from Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407. Furthermore, also Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, points to the difficulties arising for establishing relationship lending in the presence of strong competition between banks or from the capital markets.

1134 This period of time is in average 7,5 months according to the study of Franks/Sussman, *Review of Finance*, 2005, 65, covering the situation of the SMEs in the United Kingdom.

1135 Davydenko/Franks, *Journal of Finance*, 2008, 565, p. 581. Recovery rates for collateralized lending in France are 56%, for UK 92% and for Germany 67%.

deleveraging instead of raising fresh capital. This shows a preference for banks not to take further risks in attempting to reorganise the distressed firm.¹¹³⁶

As a summary, it can be said with some certainty that the holding of collateral in a relationship lending provides benefits for both lender and borrower. Moral hazard and adverse selection are reduced since the provision of collateral provides signals of the borrower's creditworthiness. When lending is concentrated and collateral allocates liquidation rights to the main lender, it helps to reduce coordination problems among multiple lenders when the borrower becomes financially distressed. Too, having seniority over other lenders' claims, the main collateralized lender has incentives to engage in out-of-court reorganisation of the distressed borrower, because it benefits most when the workout is successful. Various studies provide evidence that banks do not choose outright liquidation of a distressed borrower, but engage in elaborate workouts to turn the borrower around, restore value to the borrower and increasing the chances of other creditors and firm owners to recover their claims.

Nevertheless in certain circumstances these benefits are not clearly observable and the advantages gained by the lender in the form of stronger bargaining positions, when the borrower faces financial distress, could be used by the lending bank for extracting private gains at the costs of other creditors. Furthermore, lenders face an incentive problem to conduct value-enhancing screening and monitoring when they hold sufficient collateral. Overcollateralization of a lender could result counterproductive when it comes to encouraging effective borrower monitoring. An overcollateralized lender becomes "lazy" in ex-ante screening and ex-post monitoring of the borrower. Therefore, a balance needs to be struck between providing incentives for the borrower to repay the loan by the threat of collateral and providing incentives for the lender not to become "lazy" in carrying out its screening and monitoring functions as well as to avoid inefficient liquidations of potentially viable firms.

IV. Cross-selling of additional financial services

Engaging in relationship lending provides banks with a door opener to sell additional financial service to borrowers transforming their relationship lending to relationship banking¹¹³⁷. Examples of these other financial services include letters of credit, deposits, check clearing and cash management services, etc.¹¹³⁸ Enlarging the scope of relations with the borrower should provide banks not only with a broader amount of information, which in turn reduces information

1136 Franks/Sussman, *Review of Finance*, 2005, 65, pp. 91 – 92.

1137 Boot, *Journal of Financial Intermediation*, 2000, 7, p. 11.

1138 *Ibid.*, p. 11.

costs to banks, but also allows for better monitoring of a borrower from the bank side.¹¹³⁹ Apart from the substantial informational benefits, through the provision of additional services banks diversify their investment portfolio. Cross selling, as the practice has been termed by some authors, enables banks to build an information advantage vis-à-vis other potential lenders and in the same time creates a binding relationship between her and the borrower.¹¹⁴⁰ This binding relationship can play a crucial role in ensuring credit availability, especially in times of generally impaired market conditions for loans, since it mitigates moral hazard and deepens relationship lending. Certainly, the cross selling of additional financial services is not to be encountered only in a relationship lending scenario. However, the features characterising a relationship lending, such as the long-term horizon and the information-intensive nature of the relationship make the provision of additional financial services feasible, since borrower information acquired from the lender over the lending course can be used also for other services, reducing in this way the overall costs for the services provided.

The cross selling of additional financial services by financial intermediaries comes with both benefits and cost.

1. Benefits from the cross-selling of additional financial services

On the benefits side one can mention the binding relations between lender and borrower it creates as well as the mitigation of commitment problems. More specifically, it has been widely accepted by several authors that cross-selling allows a bank to expand the scope of borrower's proprietary information available to her. As it was stated above, this expansion of the scope of the financial relationship between the lender and the borrower may provide competitive advantages to the incumbent lender vis-à-vis other potential lenders, who do not possess adequate information about the borrower's ability to meet financial obligations. It was pointed out above that one the most obvious consequences of relationship lending, strengthened in the particular case also through cross-selling is the creation of a binding relationship between the lender and the borrower. The hard as well as soft information that the lender obtains over the borrower, gives the lender a tangible advantage when evaluating the borrower's capacities to meet existing or future financial obligations. This information advantage allows a lender to provide loans or other financial services to the borrower under terms and conditions, which are

1139 Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90, p. 93.

1140 Machauer/Weber, *Journal of Banking and Finance*, 1998, 1355, p. 1358 suggest that binding relationships are created not only in the presence of a monopoly situation, where a bank is the only lender of borrowers in a certain region, but also through the bank gain informational advantage over other lenders.

tailored to his financial strength. Sometime these other services could secure the lender larger profits than the profits earned through lending in the first place. Creating a binding relationship surely mitigates commitment problems and secures to the lender a long-term client and certain future business. A number of studies have provided evidence that binding relationship between the lender and the borrower may result in a smoothing of interest rates when the borrower faces exogenous shocks¹¹⁴¹ and its credit risk increases.¹¹⁴² The benefits for the borrower are obvious, whereas the lender hopes to extract benefits from engaging in longer-term business with the borrower.¹¹⁴³ Additionally, the reduction of information asymmetries plays a role in improving the effectiveness of lender's capacities to monitor the borrower. A corollary to improvements in the bank monitoring is an overall reduction of the credit risk a lender is faced with. The spill over effects from lower credit risk could be translated into lower interest rates charged by lender to the borrower with whom they stand in a relationship lending. Thus, the existence of cross selling may add value to a lending relationship from the lender's as well as borrower's perspective.¹¹⁴⁴

2. Costs from the cross-selling of additional financial services

However, cross selling of additional financial services by lenders to borrowers does not come without costs. The binding relationship that could result from cross selling could provide a subsidisation for loans at a reduced rate at the costs of hiding the real credit risk of the borrower. Thus, when a lender, as a trade-off for an extended scope of banking relations with the borrower,¹¹⁴⁵ provides loans at rates, which do not reflect the real risk profile of the borrower, the ex-ante gatekeeping and monitoring role¹¹⁴⁶ loses strength and misses the objective of providing a signal about borrower's creditworthiness. Although difficult to prove in the first place, such credit risk subsidisation in exchange for higher profits has repercussions with regard

1141 Berger/Udell, *Journal of Political Economy*, 1992, 1047. See also Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407, Berlin/Mester, *On the Profitability and Cost of Relationship Lending*, 1997 (hereinafter "Berlin/Mester, *Relationship Lending*"), and Dahiya/Saunders/Srinivasan, *Journal of Finance*, 2003, 375, on the smoothing of interest rates for long-term lending relations.

1142 Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407, and Berlin/Mester, *Relationship Lending*.

1143 Machauer/Weber, *Journal of Banking and Finance*, 1998, 1355, p. 1359. However, Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, p. 4 notes that this approach could be true for non-competitive loan markets, but not necessarily for competitive loan markets where banks are put under strong pressure to cover lending costs period by period since they could lose their customer any time.

1144 Degryse/van Cayseele, *Journal of Financial Intermediation*, 2000, 90, p. 93.

1145 Machauer/Weber, *Journal of Banking and Finance*, 1998, 1355, p. 1356.

1146 The role that banks perform when providing funding to borrowers.

to how banks manage risk and allocate bank capital. A broader analysis of these repercussions follows in the next chapter.

Lastly, banks are considered in general as insiders and better informed compared to other creditors. The relationship lending *per se* and the additional borrower information acquired due to cross selling allow banks to have a better overview of borrower's ability to meet its obligations. While this is certainly the positive side of being better informed, this informational advantage for relationship lenders means informational disadvantage for other creditors. When observing an impairment in the ability of the borrower to meet current and future financial obligations, the better informed relationship lender will be able to take steps to reduce loan exposures or liquidate positions before the news of borrower's distress becomes public.¹¹⁴⁷ The relationship lender can avoid or mitigate in this way losses from defaulted loans, but other less informed creditors will probably suffer larger losses.

C. The role of the legal framework in inducing relationship lending

Lending relationships are established and carried out in a particular regulatory framework that provides norms for the protection of parties involved in the relationship. This framework, which includes particularly norms on the contractual rights and duties of the parties, enforcement of claims, execution of collateral as well as the rights and duties of parties in bankruptcy, is normally described as the regulatory framework for the protection of creditors. When banks decide whether or not to lend to a particular borrower, they assess not only borrower's ability and intention to repay the loan, but also the institutional and legal framework for the protection of creditors that will govern their credit contract. Such a framework for creditor protection could be inductive or restrictive of relationship lending. A number of empirical studies¹¹⁴⁸ have shed light into the factors that encourage parties to engage in lending relationships that demonstrate the same or very similar characteristics to those of relationship lending. The reason for that lies in the fact that this framework provides *strong* creditor protection. Factors pertaining to the institutional and legal framework that produce strong creditor protection include for example, the ability of the borrowers to grant secured lenders ex-ante seniority (priority) rights in decision-making during debt renegotiation and to have these rights respected during debtor default; the power of the borrower to repossess collateral quickly and liquidate it without delay and major

1147 Dahiya/Saunders/Srinivasan, *Journal of Finance*, 2003, 375, p. 376.

1148 See e.g. empirical studies from Qian/Strahan, *Journal of Finance*, 2007, 2803; Franks/Sussman, *Review of Finance*, 2005, 65; Djankov/Mcliesh/Shleifer, *Journal of Financial Economics*, 2007, 299. See also Armour, Center for Business Research Working Papers, 2008, 1, and Armour/Hsu/Walters, *Review of Law & Economics*, 2012, 101.

costs to satisfy her claims; the absence of an automatic stay on debtor's assets on default; the availability of debtor's information to judge on her creditworthiness. In a summary, these studies find that where creditor protection is strong, bank lending is associated with concentrated ownership, longer maturities, lower interest rates and overall more favourable lending terms. This expands loan availability since lenders perceive ex-ante lower risk due to better legal protection in bankruptcy or reorganisation.¹¹⁴⁹ Ownership concentration is considered by lenders as an effective tool to obtain a stronger bargaining position in debt reorganisation, since generally they prefer reorganisation over outright foreclosure.¹¹⁵⁰ In this way lenders avoid coordination problems among multiple lenders when the borrower defaults. This approach helps also address free-riding problems.¹¹⁵¹ Moreover, lenders who are granted priority rights ex-ante and when these rights are respected ex-post, face larger incentives to maximise the value of total recovery in bankruptcy, since they perceive themselves as the residual claimants.¹¹⁵² Considering the collateral, it is suggested that although it is present in both strong as well as weak creditor protection frameworks, collateral plays a different role depending on which framework it is being used. Thus, in strong creditor protection frameworks, which are inductive of relationship lending, collateral serves among others to grant seniority and priority rights¹¹⁵³ to lenders in debt restructuring negotiations, whereas in weak creditor protection frameworks, collateral serves to protect lenders against the risk of expropriation from the debtor or other lenders, since lending is rather diffused among multiple lenders. What is not immediately observed in strong creditor protection frameworks is the essential role of borrower information.¹¹⁵⁴ However, it is submitted that the intensive flow of borrower information to the lender takes place at a later stage in the relationship when trust between the parties increases and reputation effects become more significant.

1149 Qian/Strahan, *Journal of Finance*, 2007, 2803, p. 2805.

1150 Franks/Sussman, *Review of Finance*, 2005, 65, p. 67. Reorganisation benefits all the creditors, secured and unsecured, whereas foreclosure benefits only the secured creditor executing the collateral.

1151 Qian/Strahan, *Journal of Finance*, 2007, 2803, p. 2806 and Franks/Sussman, *Review of Finance*, 2005, 65, p. 67.

1152 Armour, Center for Business Research Working Papers, 2008, 1, p. 14 and Davydenko/Franks, *Journal of Finance*, 2008, 565, p. 577.

1153 In these frameworks, lending is concentrated.

1154 However, see Djankov/Mcliesh/Shleifer, *Journal of Financial Economics*, 2007, 299, p. 309 reporting that richer countries (which have also stronger creditor protection frameworks) have a much higher incidence of private credit bureaus. A private credit bureau maintains a database on the standing of borrowers in the financial system and its primary role is to facilitate exchange of information among banks and financial institutions. See p. 307.

Although the empirical studies mentioned above do not refer to relationship lending per se, it is submitted that the factors described above as characterising lending relationships in a strong creditor protection regime, characterise also relationship lending. As a matter of fact, absent these factors, parties to a credit contract would find it too risky and costly to engage in relationship lending. It results therefore that whether parties to a credit contract engage or not in relationship lending does not depend on the parties' perception of the positive effects of relationship lending, but rather on the creditor protection regime or framework within which the lending relationship takes place. Thus, one could reason that relationship lending would occur where the legal regime in place is favourable of strong creditor rights.

D. Interaction of relationship lending and creditor protection

The assessment so far has focused on the concept and features of the financing technology, known as relationship lending. Evidence from a multitude of studies reveals clearly benefits for borrowers as well as lenders, in the form of enhanced credit availability, stable business relations, lower rates and reputation building. These benefits do not come without costs though. A trade-off between these benefits and costs influence a borrower's decision to borrow from banks or to find other sources of capital. For some types of borrowers though, such as small- and medium-sized firms, banks represent the prime, if not the only source of debt capital.¹¹⁵⁵ It is mainly these types of firms that tend to establish long-term and information-intensive lending relationships with banks.¹¹⁵⁶ The reasons for this reliance rest on the informationally opaque nature of these firms, i.e. on the difficulties that this firms face to transmit cost-effectively¹¹⁵⁷ credible firm-related valuable information to investors for the later to obtain an accurate picture of the firm's ability to meet current and future obligations. In the absence of sufficient publicity, investors would find it difficult to estimate the creditworthiness of the firm, and therefore would either lend at very high interest rates to secure against default risk, or would deny lending in the first place as a result of the adverse selection problem. However, it is also for the same reasons that

1155 Larger firms borrow directly from the capital markets, because they can get better rates. These firms are considered more stable (since they have a long way during their business life), more creditworthy and therefore represent lower default risk.

1156 The reliance of small- and medium-sized firms on bank lending for debt capital is not typical only for bank-dominated financial systems like in Germany, or in the continental Europe in general, but also in capital markets-dominated financial systems like in the US. See for e.g. Petersen/Rajan, *Journal of Finance*, 1994, 3; Petersen/Rajan, *Quarterly Journal of Economics*, 1995, 407; Elsas/Krahen, Center for Financial Studies Working Papers, 2003, 1; Memmel/Schmieder/Stein, Bundesbank Banking and Financial Supervision Discussion Paper Series 2, 2007, 1.

1157 The firm would have to incur large costs to produce and transmit this information credibly to the investors, and that would make borrowing directly from investors too expensive. Fama, *Journal of Monetary Economics*, 1985, 29.

these firms represent a concern with regard to the protection of their creditors. Bank lending plays an important role with regard to this issue. The model is rather clear: banks in their role as financial intermediaries have a central contribution to make in the stability of the financial system. Since financial stability is a collective good, banks serve as gatekeepers of public interest. They are required to carefully manage the risks stemming from their banking activities so as to avoid endangering their existence, which could cause a bank run and destabilize the whole financial system. One of the most substantial risks banks face is the credit risk, since lending constitutes the essence of banking activities.

Contemporary banking theory on financial intermediation attributes banks the role of a qualified creditor able to monitor borrowers efficiently due to their ability to produce borrower-related information at lower costs. Because depositors (capital savers) do not possess the incentives to monitor borrowers (capital users), mainly due to costs problems and the lack of expertise, the monitoring task is performed on behalf of the depositors by banks, which are able to benefit financially from performing such monitoring. Hence, banks' role as delegated monitors. Monitoring as a larger function includes two aspects: *screening*,¹¹⁵⁸ which implies an ex-ante selection of potential borrowers according to their creditworthiness as potential borrowers, but also according to the quality of their investment projects. Evoking again the gatekeeping role of banks in the financial system, the screening aspect of monitoring requires banks to prevent that low quality borrowers or low quality investment projects pass the gate kept by banks to access desired funds. The second aspect of monitoring is the ex-post *ongoing* or *interim monitoring* of the borrower to ensure that she is abiding by the agreed funding terms during the duration of the lending relationship. In the framework of this monitoring aspect, so long as the borrower abides by the agreed loan terms and in good states of the world, the lender performs nothing more than a verification service sending signals to investors about the creditworthiness of the borrower.¹¹⁵⁹ The verification services play an important role with respect to the protection of creditors because they can signal third parties about the viability of doing business with the borrower. However, the protective effect of these signals may be limited due to limited ability of creditors to interpret them accurately (since they may be ambiguous or insufficient) or because banks, for reasons that are typical for a gatekeeper, decide to sacrifice their reputation for higher short-term gains. The second and most critical situation where banks are faced with a difficult dilemma in

1158 Known also as the disruptive function of gatekeepers. See Section A.I.1. in Chapter 5.

1159 Verification or certification services of banks highlight another central feature of gatekeepers, that of reputational intermediaries. Borrowers are interested in bank lending relationships due to the signalling effects that these relationships send to investors, who on the other side interpret bank lending relationships as positive signs of firm's creditworthiness.

the framework of their ex-post ongoing monitoring is when the borrower becomes financially distressed and approaches insolvency. The causes for this distress could be both, due to breaching financial covenants with the bank and behaving opportunistically, or simply due to impaired business and market conditions. In this situation banks face the dilemma to continue to provide funding to the borrower coupled with the reorganisation of the borrower or to let the borrower go insolvent. Both decisions will have repercussions beyond the bank's balance sheet and will affect directly the interests of third party creditors who too, are in a credit relationship with the borrower. As qualified creditors, being better placed to obtain firm inside information, theory assumes that banks should be able to make better decisions about continuing funding or liquidating the borrower than other creditors, who lack this information. Both decisions represent important aspects of creditor protection. Reorganisation supplemented by additional funding will keep the firm as a going concern and will increase the chances that it will repay creditors, both the bank and other third party creditors. After all, the whole is more valuable than the sum of the parts. Liquidating a distressed firm when the firm has no real chances of a successful turnaround can still be beneficial for creditors, since valuable firm assets will be preserved from further loss, mitigating in this way the loss of creditors from unpaid claims. Also in this context, the gatekeeping role of banks becomes obvious as it tries to prevent economically inefficient borrowers from remaining further in the system. To make the "right" decision, the bank needs to possess sufficient and relevant information regarding borrower's chances of survival. Additionally, certain incentive issues need to be addressed to ensure that the bank would choose the most efficient monitoring strategy that would be value-enhancing not only for the narrow interests of the bank. Relationship lending seems to solve some of these problems. Without reiterating again the arguments that have already been brought forward in the previous sections, relationship lending is characterized by close, long-term and information-intensive interactions between the lender and the borrower and these interactions provide the lender with proprietary inside information about the quality of the borrowing firm. Therefore, the relationship lender should be best placed to perform the gatekeeping and delegated monitoring role that banking theory attributes to banks.

Banks are in the position to obtain this privileged information because of their right to operate as banks, a right which is granted to them by way of a licence issued by public banking or regulatory authorities. Banking licences represent public rights granted to private persons to participate in the financial system and provide public goods, such as financial stability.¹¹⁶⁰ Therefore banks are considered to be gatekeepers of public interest. Monitoring is a process

1160 See definition on public goods in chapter 6 above.

rather than an outcome, and therefore its efficiency is assessed with relation to the performance of the subjects that the monitor is expected to keep an eye on. Banks, as lenders, are expected rather than just supposed to monitor the borrowers who stand in a lending relationship with them or attempt to start such a relationship. They are expected to examine the quality of potential borrowers who attempt to obtain lending from banks to ensure that low quality borrowers are sorted out from the beginning or that loans granted to these borrowers reflect their risk profile. Moreover, it is also expected that once funding is provided to a borrower, banks will continue to monitor the performance of the borrower until the loan is fully repaid.

Therefore, if relationship lending provides lenders with superior borrower information¹¹⁶¹ that allows them to choose the efficient monitoring strategy, then it can be reasonably concluded that relationship lending has the potential to deliver efficient creditor protection. If relationship lenders can discipline borrowers more efficiently, as some studies corroborate,¹¹⁶² then this should lead to less opportunistic behaviour by borrowers and a lower insolvency risk. These outcomes are beneficial for third party creditors as well.

Relationship lending seems also to improve the performance of banks as gatekeepers of public interest regarding the stability of the financial system, since both, relationship lending and gatekeeping rely on the capability of banks to collect and produce cost-efficiently quality information about borrower's ability to meet its future obligations. The second aspect of gatekeeping, namely the reputational intermediary role of the gatekeeper, is not a characteristic relevant only for the gatekeeping, but also for the relationship lending. A relationship lender, who fails to maintain its reputation as a trustworthy financial intermediary, will not be a credible business partner for the relationship borrower. The lending relationship will break down resulting in costs for both lender and borrower. Inefficient reorganisation or insolvency decisions could result and thus also damages for creditors.¹¹⁶³ Moreover, a non-reputational relationship lender, who cannot credibly and in a trustworthy manner collect and produce borrower

1161 See conclusions of the work by Elsas, *Hausbank*, p. 269.

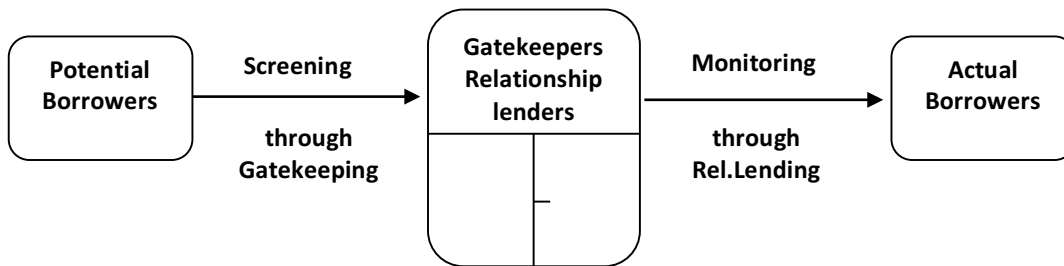
1162 See e.g. Foglia/Laviola/Marullo Reedtz, *Journal of Banking and Finance*, 1998, 1441. In a different study by Memmel/Schmieder/Stein, *Bundesbank Banking and Financial Supervision Discussion Paper Series 2*, 2007, 1, it is shown for Germany that medium-sized and larger companies with a relationship lender exhibit significantly higher equity ratios and significantly lower probability of default (PD) value than like companies without a relationship lender. See p. 15.

1163 The disruptive function of a gatekeeper could find its parallel in relationship lending in the decision that a bank needs to make when it considers whether to provide further funding to a distressed borrower or to allow her to go bankrupt, thus "disrupting" her further economic existence.

information, will also give wrong signals about the creditworthiness of the borrower to the third parties who already deal or plan to enter into a business relationship with the borrower.

As a matter of fact, one could say that efficient relationship lending goes hand in hand with efficient gatekeeping. Without one, the other cannot exist. They represent the two sides of the same coin, with the goal to maintain the stability of the financial system.

Figure 3: Complementary roles of gatekeeping and relationship lending



Although there is as of yet no study to provide evidence of direct benefits that third party creditors enjoy from relationship lending, it cannot be denied that when banks perform their gatekeeping (screening and monitoring) role accurately, without doubt this will positively influence also the outcomes for third party creditors. Therefore, the gatekeeping role and relationship lending by banks should be encouraged as important supplementary mechanisms that provide additional protection to third party creditors.

E. Banking regulation and efficiency of bank monitoring

Banking activity is subject to financial regulation in the general sense, and to banking regulation in the narrow sense. With banking regulation in this paper is meant the entirety of norms issued by law-making authorities, aimed at achieving certain given objectives by providing directions and setting standards as well as limitations on how banking business is carried out.¹¹⁶⁴ As a general statement, state regulation for a certain sector is required when that sector is of particular interest for the wider public. So there is a public interest, which can be better achieved through state intervention in the form of regulation, since without the latter these public interests will not be achieved or will be suboptimally achieved.¹¹⁶⁵

1164 See Fest, Zwecke, Ansätze und Effizienz der Regulierung von Banken, 2008 (hereinafter “Fest, *Regulierung von Banken*”), p. 20 ff. for a thorough discussion on the definition and purpose of banking regulation.

1165 Known in literature as the “public interest” paradigm. *Ibid.*, p. 26.

Banking regulation as a particular kind of financial regulation is justified with the necessity to achieve the realisation of public interest, which is often embodied in two principal objectives: the stability of the banking system¹¹⁶⁶ and the protection of depositors.^{1167, 1168} These objectives are achieved i.a. through two types of banking regulation, categorised as preventive and protective regulation. This categorisation is made on the basis of the time when the respective type of banking legislation is put at work. Thus, while preventive regulation, as the term denotes, aims at avoiding the occurrence of events that could damage the public interest, the protective regulation aims at minimizing the negative effects of harmful events that have already occurred. Thus, preventive regulation implies norms that purport to limit the risk level contracted by banks, reducing in this way the probability of bank insolvency. Examples of such type of regulation are norms on bank capitalisation or on the regulatory capital that banks are required to hold, as well as requirements on investment diversification.¹¹⁶⁹ On the side of the spectrum of banking regulation, protective regulation includes norms that implement various measures once a bank is in a life-threatening crisis or has already gone insolvent.¹¹⁷⁰ The purpose of these norms is for example to enable solvent banks, which suffer a liquidity crisis to get the necessary capital to meet its short-term liquidity needs¹¹⁷¹, or in the case of banks already gone insolvent to minimize the damages to bank depositors through deposit insurance schemes.

1166 The stability of the financial system is a public value to be safeguarded. See e.g. website of the European Banking Authority www.eba.europa.eu.

1167 The reasons why these two objectives constitute principal objectives of banking regulation relate especially to the susceptibility of banks towards bank runs, which have serious repercussions not only for the banking system, but for the real economy as well. Additionally, the reason for protecting bank depositors rests in the lack of information and knowledge (rationality) regarding bank operations (especially when the bank faces a run), exacerbating the depositors' position when a bank faces insolvency. See the discussion in chapter 6 regarding the special nature of banks.

1168 This is however a simplistic presentation of the objectives of banking regulation, since also within the two main objectives, namely financial system stability and protection of depositors, financial literature distinguishes between the safeguarding of bank competition, safeguarding of financial intermediation, safeguarding the stability of the money value as well as the protection of creditors. See categorisation of banking regulation objectives in Seifert, *Privilegierung und Regulierung im Bankwesen. Ein Beitrag zur ordnungspolitischen Problematik branchenorientierter Strukturpolitik*, 1. Aufl., 1984,. See also Hartmann-Wendels/Hellwig/Jäger-Ambrożewicz, *Arbeitsweise der Bankenaufsicht vor dem Hintergrund der Finanzmarktkrise*, 2010 (hereinafter "Hartmann-Wendels et al., *Bankenaufsicht*"), p. 25 and Fest, *Regulierung von Banken*, p. 40.

1169 *Ibid.*, p. 36.

1170 *Ibid.*, p. 35.

1171 The lender of last resort norms constitute typical protective regulation. Due to liquidity and maturity transformation functions, banks are especially prone to risks related to the lack of liquidity, risks which can be aggravated in case of bank runs. For more details on the transformation functions of banks see Chapter 6.

The purpose of banking regulation in general and of preventive banking regulation in particular is to create incentives for banks to behave in such a way as to avoid taking over through their activities too much risk that would threaten their viability and existence. Hence, a major focus of preventive banking regulation is the management of risk by banks. Since depositors (capital givers) do not possess the incentives to monitor the borrower (capital users) for reasons explained in chapter 7, banks take over the role of delegated monitors and thus need to manage the lending-related risk by monitoring the borrowers. Banking regulation is thus aimed at creating the incentives for banks and at setting the standards and limits that banks must observe when they contract banking-related risk.

Lending, as one of the central activities of banking, constitutes a major interest for banking regulation since a large portion of risk faced by banks is credit risk or the risk arising from the failure of borrowers to repay the loans. Recent developments in international banking regulation, with the adoption in 2006 of the Basel II Accord, the revised framework on the international convergence of capital measurement and capital standards for internationally active banks¹¹⁷² provide additional as well as adopted mechanisms available to banks to manage credit risk. The revised framework provides banks with additional tools to measure credit risk and expands banks' flexibility in using the tools available. According to the definition above regarding the types of banking regulation, Basel II requirements are considered to provide a preventive type of banking regulation since they are aimed primarily at limiting the risk banks contract through their banking activity, and especially lending activity, and in the same time providing banks with tools to manage that risk. By limiting the level of credit risk banks can contract, Basel II requirements should make a direct contribution for the stability of the banking system by reducing the likelihoods of banking crises.

The new methods available to banks to measure risk affect directly how banks lend, and thus also what kind of relationship they built with their customers. The measurement of the credit risk determines also the terms of lending. It is the purpose of the next chapters to investigate the impact of Basel II on the lending behaviour of banks in general, and especially on the relationship lending in particular. Does Basel II encourage relationship lending as well as the performance of an efficient gatekeeping role by banks? Do banks possess under Basel II incentives to accurately assess credit risk and carefully manage it? Does Basel II make a contribution to a better protection of third party creditors by encouraging banks to maintain close and information-

1172 Basel II Accord.

intensive relationships with the borrowers, thus leading to better monitoring and more efficient decisions regarding borrower's financing needs?

PART IV

BASEL II ACCORD AND BANK MONITORING PERFORMANCE

§ 9 The Basel Accord Framework

In the previous chapter it was shown that relationship lending provides benefits for both parties to the lending agreement. The particular features that characterize a relationship lending allow the relationship lender to adapt financing to the needs of the borrower. The special relationship between the lender and the borrower is made possible through a continuous and information-intensive relationship, through which the lender obtains an information advantage concerning the borrower and can use this advantage to perform functions which a normal or outside bank would not willing to perform. One of the key features of the relationship lending was the informed monitoring of the borrower by the lender, which improves borrower's performance and reduce overall insolvency risk. The relationship lender, by being better placed to assess the quality and behaviour of the borrower, can make more efficient decisions during the monitoring process. Making the "right" or the most efficient decision is especially meaningful when the borrower is facing financial distress and the lender will have to decide whether to force the borrower to liquidate or provide her with additional capital. In these kinds of situations, relationship lenders are more probably to make the right decision due to the information they possess. The efficient decisions of relationship lenders benefit not simply them and the borrowers, but also other investors or third party creditors who are or plan to enter into a business transaction with the borrower. Therefore, relationship lending serves to improve the protection of creditors, and especially of those that would otherwise not be able to self-protect.

However, lending is a banking activity and therefore subject to extensive banking regulation, which affects also bank's incentives towards borrowers, and therefore also the lending relationship with them. Banking regulation aims primarily at ensuring the stability of the financial system. Due to its importance but also fragility, efforts have been made through international agreements to ensure the stability of the financial system at an international level by setting minimum standards on bank capital. The Basel Accord provided for the first time a set of requirements that were aimed at helping banks to qualify credit risk in a more accurate way and thus ensure they held sufficient own capital to counter the risk. The revised Basel Accord, or the so called Basel II Accord went much further in its efforts to design a much more risk-sensitive approach, and in this way strongly influenced the decision-making of bank in a lending process. Therefore, an analysis of most important requirements of the Basel Accords,

and especially of Basel II Accord, is necessary in order to be able to gain a better understanding of how these requirements affect banks' incentives towards borrowers, and especially the impact of the requirements on relationship lending.

A. The Emergence of the Basel Committee

The internationalisation of the financial markets in the early 1970s¹¹⁷³ brought with it a larger access to capital markets. Capital was more readily available. The number of participants competing for access to this capital grew, and with it also the challenge to supervise this growing number of interconnected international financial players. Large international financial institutions were reducing the boundaries of the financial world, but not necessarily the risks related to their activities. Because of their large economic size and the geographical extent of their business, a banking failure of one of these financial players in one country, could have the potential to wreak havoc in other countries as well as have serious repercussions for the stability of other financial institutions.¹¹⁷⁴

Faced with this concern, banking supervisors of industrialized countries, which were also home to large internationally active banks, became aware of the need for cooperation among them in order to provide for some form of “international” supervisions of these banks. The failure of the *Bankhaus I. D. Herstatt* in 1974 might have provided the trigger to speed up this cooperation.¹¹⁷⁵ Therefore, the central bank governors of the ten most industrialized countries¹¹⁷⁶ decided to establish at the end of 1974 a committee, the work focus of which was to discuss possible ways for international supervision of large international banks. The committee, which was named the Basle Committee on Banking Supervision (hereinafter the words “BCBS” and “Committee” will be used interchangeably) came into existence. A gathering of central bank governors and other representatives of national authorities responsible for the prudential supervision of banks, the BCBS was based in Basel¹¹⁷⁷, where also the Bank for International Settlements (“BIS”), too

1173 Find a reference regarding the internationalisation of financial markets in the 1970.

1174 See for example the case of the failure of Bankhaus Herstatt, a German bank, in the 1974. Gleeson, *International regulation of banking*, at p. 33.

1175 Tarullo, *Banking on Basel*, at p. 2; Gleeson, *International regulation of banking*), at p. 33; Henrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563, at p. 563.

1176 At the time the committee was established, the Group of Ten most industrialized countries (G10) included the US, the UK, Germany, Canada, France, Italy, Belgium, the Netherlands, Sweden and Japan. In 1983 Switzerland became the 11th country member of the G10, although the name G10 remained unchanged. The G10 countries consult and cooperate on economic, monetary and financial matters. For more see the website of the Organisation for Economic Co-operation and Development (“OECD”) www.oecd.org.

1177 Originally, the French spelling “Basle” was used for the Committee, since French was at the time the working language of the Committee. However, the German spelling “Basel” prevailed since the name

established by central bank governors of the founding member countries¹¹⁷⁸, was based. Today the BCBS numbers 27 members¹¹⁷⁹ represented by their central bank and by the authority with the formal responsibility for the prudential supervision of the banking business where this responsibility does not rest with the central bank.¹¹⁸⁰

From its foundation until nowadays, the BCBS has remained an informal body with no formal supranational supervisory authority. Its opinions and conclusions in banking regulation and supervision do not have the legal force of international law and thus are not binding to its members.¹¹⁸¹ However, this has not hindered BCBS to become one of the most influential bodies with major powers in banking regulation, setting standards on banking regulation and supervision implemented worldwide.

The BCBS reports to the representatives of the member countries and seeks their endorsement for its initiatives which cover a wide array of financial issues.¹¹⁸² Therefore, considering the way how the BCBS functions and proposes recommendations, it comes as no surprise that the recommendations of the BCBS on bank regulation and supervision have a wide international application, since the most internationally active and large financial institutions have their seat in one of the member countries.

Considering the events¹¹⁸³ that triggered the establishment of the BCBS, the Committee has pursued two important principles during its work, namely that no foreign banking establishment

of city on the German-speaking side of Switzerland was “Basel” and not “Basle”. See footnote 1 in Gleeson, *International regulation of banking*, p. 33.

1178 The Bank for International Settlements was established in the 1930 to settle the reparation payments imposed on Germany under the Treaty of Versailles following the defeat of Germany after the First World War. The founding member countries of BIS included Belgium, France, Germany, Italy, Japan, the United Kingdom and the United States. The choice of Switzerland to serve as a seat for the BIS was a compromise between the founding members, as Switzerland represented an independent, neutral country, where the Bank could be shielded from too much undue influence from any of the major powers of that time. The choice of the town of Basel was for simply practical reasons, namely because it provided excellent railway connections in all directions in a time when train was the prime mean for international travel. For more details see www.bis.org/about/origins.htm.

1179 The members of the BCBS, currently 27, are: Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxemburg, Mexico, Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom and the United States. BIS, <http://www.bis.org/about/factbcbs.htm>.

1180 BIS, www.bis.org/bcbs/history.htm.

1181 Hirte/Heinrich, *Zeitschrift für Bankrecht und Bankwirtschaft*, 2001, 388, p. 390; Tarullo, *Banking on Basel*, at p. 2; Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563, at p. 564.

1182 BIS, www.bis.org/bcbs/history.htm.

1183 Such as the failure of the Bankhaus Herstatt in 1974. Gleeson, *International regulation of banking*, at p. 33.

remains outside the supervisory focus and that supervision should be adequate.¹¹⁸⁴ The objective of the Committee was to close gaps in the international supervisory coverage of banking institutions in order to avoid banking failures,¹¹⁸⁵ especially those failures having serious repercussions on the international markets, and therefore affecting several countries at the same time.¹¹⁸⁶ To accomplish this objective, the Committee has devoted a substantial part of its work to the promulgation of standards for bank supervision as well as to the formulation of standards regarding bank capital adequacy or bank solvency standards.¹¹⁸⁷ This objective of the Committee goes hand in hand with one of the most important objectives of the BIS, namely that of pursuing monetary and financial stability.¹¹⁸⁸ Therefore, it is not coincidental that the BCBS had the support and the endorsement of the BIS from the first moment of its establishment. After all, there were the representatives of almost the same countries who established both the BIS and BCBS.

In the pursuit of its main objective, the BCBS has issued a number of proposals and recommendations on the improvement of banking regulation as well as supervision. Closing the gaps in banking regulation and bank supervisions implied for the Committee the setting of a level playing field to ensure that international banks would operate within a regulatory framework where the common standards would apply independent of where the bank was established. This regulatory framework was necessary to avoid a “race to the bottom”¹¹⁸⁹ with respect to banking regulation and supervision and level the international regulatory playing field for banks.¹¹⁹⁰ It is in this context that the Committee proposed the first Basel Capital Framework Accord.

1184 BIS, www.bis.org/bcbs/history.htm. See also Tarullo, *Banking on Basel*, at p. 2.

1185 Gleeson, *International regulation of banking*, at pp. 33 – 34.

1186 Tarullo, *Banking on Basel*, at p. 3.

1187 Such as e.g. the “Core Principles for Effective Banking Supervision” or the Basel Capital Accord Framework of 1998. See Tarullo, *Banking on Basel*, at pp. 2 – 3; See also Condemi/Polis, *European Business Law Review*, 2004, 405, at p. 406.

1188 See BIS, “The establishment of the BIS” at www.bis.org/about/history.htm. Although the original reason what the BIS was established was to deal with issue of reparation payments imposed on Germany by the Treaty of Versailles following the end of the First World War, in the aftermath of the financial crises of the early ‘30s the focus of the Bank shifted to the promotion of the cooperation between the central banks with the view to encourage monetary and financial stability.

1189 Known as the situation whereby the lower regulatory standards of a country make it very difficult for other countries to maintain more stringent, and thus more costly, but also necessary standards. Because of such situation, in the particular case, banks located in countries with more stringent regulatory standards suffer regulatory disadvantages and increased costs in comparison to banks located in countries with lower regulatory standards. See Tarullo, *Banking on Basel*, at p. 53; See also Gleeson, *International regulation of banking*, at p. 34.

1190 Morrison/White, *Journal of Finance*, 2009, 1099, at p. 1099.

B. The Basel I Capital Accord

As previously pointed out above, the internationalisation of the financial markets opened up the possibility for different banks from different countries to compete for debt capital. However, in the absence of harmonized rules regarding what constitutes bank capital as well as regarding regulatory constraints on capital requirements, various banks were subject to very different rules, depending on the laws of the country where they were located.¹¹⁹¹ Stronger bank competition¹¹⁹² for capital pushed banks to improve their return on equity by trying to finance themselves through a range of financial instruments and by reducing the equity proportion of their balance sheets.¹¹⁹³ The diverse standards on bank capital requirements with respect to capital adequacy ratios¹¹⁹⁴ as the mechanism to deal with credit risk meant that some banks were being treated more advantageously than some others,¹¹⁹⁵ while the lack of a common standard regarding the regulation of banks to provide for credit risk mitigation meant that banks could further increase rather than decrease risk. In the backdrop of these concerns,¹¹⁹⁶ the community of bank regulators decided to initiate what in 1988 became the Basel Capital Accord, or the Basel I.

I. Key elements of the accord

Basel I was the result of a continuous regulatory reliance on specific capital ratios calculations based on risk-weighted assets¹¹⁹⁷ as a way to ensure bank safety and soundness. Capital regulation was becoming the prime mechanism for banking regulation. Defining specific rules about bank own capital as well as bank liquidity were considered as the appropriate regulatory answer to achieving the two objectives of bank supervision, namely the protection of depositors and the stability of the banking system. However, among the various countries¹¹⁹⁸ hosting the

1191 The judgment of the relevant regulator supervising the bank was also playing a role. See Gleeson, *International regulation of banking*, at p. 34.

1192 Condemni/Polis, *European Business Law Review*, 2004, 405, at p. 405.

1193 The major concern of central bank governors and national supervisors that the capital of world's larger banks, which serves as a cushion against losses, had become too low was also the major impetus for the launching of the Basel I Accord. See Benzin/Stefan/Rachev, *Approaches to Credit Risk in the New Basel Capital Accord*, 2004 (Available at www.ams.sunysb.edu/~rachev/publication/benzin_trueck.pdf) (hereinafter Benzin et al., *Approaches to Credit Risk*) at p. 1. See also Gleeson, *International regulation of banking*, at p. 34.

1194 Condemni/Polis, *European Business Law Review*, 2004, 405, at p. 406.

1195 See the discussion by Tarullo, *Banking on Basel*, at pp. 45 – 54.

1196 See Hirte/Heinrich, in: Derleder/Bamberger/Knops (Hrsg.), *Handbuch zum deutschen und europäischen Bankrecht*, 2nd. Aufl. 2009 (hereinafter "Hirte/Heinrich, in: Derleder et al., *Handbuch zum deutschen und europäischen Bankrecht*"), at p. 2185.

1197 Tarullo, *Banking on Basel*, at p. 45.

1198 Mainly the G10 countries.

largest internationally active banks, there was a considerable variation on the definition of bank capital, i.e. what financial elements make up the capital, as well as how was the level of this capital calculated.¹¹⁹⁹ Capital regulation is as strong as the financial elements that make up the capital of a bank which is to serve as a buffer against insolvency. Because of the diversities existing among the Committee's countries regarding capital regulation, the Basel I Accord had to provide a compromise for a common standard that would pave the way for its application to many banks in many jurisdictions. The BCBS thus proposed to achieve the two main objectives of Basel I, namely that of promoting the soundness of internationally active banks and levelling the regulatory playing field among banks, through the implementation of several essential concepts. Three of these main concepts introduced by the Basel I Accord are discussed below.

1. Concept one: Definition of capital

The compromise achieved standardized the rules regarding the financial elements that are to constitute the capital of bank. Because of the varying opinions in this area,¹²⁰⁰ a tiered approach was adopted, according to which the capital of a bank would include a tier one capital made up of high liquid capital. This would include basically shareholders' equity, retained earnings and other disclosed reserves, which satisfy the essential characteristics for regulatory capital, such as that it be paid up, freely and permanently available, able to absorb losses and allow the bank to continue as a going concern, represent coupon flexibility and rank lower than claims of all creditors in the event of liquidation.¹²⁰¹ Because of the high liquidity of this capital, tier one capital was also called the bank's core capital. The other portion of bank capital, the so-called tier two capital, would include various financial elements such as revaluation reserves, subordinated debt, general loan-loss reserves, as well as some capital instruments.¹²⁰² It is in the

1199 Condeemi/Polis, *European Business Law Review*, 2004, 405, at p. 406.

1200 There were disagreements especially between the US and the UK on one side, and Japan on the other. Japanese banks, at the time the Basel I Accord was being drafted, were allowed to include in their capital calculations most of their unrealized gains from their holding of securities and real estate. This issue became the most contentious issue during the negotiations for the Basel I Accord. However, in order to have Japan agree to the Accord, and thus make the capital ratio standards applicable also to the Japanese banks, which at the time when the Accord was agreed, constituted nine of the ten largest banks in the world by amount of assets held, a compromise had to be found that would accommodate also the Japanese definition of capital. See Tarullo, *Banking on Basel*, at pp. 46 – 47.

1201 See e.g. Financial Services Authority, *Definition of Capital*, 2007 (Available at www.fsa.gov.uk/pubs/discussion/dp07_06.pdf) (hereinafter "FSA, *Definition of Capital*") at pp. 5-6; See also Tarullo, *Banking on Basel*, at p.56 and Gleeson, *International regulation of banking*, at p. 49.

1202 Tarullo, *Banking on Basel*, at p. 56.

content of the tier two capital that the various interests of the different countries of the Committee regarding the definition of capital were accommodated.¹²⁰³

2. Concept two: The setting of capital adequacy ratios

After defining what constitutes bank capital, the Accord required banks to maintain a specific minimum ratio for each tier of capital against the risk-weighted assets of the bank. The minimum ratio for tier one capital was to be four per cent of the bank's risk-weighted assets, whereas the minimum ratio of the whole capital, i.e. including both tier one and tier two capital was to be at eight per cent of the bank's risk-weighted assets. That meant that a bank could not contract an overall weighted credit risk larger than 12.5 times the amount of its capital. The definition of the eight per cent capital adequacy ratio was subject to two main difficulties, namely to the difficulty related to the identification and measurement of credit risk, as well as to the difficulty related with the determination of a capitalisation level which is considered optimal.¹²⁰⁴ In the end, the eight per cent ratio was set by taking into account the need not to hamper banks' financing and support of the economy, by also reducing direct interventions in the operations of a bank, as well as by considering the need to limit the risk of bank defaulting 'within a statistically acceptable range'.¹²⁰⁵

The inter-connection of capital adequacy ratios with the weighted credit risk of a bank would also serve as an incentive for a bank to increase capital if it wishes to increase risk.¹²⁰⁶ Thus Basel I served to entrench the concept that the capital adequacy of a bank depends on the riskiness of its portfolio.¹²⁰⁷

1203 Such as the inclusion in the tier two capital of noncumulative perpetual preferred stock after the insistence of the US or the permission to include up to 45 per cent of a bank's unrealized gains from securities it held after the insistence of Japan. See Tarullo, *Banking on Basel*, at p. 56.

1204 Condemi/Polis, *European Business Law Review*, 2004, 405, at p. 407.

1205 Condemi/Polis, *European Business Law Review*, 2004, 405, at p. 408. Thus, bank capital was deemed to be adequate if it was said to be capable of reducing the likelihood of a future default below an acceptable threshold. Condemi/Polis, *European Business Law Review*, 2004, 405, at p.406. However, with regard to the setting of the 8 per cent level, Alexander, *Journal of Banking Regulation*, 2004, 6, at p. 7 that the set ratio of 8 per cent was mainly motivated by a regulatory concern for the low levels of capital held by banks in the '80s, 'rather than by an estimate of the socially optimal level of capital that a bank should hold.'

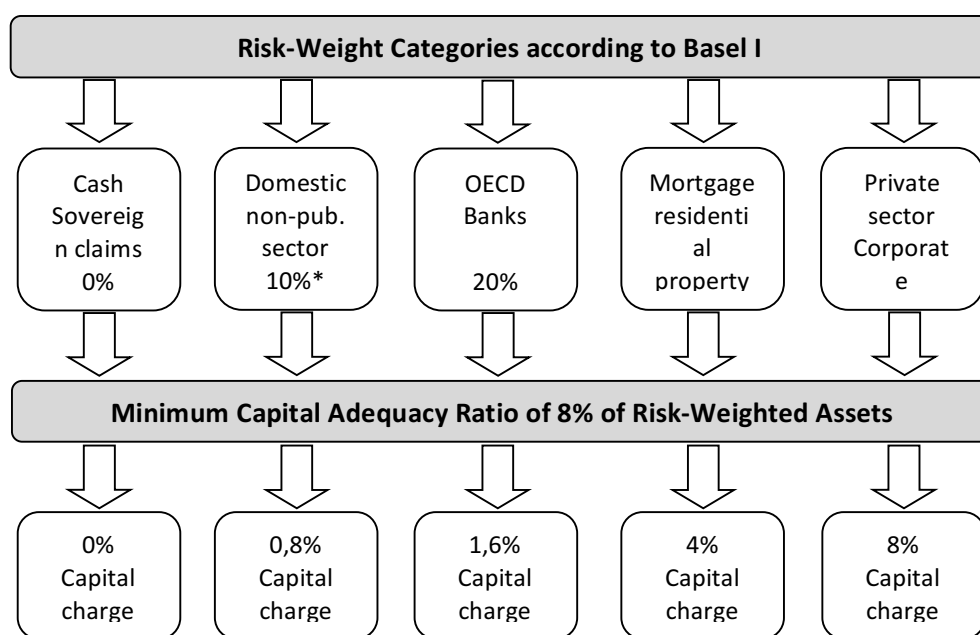
1206 The new concept was also considered as "combining their (banks') advantages and mitigating their flaws", in that banks, in the position of financial intermediaries, would be able to assume risk, mainly credit risk, in exchange for capital, but that risk would be limited. Condemi/Polis, *European Business Law Review*, 2004, 405, at p.407. (word in parenthesis by author) (Consider again where the statement "combining their advantages and mitigating their flaws" really means what you have described)

1207 Tarullo, *Banking on Basel*, at p. 59.

3. Concept three: The determination of risk classes

Regarding the weighting of risk, Basel I designed a simple system whereby banks were required to divide their exposures, assets or off-balance sheet items, into several categories of relative riskiness.¹²⁰⁸ With the view to achieve convergence among the different regulators the Committee decided to adopt a simple solution with regard to the risk categories by defining five broad weight classes, namely 0, 10, 20, 50 and 100 per cent, reflecting similar types of borrowers.¹²⁰⁹ Basel I addressed primarily credit risk,¹²¹⁰ i.e. the risk that the counterparty would default on the payment of interest and principal.¹²¹¹

Figure 4: Capital Charges According to Risk Categories in Basel I Accord



* According to the Basel I Accord, the risk weight for this class of on-balance sheet items may vary at the discretion of the national supervisors from 0 to 50%. But for ease of presentation, a risk weight of 10% was chosen.

1208 Conde/Polis, *European Business Law Review*, 2004, 405, at p. 407.

1209 Gleeson, *International regulation of banking*, at p. 34.

1210 Country risk was treated as a further aspect of credit risk. Thus, country risk was addressed using two approaches, namely a simple differentiation between the claims towards OECD and non-OECD countries. See discussions in Basel Committee on Banking Supervision, *International Convergence of Capital Measurement and Capital Standards*, 1988 (hereinafter "Basel I Accord"), at pp. 8-10.

1211 Although the Basel I Accord pointed out that a bank must also guard against other kinds of risk, such as e.g. investment risk, concentration risk, interest-rate and market risk, credit risk represented for the Committee the main source of risk for banks. See Basel I, at p. 8. See also Tarullo, *Banking on Basel*, at p. 55 and Conde/Polis, *European Business Law Review*, 2004, 405, at p. 408.

Therefore, also the capital adequacy ratios required by the Accord were to be measured with respect to the risk of counterparty default. The risk categories broadly represent three types of claims: claims towards central governments, central banks and commercial banks incorporated in one of the OECD countries, claims on residential mortgage property, and claims on the private sector, as well as towards central governments of non-OECD countries and banks incorporated outside the OECD. The first type of claims was risk-weighted at 0 till 20 per cent, the second type of claims was risk-weighted at 50 per cent, and the third type of claims was risk-weighted at 100 per cent. The categories of risk set by the Accord defined risk in broad terms.¹²¹² Thus, the assignment of assets in one of the risk classes was based primarily ‘on the generic nature of the borrower,¹²¹³ rather than the borrower’s specific financial characteristics’,¹²¹⁴ such as credit history or cash flow. Thus, for exposures towards the same type of borrowers banks were required to hold the same amount of capital, independent of the creditworthiness or riskiness of the borrower.¹²¹⁵ This approach was however at odds with the concept of “higher capital for higher risk” that Basel I served to entrench, in that borrowers’ risk was categorised based on risk’s origin rather than content. This way of categorising risk resulted subsequently in the subsidisation of “bad” debtor at the costs of “good” debtors, since there was no differentiation between the two within the same risk category. This shortfall of Basel I, which is addressed further below, was addressed later on in the Revised Capital Accord Framework, or Basel II Accord.

II. A summarized assessment of Basel I

As noted above, the two fundamental objectives of Basel I were to promote the soundness of internationally active banks and to level the regulatory playing field among banks from different jurisdictions.¹²¹⁶ The adoption of the Accord not only by the Committee’s countries who were the signatories to the Accord, but also, on a voluntary basis, by a large number of non-Committee’s countries¹²¹⁷ brought a certain degree of harmonization among the domestic regulatory standards regarding bank capital adequacy. However, did the converged capital

1212 Basel I, at p. 8.

1213 Such as OECD or non-OECD country.

1214 Tarullo, *Banking on Basel*, at p. 57.

1215 Gleeson, *International regulation of banking*, at p. 34.

1216 Basel I Accord, at p. 1.

1217 See discussion on the implementation and compliance with the Accord by Tarullo, *Banking on Basel*, at pp. 65 – 66.

measurement and capital standards achieve the stated objectives of Basel I? More importantly, did the Basel I Accord create new problems by trying to solve old ones?

Figure 5: Risk weights by category of on-balance-sheet asset according to Basel I

0%	(a) Cash (b) Claims on central governments and central banks denominated in national currency and funded in that currency (c) Other claims on OECD central governments and central banks (d) Claims collateralised by cash of OECD central-government securities ³ or guaranteed by OECD central governments
0, 10, 20 or 50%	(a) Claims on domestic public-sector entities, excluding central government, and loans guaranteed by or collateralised by securities issued by such entities
20%	(a) Claims on multilateral development banks (IBRD, IADB, AsDB, AfDB, EIB, EBRD) ⁵ and claims guaranteed by, or collateralised by securities issued by such bank (b) Claims on banks incorporated in the OECD and claims guaranteed by OECD incorporated banks (c) Claims on securities firms incorporated in the OECD subject to comparable supervisory and regulatory arrangements, including in particular risk-based capital requirements, ⁶ and claims guaranteed by these securities firms (d) Claims on banks incorporated in countries outside the OECD with a residual maturity of up to one year and claims with a residual maturity of up to one year guaranteed by banks incorporated in countries outside the OECD (e) Claims on non-domestic OECD public-sector entities, excluding central government, and claims guaranteed by or collateralised by securities issued by such entities
50%	(a) Loans fully secured by mortgage on residential property that is or will be occupied by the borrower or that is rented
100%	(a) Claims on the private sector (b) Claims on banks incorporated outside the OECD with a residual maturity of over one year (c) Claims on central governments outside the OECD (unless denominated in national currency - and funded in that currency – see above) (d) Claims on commercial companies owned by the public sector (e) Premises, plant and equipment and other fixed assets (f) Real estate and other investments (including non-consolidated investment participations in other companies)

Source: *Basel Committee on Banking Supervision*, at pp. 17 – 18.

1. Achievements of Basel I

In a short assessment, the Basel I Accord represented a milestone with regard to the harmonisation of the international regulatory framework on bank capital adequacy regulation agreed among key financial nations.¹²¹⁸ The rules on capital adequacy,¹²¹⁹ with their focus on

¹²¹⁸ Deutsche Bundesbank, *Basel II*, at p. 16.

¹²¹⁹ These rules were considered detailed for the time considering the level of sophistication of banking operations and financial markets. See Tarullo, *Banking on Basel*, at p. 84.

risk-weighted assets, provided ‘a fairer basis for making international comparisons between banking systems whose structures may differ’¹²²⁰. As such the Accord attempted to reduce competitive disadvantages between internationally active banks located in forbearing or less forbearing countries and it strengthened the capital base of credit institutions.¹²²¹

Establishing the link between the capital required to be held by banks and the risk contracted by them helped introduce a risk-sensitive system that would provide sounder banks and thus ensure more stability in the system. Although, as it will be pointed out below, this link between capital adequacy and risk contracted was not as sensitive as it needed to be, the shifting of the supervisory focus away from the gearing ratio of a bank to its risk portfolio was a positive development.

The setting of a standard adequacy ratio that all internationally active banks were expected to achieve was also a main result of the Basel I Accord. The ratio of eight per cent was considered by the Committee as consistent with the objective of ‘securing over time soundly-based capital ratios for international banks.’¹²²² The wide acceptance of the Accord in general and of the capital adequacy ratio in particular can be perhaps witnessed by the adoption of the Accord after its introduction by around 100 other countries apart from the G-10 first signatory countries.¹²²³ The voluntary adoption of the Accord by so many non-G10 countries may have signalled the need that existed at the time to fill in an existing gap regarding the international regulatory framework on capital standards for banks.¹²²⁴

As a complement to the capital ratios, the Accord reached also a necessary agreement on the components of the capital. The strength of a wall depends on the quality of the bricks. However, agreeing on what made a brick a strong one came out to be a very challenging task. A lot of midnight oil was burned on the negotiation table by the Committee to bring all the signatory parties to an agreement. Although this element did not escape the influence of the domestic

1220 Basel I Accord, at p. 8.

1221 Condemni/Polis, *European Business Law Review*, 2004, 405, at p. 423.

1222 Basel I Accord, at p. 13.

1223 Benzin et al., *Approaches to Credit Risk*, at p. 4 suggest that the wide acceptance of the Accord implies the achievement of the Accord’s two principal purposes, namely that of ensuring an adequate level of capital in the international banking system as well as the creation of level playing field for internationally active banks.

1224 According to Alexander, *Journal of Banking Regulation*, 2004, 6, at p. 7, Basel I has been credited with increasing the capitalisation of the banking sectors in most countries adopting the Accord, as the capital maintained by most banks before the adoption of the Accord was much lower than the 8 per cent ratio required by Basel I. The 8 per cent ratio required by Basel I was a ‘dramatic increase’ in capital levels for most banking systems. Alexander, *Journal of Banking Regulation*, 2004, 6, at p. 6.

interests of some of the Committee member countries,¹²²⁵ the compromise achieved by designing a two tier capital system served to create an acceptable foundation for further improvements, which came later on with the adoption of the Basel II Accord.

Furthermore, the Basel I Accord also provided a two-phases procedure to capture off-balance sheet items for the purposes of capital adequacy ratio calculations.¹²²⁶ Although this procedure is criticised by some scholars as incomplete,¹²²⁷ the contribution of Basel I in bringing off-balance sheet items within the ambit of capital regulation is acknowledged.

2. Drawbacks of Basel I

On the drawbacks side, the Basel I Accord was mainly criticised for its insufficient sensitivity to the risks faced by internationally active banks. The creation of ‘broad brush’¹²²⁸ risk weights in defining risk categories for the various on-balance sheet items, where the generic nature of the borrower was taken into consideration instead of the borrower’s creditworthiness or his specific financial situation lead to a situation where loans to “bad borrowers” were subsidised at the expense of “good borrowers”.¹²²⁹ The outcome was that “good borrowers” were paying a higher interest rate for the loan when taking into account their risk profile, whereas “bad borrowers” were paying a lower interest for the loan when considering their risk profile. This regulatory arbitrage¹²³⁰ presumably created by the Accord raised the concerns that the risk contracted by banks was not being adequately reflected in the level of capital held,¹²³¹ and therefore, it could constitute a threat to the soundness and stability of a bank in particular, and of the system in general.¹²³² The ‘bucket risk’ approach could additionally result counterproductive for the soundness of banks because it could encourage banks to move high quality assets from claims on the private sector off the balance sheet, and replace them with low

1225 E.g. the case of Japan or the US. For more see section i. “Definition of Capital” above.

1226 Tarullo, *Banking on Basel*, at p. 81.

1227 Tarullo, *Banking on Basel*, at p.81 states that the way how Basel I dealt with the securitization issue did not reflect the risk that banks had contracted for.

1228 Basel I Accord, at p. 8. The Committee stresses that the risk weightings defined by the Accord should not be taken as a substitute for commercial judgment for purposes of market pricing of different financial instruments.

1229 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1504, at p.1505; Tarullo, *Banking on Basel*, at p. 82. See also Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563, at p. 564.

1230 Meaning strategies that reduce a bank’s regulatory capital requirements without a corresponding reduction in the risk exposure. See footnote 2 at ECB, *The New Basel Capital Accord: Main Features and Implications*, 2005 (hereinafter “ECB, *New Basel Capital Accord*”), at p. 49.

1231 Conдеми/Polis, *European Business Law Review*, 2004, 405, at p. 424.

1232 Tarullo, *Banking on Basel*, at p.80. See also the discussion by Nikoleyzyk, *Gläubigerschutz zwischen Gesetz und Vertrag. Alternativen zum System eines festen Nennkapitals*, 2007, at pp. 150 – 153.

quality assets because the capital charge on private sector loans it was a standard eight per cent independent of the risk profile of the borrower.¹²³³

The simplicity of the “risk classes” system resulted in assets with a different risk structure or risk level being assigned the same risk class.¹²³⁴ This led as a consequence to an imprecise measurement of the real economic risk faced by banks as a result of their continuously more complex business activities.¹²³⁵

Additionally, the Basel I Accord provided mainly for only one option for measuring the capital adequacy of a bank, namely by measuring the credit risk.¹²³⁶ As already pointed out above, country risk was measured only as an incident of credit risk, whereas other risks were not measured at all. The 1996 amendments to the Accord attempted to address at least partially this problem by providing also for the measurement of market risk as an element for the calculation of the capital adequacy ratios of a bank. However, despite the inclusion of market risk, this way of measuring the capital adequacy of a bank did not reflect the general risk profile of the bank, including operational risk, and therefore it gave an incomplete view of the risks threatening a bank’s solvency and stability.¹²³⁷

Basel I was also criticised for its lack of adequate consideration of the maturity of loans for the purposes of the calculation of capital charges. Thus, Basel I required banks to hold capital only for loans with a maturity of one year or longer. This requirement led to the proliferation of 364-day loans, for which banks were not required to hold capital. The regulatory capital arbitrage created by this rule, where banks could take over risk without holding accordingly regulatory capital, could have had an immediate impact on the bank’s safety and soundness.¹²³⁸

Last but not least Basel I was also criticised for its lack of incentives to banks to develop risk control and mitigation systems. Because of the simple system of risk categorisation in five classes without taking into account the real risk profile of the borrower but solely its nature,

1233 Benzin et al., *Approaches to Credit Risk*, at p. 4.

1234 Tarullo, *Banking on Basel*, at p.79.

1235 Deutsche Bundesbank, *Basel II*, at p.16. Innovative financial instruments and methods for controlling risk were not considered by Basel I. As such, because of the regulatory arbitrage created, by using securitisation techniques bank could reduce the level of regulatory capital without necessarily reducing the level of risk. See also Deutsche Bundesbank, *Basel II*, at pp. 20-21.

1236 Basel Committee on Banking Supervision, *The New Basel Capital Accord: An Explanatory Note, 2001* (hereinafter “BCBS, *New Basel*”), at p. 2.

1237 Deutsche Bundesbank, *Basel II*, at p. 16 points out that economic risks of a bank under Basel I were measured ‘roughly and imprecise’.

1238 Tarullo, *Banking on Basel*, at p. 80.

Basel I did not reward banks in the form of lower regulatory capital for developing innovative methodologies to better control risk.¹²³⁹

Almost seven years after the deadline set by the Committee for the full implementation of the Basel I Accord, efforts were under way to design a better framework, building upon the foundations laid by Basel I. The complexity of bank's business activities was continually increasing, and this complexity needed to be matched with more risk-sensitive rules as well as more flexible methodologies to measure the various kinds of risk faced by banks. It is against this backdrop that the Committee started with the first consultations for designing an improved Basel capital accord framework.

C. Basel II: Introduction to the revised framework

The formally named "International Convergence of Capital Measurement and Capital Standards: A Revised Framework" or Basel II Accord¹²⁴⁰ was the result of a long and continuous dialogue between the Basel Committee on the one side, and the financial intermediaries, primarily large international banks and rating agencies, on the other.¹²⁴¹ The Committee published three consultative papers and conducted five Quantitative Impact Studies ("QIS") to cover the most crucial elements of Basel II. With Basel II, the Committee had set as its goal to address the drawbacks of Basel I, especially with regard to the methodologies for measuring credit risk and to the risk-sensitivity of the system¹²⁴² with the view to get an accurate view and measurement of the real risk profile of a bank,¹²⁴³ which also affects the amount of own capital a bank has to set aside to address the risk.

Capital adequacy alone, despite its important role, could not guarantee the safety and the soundness of a bank. Bank's management ability to control the risk the bank contracts is essential with regard to a bank's safety and soundness.¹²⁴⁴ Bank regulators and supervisors became aware that in a dynamic and complex financial system, without a combination of different mechanisms,

1239 Tarullo, *Banking on Basel*, at p. 84.

1240 Words "Basel II" and the "Revised Framework" will be used interchangeably.

1241 For a longer description regarding the involvement of large banking institutions during the review process that led to the new Basel Accord, and especially their influence with regard to the adoption of the Internal Rating-Based Approach ("IRB") see Tarullo, *Banking on Basel*, at pp. 87 – 113.

1242 Hirte/Heinrich, in: Derleder et al., *Handbuch zum deutschen und europäischen Bankrecht*, at p. 2198. An improvement of the differentiation between the risk categories was one of the key concerns of the Basel Committee.

1243 Deutsche Bundesbank, *Basel II*, at p. 16.

1244 *Ibid.*, at p. 17.

such as bank-level management, supervision and market discipline the stability of the banking sector and of the whole financial system cannot be achieved at a satisfactory level.¹²⁴⁵

Bank business had become more complex over the years since the adoption of Basel I and so had become also their methodologies for quantifying risk. The approach for quantifying risk provided by Basel I was too simplistic to respond to the complex systems developed by sophisticated credit institutions themselves,¹²⁴⁶ especially with respect to the measurement of economic capital.¹²⁴⁷ Therefore the Committee decided to revise the methodology for measuring credit risk through the adoption in Basel II of a “two-approach” system: the standardised approach and the advanced approach. Although Basel II, the same as Basel I, was intended to apply mainly to internationally active banks, the choice of the two approaches, the standardised and the advanced, to measuring risk as well as its underlying principles made Basel II suitable for banks with varying levels of sophistication and complexity.¹²⁴⁸

The Revised Framework keeps unaltered the minimum capital adequacy ratio that banks are required to hold against risk-weighted assets, but added complex risk classes and weighting factors with the view to provide banks with the possibility to categorise counterparty default risk as accurately as possible, making use also of the ratings assigned by eligible rating agencies.¹²⁴⁹ The fundamental principle that a bank must possess adequate own capital to cover losses,¹²⁵⁰ and that a bank may not contract risk simply according to its arbitrary choice, but according to the level of capital available remains the cornerstone of the new accord.¹²⁵¹ As already indicated, the aim of the Committee for the new accord was to increase risk-sensitivity of banks towards borrowers. This means that the regulatory capital of the bank depended on the probability of default of the borrower. The advanced approach for the measurement of risk through bank internally developed models would strengthen further this “dependency” between and risk and regulatory capital. The pricing of risk, which defined also the interest that a borrower was to pay

1245 BCBS, *New Basel*, at p. 1.

1246 *Ibid.*, at p. 11; ECB, *New Basel Capital Accord*, at p. 49.

1247 Economic capital is the bank’s internal measurement of risk across risk types and across business units. It is the primary management tool for bank management through which banks attempt to improve the overall risk/return ratio within the bank by ensuring that the most profitable businesses of the bank receive also the largest portion of bank’s capital. See Gleeson, *International regulation of banking*, at p. 13.

1248 BCBS, *New Basel*, at p. 2.

1249 Condemni/Polis, *European Business Law Review*, 2004, 405, at p. 424.

1250 Hartmann-Wendels, *Basel II. Die neuen Vorschriften zur Eigenmittelunterlegung von Kreditrisiken*, 2003 (hereinafter “Hartmann-Wendels, *Basel II*”), p. 2 and Hartmann-Wendels et al., *Bankenaufsicht*, p. 12.

1251 Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563, at p. 564.

for a loan, was to consider from now on the creditworthiness of the individual borrower, and not just his generic nature. This constituted a major shift in the procedure for granting loans to borrowers when compared to the pattern applied by Basel I. Risk was thus not to be matched by a bank by simply putting aside a lump sum¹²⁵² based on the “bucket risk” approach of Basel I, but the charges on the capital of a bank were to be heavily depending on the individual risk measurement of the borrower, using, where possible, the ratings of the rating agencies.

Basel II was finally endorsed by the central bank governors and head of banking supervisory authorities of the G10 countries on 26 June 2004.¹²⁵³ The intention of the Committee was make the new accord available for implementation as of the end of 2006.¹²⁵⁴

D. Structure of Basel II

The structure of Basel II foresees a model made of three pillars:

- a) Pillar 1: Minimum capital requirements
- b) Pillar 2: Supervisory review process
- c) Pillar 3: Market discipline

The three pillars are mutually reinforcing¹²⁵⁵ and the rigorous application of each one of them contributes to an increased safety and soundness of the financial system in general, and of the banking system in particular.¹²⁵⁶ In order to achieve this objective, the new Accord provides strengthened incentives for prudent bank management by rewarding risk mitigation and control system developed by banks; increasing the role of supervisory authorities in validating the bank’s measurement of risk, and strengthening the role of market in disciplining banks through better access to information on risks in individual credit institutions by introducing disclosure requirements. The three pillars of Basel II are further elaborated below.

1252 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1504, at p. 1505; Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563, at p. 565.

1253 The Basel II Accord was implemented in the EU through the recast of the Banking Directive (Directive 2006/48/EC of the European Parliament and of the Council) and the recast of the Capital Adequacy Directive (Directive 2006/49/EC of the European Parliament and of the Council). Consolidated versions of both directives can be found under: http://ec.europa.eu/internal_market/bank/regcapital/legislation_in_force_en.htm.

1254 Paragraph 2 of Basel II Accord, at p. 1.

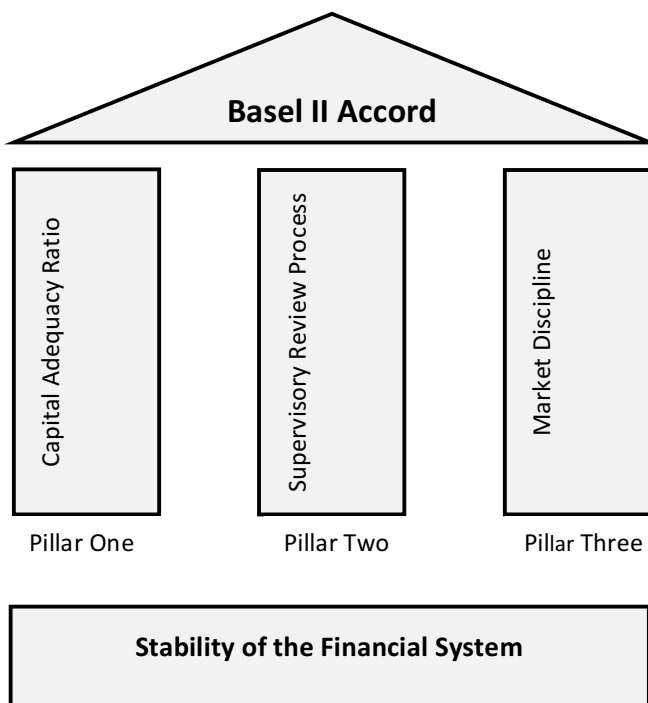
1255 The quantitative norms of Pillar 1 regarding capital adequacy are complemented through the qualitative norms of Pillar 2 regarding minimum standards for adequate bank risk management. Schöning, in: *Management kleiner und mittlerer Unternehmen. Stand und Perspektiven der KMU-Forschung*, 1. Aufl., Nachdr. 2008 (hereinafter “Schöning, *KMU-Forschung*”), at p. 563.

1256 BCBS, *New Basel*, at p. 2. See also ECB, *New Basel Capital Accord*, at p. 49.

I. Pillar one: Minimum regulatory capital requirements

The fundamental objective of the Basel II Accord was to design a framework that would strengthen the stability and soundness of the banking sector as well as protect bank depositors.¹²⁵⁷ As already established by the Basel I Accord and continued by Basel II, building confidence in the banking sector with the view to increase stability of the sector was to be achieved by requiring banks to hold minimum levels of capital against their risk-weighted assets. The requirement to hold capital was based on the notion that banks face incentives ‘to underprice financial risk¹²⁵⁸ and therefore create too much of it in financial markets’.¹²⁵⁹

Figure 6: The Three Pillars of Basel II



Building on the principles laid down by Basel I, Basel II attempts to limit as well as to more accurately measure the risk assumed by banks in the course of their banking as well as non-banking activities.

1257 The need to protect depositors arises also out of the fact that banks are typically highly leveraged enterprises. The average level of bank own capital is approx. 10 per cent of risk-weighted assets. However, measured against total assets, this figure reduces to 1 – 3 per cent. Hartmann-Wendels et al., *Bankenaufsicht*, p. 6.

1258 By underpricing risk, banks would be required to hold less regulatory capital, thus having more capital available for further investments, improving in this way their return on equity.

1259 Alexander, *Journal of Banking Regulation*, 2004, 6, at p. 6. See also discussion on rationale for capital regulation in Tarullo, *Banking on Basel*, p. 16 ff.

From a legal and business point of view, banks are vehicles for assuming risk with the view to make profit. In this sense, bank regulation should assist banks to quantify and restrict the level of risk assumed in order to maintain its solvency and liquidity and avoid endangering the stability of the system.¹²⁶⁰ In order to achieve that, banks need to identify the risk they face, quantify it, justify it through the returns they will be earning by assuming the risk, as well as be able to understand how risks correlate in order to get an overall view of the risk faced by the credit institution.¹²⁶¹ The first pillar of Basel II deals precisely with the identification and quantification of risk faced by banks. The new requirements on risk measurement attempt to align more accurately the capital ratios with the actual risks faced by banks, thus increasing bank capacities to manage risk better.¹²⁶²

The first pillar of Basel requires banks to maintain a minimum solvency ratio of eight per cent of risk-weighted assets. The capital ratio has two components: the numerator, which represents a figure of the absolute capital of bank, and the denominator, which represent a figure of the absolute risks of bank. Thus the adequacy of a bank's capital is an expression of the bank's probability to fail should contracted risks materialize. The eight per cent required capital adequacy ratio¹²⁶³, unchanged from Basel I, should ensure that a bank has sufficient capital to cover unexpected risk. The solvency or the capital adequacy ratio is calculated by using the following formula:

Figure 7: Formula for calculating CAR according to Basel II

$$\text{Capital Adequacy Ratio} = \frac{\text{Total Capital}}{\text{Total Risk Weighted Assets}} \geq 8 \%$$

1. The Numerator

In the formula quantifying the risk and thus measuring the capital adequacy ratio, the numerator has remained unaltered from the one defined in Basel I. More concretely, the numerator is the sum of the bank's tier one and tier two capital. As already pointed out in the discussion above regarding Basel I Accord, tier one capital consists of high quality capital, i.e. high liquid capital

¹²⁶⁰ Gleeson, *International regulation of banking*, at p. 3.

¹²⁶¹ *Ibid.*, at p. 4.

¹²⁶² Fees/Hege, Center for Financial Studies Working Papers, No. 2004/25, 1, p. 1.

¹²⁶³ It is unclear why the value of 8 per cent was chosen, since the selection of this value is not based either on theoretical or empirical valuations.

able to absorb losses suffered by a bank and to enable it to remain a going concern.¹²⁶⁴ This element of capital is made of common equity capital and disclosed reserves. The Committee agreed that also for Basel II, this key element of capital should constitute the core capital of bank, because it 'is the only element common to all countries' banking systems, it is wholly visible in the published accounts and is the basis on which most market judgements of capital adequacy are made'.¹²⁶⁵ With this consideration the Committee attempted to ensure a quality standard about core capital for all internationally active banks.

As in Basel I, also in Basel II, the accord foresaw, for supervisory purposes, the inclusion of supplementary capital in the calculation of the capital adequacy ratio. This tier two capital included undisclosed reserves, revaluation reserves, general loan-loss reserves, hybrid debt capital instruments and subordinated term debt.¹²⁶⁶ According to the Committee, these elements of capital do not enjoy the quality of tier one capital, because they lack one or more of the features of tier one capital, such as free availability, permanency, ability to absorb losses of a bank as a going concern, or the ranking lower than all other debts and liabilities of a bank in a liquidation.¹²⁶⁷ Nevertheless, the Committee considered that supplementary capital may be included in the measurement of the adequacy ratio, but subject to the condition that at least 50 per cent of bank capital should consist of tier one capital, while tier two capital cannot exceed 100 per cent of tier one capital.¹²⁶⁸ Thus, in a simple scenario tier one and tier two capital would make each four per cent of the capital held by banks.

By maintaining the definition of tier one capital unchanged, the Committee intended to show the importance that it attaches to the securing of the appropriate quality and level of total capital resources maintained by international major banks.¹²⁶⁹ After all, it was the objective of Basel II to increase the risk sensitivity of the regulatory capital requirements framework in accordance with the principle that more risk requires more capital to be set aside. However, as previously mentioned in this dissertation, the capital regulation is as strong as the elements that make up the capital. The work for fine-tuning the definition of bank capital for regulatory purposes had not yet finished. What proved to be one of the most difficult issues on the negotiating table

1264 Features of tier one capital include ability to absorb losses; permanent in nature; ranking lower than all other debts and liabilities of the bank; and it has no fixed costs. For more on these features see FSA, *Definition of Capital*. See also Gleeson, *International regulation of banking*, at p. 49.

1265 Basel II Accord, para. 49 (i), at p. 14.

1266 *Ibid.*, paras. 49(iv) to 49(xii), at pp. 14-16.

1267 *Ibid.*, paras. 49(iv) to 49(xii), at pp. 14-16.

1268 *Ibid.*, para. 49(iii) at p. 14.

1269 Basel III Accord, para. 4 at p. 2; para.48 at p. 12.

during the negotiation of the Basel I Accord, had still remained a controversial issue and landed again on the negotiating table when the Committee drafted its reform proposals of Basel II accord, following the regulatory reform agenda of the G-20¹²⁷⁰ in response to the economic and financial crisis which began in 2007.¹²⁷¹ The crisis showed that neither the quantity nor the quality of the core bank capital, the capital which is supposed to serve as a buffer against losses, were at an appropriate level to match the risk that banks had assumed. The issue of what should constitute bank capital became once more a crucial issue for bank regulation purposes. The lack of consistency about the definition of capital in the different jurisdictions drove home the concern that additional work needed to be done to revise the international standards regarding essential issues on banking regulation. With this concern in mind, the Committee members proposed the increase of the core capital portion in the overall capital of a bank.

As it has been indicated above, the capital should allow a bank to cover the losses arising out of bank's business activities and enable it to continue as a going concern. This function, in the capital of bank, is played primarily and foremost by the core capital, or the tier one capital. Strengthening the resilience of a bank, and thus of the banking sector, would mean increasing the core capital of a bank, while at the same time maintaining its quality.¹²⁷²

2. The Denominator

One of the main objectives of Basel II was to increase sensitivity of the models used by the Accord to measure risk. As such, the Accord introduced improvements with regard to the measurement of risk, and especially with regard to the calculation of the denominator in the model determining the capital adequacy ratio of a bank.¹²⁷³

Quantifying with precision the risks that a bank faces is a daunting task, and sometimes next to impossible because some risks may simply not be known until they occur.¹²⁷⁴ Credit risks and market risks, which relate to the value of assets held by a bank, have been the strongest

1270 The G-20 or Group 20, established in 1999, is the group of twenty systemically important industrialized and developing economies, a gathering with the goal to discuss key issues in the global economy. The G-20 is made up of the finance ministers and central bank governors of 19 countries: Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Mexico, Russia, Saudi Arabia, South Africa, Republic of Korea, Turkey, United Kingdom, and United States. The European Union is the 20th member of the G-20. For more information see www.g20.org.

1271 Walter, *Basel III: Stronger Banks and a More Resilient Financial System*, 2011 (Available at www.bis.org/speeches/sp110406.pdf) (hereinafter "Walter, *Basel III*") at p. 2/12.

1272 Basel III Accord, paras.8-9, at p. 2.

1273 According to the model introduced by Basel II, the equation is the following: $[\text{Tier 1 capital} + \text{Tier 2 capital}] / \text{Risk Weighted Assets} \geq 8\%$.

1274 E.g. political risk.

candidates for quantification, whereas the quantification of operational risks, introduced by Basel II for the first time, remains controversial.¹²⁷⁵

Whereas the nominator summarizes the absolute amount of bank capital, divided into tiers, the denominator represents the absolute risk of a bank. The denominator is made up of the total risk-weighted assets of a bank, against which the bank is to hold capital. Total risk-weighted assets¹²⁷⁶ are determined by multiplying the capital charges for market risk and operational risk by 12.5¹²⁷⁷ and adding the resulting figures to the sum of risk-weighted assets for credit risk¹²⁷⁸ according to the following formula:

Figure 8: Formula for calculating total RWA according to Basel II

$$[12.5 * (\text{Market Risk} + \text{Operational Risk}) + (\text{Credit Risk})]$$

The rules of Basel II regarding the measurement of risk provide for the quantification of three types of risk, namely credit risk, operational risk and market risk. While the measurement of market risk remains unaltered from the method introduced by Basel I, the measurement of credit risk is more elaborate, whereas operational risk is measured for the first time¹²⁷⁹ for the purposes of inclusion in the calculation of the CAR. Below is a summarized explanation of what each of the three elements of the risk-weighted assets measure and how are they measured.

a) Market Risk

Market risk is defined as the risk of losses in on and off-balance-sheet positions resulting from changes in market prices in the value or the price of an asset.¹²⁸⁰ Such risks include for example the risks pertaining to interest rate related instruments and equities in the trading book as well as the foreign exchange risks and commodities risks throughout the bank.¹²⁸¹ Hence, the purpose of market risk is to quantify the risk of market fluctuations in assets held by a bank.¹²⁸² In contrast

1275 Tarullo, *Banking on Basel*, at p. 28.

1276 Since bank portfolio assets vary regarding the risk of loss they face, for the purposes of calibrating the level of regulatory capital, it is necessary to weight the risk of each asset portfolio.

1277 The reciprocal of the minimum capital ratio of eight per cent.

1278 Basel II Accord, para. 44, at p. 12.

1279 BCBS, *New Basel*, at p. 3.

1280 Gleeson, *International regulation of banking*, at p.9.

1281 Basel II Accord, at p. 157.

1282 Berger, *Hertfordshire Law Journal*, 2008, 2, at p. 4. See also Tarullo, *Banking on Basel*, at p. 27 explaining that this risk becomes more significant as a higher proportion of bank's assets is traded rather

to operational risk, the measurement of market risk was not a new requirement under Basel II. The measurement of market risk was already introduced through the 1996 amendments to Basel I by the Committee, which, for the first time, extended its reach beyond credit risk.¹²⁸³

Capital charges for market risk would apply either to the trading book items, namely to financial instruments or commodities held either with the intent of trading or to hedge other elements in the trading book, or to the bank's total currency and commodity positions.¹²⁸⁴ Additionally, the charges on capital for market risk are to be applied on a worldwide consolidated basis,¹²⁸⁵ thus to internationally active banks. Market risk can be specific, when the value of particular asset, for example a security, will change for reasons related to that particular security, or general¹²⁸⁶ when the value of all of the securities of a particular type are affected by changes in the market prices of an asset.¹²⁸⁷ For quantifying market risk, four standard market risk factors are considered: i) interest rate risk; ii) equity position risk; iii) foreign exchange risk, and iv) commodities risk.

Basel II provides for two methods for measuring market risk, namely the standardised method and the internal models approach.

(i) *The Standardised Approach*

The Accord contains detailed descriptions of how the capital charges for each of the risk factors are to be calculated.¹²⁸⁸ For the purposes of this dissertation it suffices to say that under the standardised method for measuring market risks, specific risk and general market risk arising from debt and equity positions are calculated separately and then summed up together to give the capital charge for market risk.¹²⁸⁹

than lent.

1283 Tarullo, *Banking on Basel*, at p. 61.

1284 Basel II Accord, paras. 683-5, at pp. 157-8.

1285 *Ibid.*, para. 683 (v) at p. 157.

1286 See *Ibid.*, paras. 709 ff, at p. 166 ff.

1287 Gleeson, *International regulation of banking*, at p. 10. See also Basel II Accord, para. 718(i), at p. 170 which provides that capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates.

1288 See Basel II Accord, paras. 709-718 (LXIX) at pp. 166-203.

1289 *Ibid.*, para. 701(i) at p. 162.

(ii) *The Internal Model Approach*

The most widespread method for measuring market risk is the alternative method, namely the internal models approach, which banks may use subject to explicit approval by the bank's supervisory authority.¹²⁹⁰ This method allows banks to use risks measures derived from their own internal risk management models after fulfilling a number of criteria. These criteria include the adequacy of the risk management system, qualitative standards for bank's management oversight of the use of models, guidelines for stress testing, validation procedures for external oversight of the use of models, etc.¹²⁹¹ Under the internal models approach, for measuring how the prices and values of assets are affected by changes in the various market risk factors, banks are allowed to use statistical models which generate a "value-at-risk" ("VAR") figure, which is the estimate of the largest potential loss the firm could suffer, given the current portfolio of financial instruments it holds, over a given a period of time, in a minimum "holding period" of time.¹²⁹² Basel II requires that the minimum "holding period" of time to be equivalent to ten trading days.¹²⁹³ VAR models calculate risk drawing on the data from statistical analyses of past price movements to determine the range of price movements or risk that might take place in the future. As it is with any formula, the quality of the output data depends on the quality of the input data and therefore the certainty of the results from the statistical models employed can be limited.¹²⁹⁴

Banks using internal models approach for measuring market risk are required to back-test and validate the VAR models used, as well as to have in place stress testing programmes and

1290 This method was already employed by financial institutions for internal purposes before it was incorporated in the Basel I through the 1996 Amendments and later on also as part of Basel II. The 1996 Amendments for the incorporation of market risk as one of the aspects for the calculation of bank regulatory capital was a product of Committee's significant interaction with large internationally active banks. Additionally, the efforts of the Committee on the incorporation of market risk was influences also by the work of the European Union on the capital adequacy directive which would apply to universal financial institutions, not just banks, which conducted commercial banking activities as well as other financial activities. For this type of institutions market risk was highly relevant. For more details on the Committee consultations process for the adoption of the market risk requirements see Tarullo, *Banking on Basel*, at p. 61-64.

1291 Basel II Accord, para. 701(ii) at p. 162.

1292 Gleeson, *International regulation of banking*, at p. 10.

1293 Basel II Accord, para. 718(LXXVI) (c), at p. 195.

1294 The VAR models are subject to limitations. Despite the back-testing and the validation of the VAR models, they are limited in their ability to predict the size of the potential losses because it is not possible to always estimate or predict the size and intensity of the risks occurring. See Gleeson, *International regulation of banking*, at p. 10. See also Tarullo, *Banking on Basel*, at p. 63: "Past market experience did not necessarily predict future market patterns."

scenarios,¹²⁹⁵ that help validate these models, with the view to identify events or influences that could greatly impact the value of a bank's asset portfolio.

The 1996 Amendments to the Basel I for the incorporation of market risk marked a shift in the approach of the Committee with respect to ensuring banks' liquidity or solvency by focusing increasingly also on the bank's risk management systems and risk models to ensure bank's liquidity and solvency.

b) Operational Risk

During the review process that led to the adoption of Basel II, banks participating in the consultations admitted that operational risk was undeniably significant. The increase in the sophistication of banking operations and practices, the assimilation of technological inventions and their use in the performance of business transactions, the mergers and acquisitions in the banking sector creating multinational financial institutions operating in several jurisdictions, the outsourcing of various operational activities have the potential to generate risks that can cause severe financial losses to a bank, or worse put the existence of a bank into question. However, unlike the other two types of risk, namely credit and market risk, operational risk was perhaps the most difficult to quantify in any meaningful way.¹²⁹⁶ The results of the Second QIS also showed that the number of loss events from inadequate or failed internal systems or human errors were quite large.¹²⁹⁷ In this context, despite the criticism from some of the banks that opposed a capital charge for operational risk, the Committee proceeded with its plans to introduce operational risk as a new risk category under Basel II.¹²⁹⁸ The novelty of the approach introduced by Basel II does not rest on the acknowledgment that operational risks exist, but on the understanding that these risks can be anticipated and mitigated through proactive steps and

1295 Basel II Accord, para. 718(LXXVII-LXXVIII) at p. 197.

1296 Tarullo, *Banking on Basel*, at p. 98. The reason for the difficulty in quantifying operational risk lies in the fact that while credit risk and market risk both refer to the value of assets held by a bank, assets which have a measurable value, operational risk refers to failures in the internal processes and people, or risks from external events, the value of which is very hard, to say the least, to determine. See also Bloom, in: Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft (Hrsg.), *Basel II. Handbuch zur praktischen Umsetzung des neuen Bankenaufsichtsrechts, 2005* (hereinafter "Bloom, in: Deloitte & Touche, *Basel II*"), at p.387 stating that the reluctance to seriously deal with operational risk lies in the fact that there is no uniform definition of what operational risk is.

1297 Basel Committee on Banking Supervision, *The Quantitative Impact Study for Operational Risk: Overview of Individual Loss Data and Lessons Learned. Second Quantitative Impact Study, 2002*, at p. 3. See also Bloom, in: Deloitte & Touche, *Basel II*, at p. 387 suggesting that operational risk tends not to be well known because often the contributing factors are many in number and difficult to identify.

1298 BCBS, *New Basel*, at p. 3. See also ECB, *New Basel Capital Accord*, at p. 50 and Tarullo, *Banking on Basel*, at p. 9.

processes.¹²⁹⁹ After all, a financial institution should be able to identify, measure and control the risks it incurs through the business decisions and activities it carries out.

The Committee defines operational risk in the Basel II Accord as ‘the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events’¹³⁰⁰, including in the definition also legal and compliance-related risk, but excluding risks such as strategic risk associated with business decisions¹³⁰¹ and reputational risk.¹³⁰²

The current definition of operational risk covers not only physical disruptions of a bank’s operations by natural disaster or human-caused events, but also failures resulting from human errors.¹³⁰³ Additionally, the increasing reliance of financial institutions on automated systems to carry out financial transactions or provide network communications makes the management of this operations-related risk a high priority for banks. Hence, their inclusion in the notion of operational risk.¹³⁰⁴

While losses can be expected or unexpected, through the introduction of operational risk capital charges, Basel II aims to help banks protect against unexpected losses, namely against those losses which although unlikely to occur, are foreseeable and thus can be mitigated by setting aside capital as a cushion to absorb these losses should they materialise.

Regarding the method for quantifying operational risk, Basel II framework outlines three approaches in a continuum of sophistication and risk sensitivity, as well as of capital savings,¹³⁰⁵ namely i) the *Basic Indicator Approach*, ii) the *Standardised Approach*, and iii) the *Advanced Measurement Approach*.¹³⁰⁶ The first two methods rely on fixed percentages of certain indicators prescribed in the Accord, whereas only the last method permits banks to assess operational risks on the basis of models developed internally by the institution. The purpose of the Accord to

1299 Bloom, in: Deloitte & Touche, *Basel II*, at p. 386.

1300 Basel II Accord, para. 644, at p. 143. See also Hartmann-Wendels, *Basel II*, p. 4.

1301 Gleeson, *International regulation of banking*, at p. 12.

1302 Although the first pillar of Basel II does not require banks to set aside capital for these types of risk, banks are nevertheless required, under the framework of the second pillar of Basel II, to ensure that they have adequate capital to support all the risks in their business, including those not covered by the first pillar. See Basel II Accord, paras. 720-1 at p. 204.

1303 Tarullo, *Banking on Basel*, at p. 28; Gleeson, *International regulation of banking*, at p. 12.

1304 Gleeson, *International regulation of banking*, at p. 12. Additionally, the practice of outsourcing the services providing the automated system used by banks presents an additional risks to bank, because they cannot control their adequate functioning.

1305 Basel II Accord, para. 645, at p. 144.

1306 The approach of the Committee for the measurement of operational risk through three different methods paralleled its own approach for the measurement of credit risk, also through three methods differing in their complexity and risk sensitivity. Tarullo, *Banking on Basel*, at p. 108.

provide for three methods that vary in their level of sophistication and risk sensitivity was to enable banks to use the risk measurement method that suits best to their risk profile. The Committee encourages banks to develop and improve their risk management systems and thus move towards more sophisticated operational risk measurement methods that correspond to their risk profiles, rather than using the basic methods.

(i) *The Basic Indicator Approach*

In a short overview of the three methods outlined above, the *Basic Indicator Approach* (“BIA”) is the simplest method that can be used by a bank for measuring operational risk and it is intended to be used only temporarily by a bank, as an entry-level method, until a bank has the means to use one of the other two approaches. The BIA is the default method for measuring operational risk since there are no criteria banks need to fulfil for utilizing it. However, even when using this method, banks are required by the Accord to comply with the Committee’s guidance on Principles for the Sound Management of Operational Risk and the Role of Supervision, published in February 2003 and updated in 2011.¹³⁰⁷ These guidelines were neither revoked nor affected by the adoption of the Basel II requirements, because while the guidelines require that a bank have in place procedures to control and reduce operational risk, Basel II rules provide the mechanism how the operational risk a bank is exposed to is to be measured.¹³⁰⁸

According to this approach, named also the “top-down” approach,¹³⁰⁹ banks rely on indicators at bank level to arrive at a capital charge for operational risk. Thus, banks using the BIA must hold capital for operational risks equal to a fixed percentage, set by the Accord at 15 per cent, of its average annual gross income¹³¹⁰ over the previous three years. Where gross income in a year is negative, that year is excluded from the calculation of the average. One of the potential problems with this approach is that it lacks the flexibility¹³¹¹ to address bank-specific needs according to their risk profiles. Calculations of the capital charges are made on the basis of the annual gross income without regard to the risk profile of the bank or of the business segments of

1307 Basel Committee on Banking Supervision, *Sound Practices for the Management and Supervision of Operational Risk*, 2003.

1308 Gleeson, *International regulation of banking*, at p. 273.

1309 Bloom, in: Deloitte & Touche, *Basel II*, at p. 391.

1310 Gross income is defined in Basel II as net interest income plus net non-interest income, and includes among others interest receivable and similar income, interest payable and similar charges, income from shares, commissions and fees receivable, net profit or net loss on financial operations, etc. See Basel II Accord, para.650, at p. 145 and Gleeson, *International regulation of banking*, at pp. 262-3.

1311 Bloom, in: Deloitte & Touche, *Basel II*, at p. 391.

the bank. It is perhaps for this reason that this method was thought only as a temporary solution until banks were able to use the more tailored approaches.

(ii) *The Standardised Approach*

Under the *Standardised Approach* (“SA”) approach, called also the “bottom-up” approach, the measurement of operational risk, unlike the BIA approach, is made at the business and process area level, rather than at the bank level. The approach relies on the expertise of each business line of the bank to identify, to measure and to control the risk it has incurred.¹³¹²

A bank may utilize this method for the measurement of operational risk subject to the fulfilment of certain minimum eligibility criteria. These criteria require among others that the bank’s board of directors and senior management be actively involved in the oversight of the operational risk management framework as well as the existence of an operational risk management system that is operationally sound and that is implemented with integrity.¹³¹³

The mechanism employed under the SA for the measurement of operational risk foresees the segmentation of the bank’s activities in eight business lines: corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage. The operational risk is measured individually for each business line following the same pattern as in the BIA. That means that gross income of each business line is taken as a lead indicator for the calculation of operational risk.¹³¹⁴ Further, each business line is assigned by the bank supervisor a risk *beta* factor between 12 and 18 per cent. In each case, the average gross income of each business line for the last three years is established, and that figure is multiplied by the risk *beta* factor pertaining to that business line. The total capital charge of a bank for operational risk is calculated as the three-year average of the simple summation of the regulatory capital charges for each of the eight business lines in each year.

However, the accurate measurement of operational risk according to this approach depends on the availability of operational data in each of the business segments of the bank and on the in-house expertise of the bank. Additionally, the segmentation of a bank’s business and the assignment of three¹³¹⁵ different risk *beta* factors depending on the business line may lead to the outcome that for some banks using the SA the capital charges might be higher than if they had

1312 Bloom, in: Deloitte & Touche, *Basel II*, at p. 391.

1313 Basel II Accord, para. 660, at p. 168.

1314 In contrast to the mechanism under the BIA, the gross income under the SA mechanism, gross income is measured for each particular business line and not for the whole bank. Basel II Accord, para. 653, at p. 146.

1315 Namely 12%, 15% and 18%.

chosen to use the BIA. In this respect, Basel II requirements for operational risk lack the incentives to encourage banks to move to a more advanced approach for operational risk management than the basic approach.¹³¹⁶

(iii) *The Advanced Measurement Approach*

The most sophisticated method for measuring operational risk is the *Advanced Measurement Approach* (“AMA”) which allows banks to employ internally developed models for assessing the incidence and severity of events covered by the notion of operational risk and determining a charge based on that information.¹³¹⁷ As with the SA, a financial institution wishing to utilize the AMA must satisfy the institution’s supervisor that it fulfils certain minimum operational risk management criteria as well as quantitative and qualitative standards. Thus, apart from the general standards that applied also with regard to the SA, qualitative standards require among others that a bank have an independent operational risk management function responsible for the design and implementation of the operational risk management framework; the integration of operational risk management system with the day-to-day risk management system of the bank; regular reporting of operational risk exposures and loss experience to the bank’s senior management and board of directors; proper documentation of the operational risk management system as well regular reviews of the operational risk management system by internal and external auditors.¹³¹⁸

The method employed under AMA is unique to each bank,¹³¹⁹ because the capital charge for the operational risk will equal the risk measure generated by the bank’s internally developed models and approved by the bank supervisors. However, compared to the BIA and the SA, the AMA should consider the actual risk profile of a bank when calculating the capital charges for operational risk. Regardless of the internal method used by a bank following the AMA, the Committee requires the bank to demonstrate that the model employed for the measurement of

1316 Engels/Schauff, in: Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft (Hrsg.), *Basel II. Handbuch zur praktischen Umsetzung des neuen Bankenaufsichtsrechts*, 2005, at p. 360.

1317 Gleeson, *International regulation of banking*, at p. 262.

1318 For more details on the qualitative as well as quantitative criteria required to be met by a bank before using the AMA for the measurement of operational risk see paras. 666-669 at pp. 150-2 of *Basel II Accord*.

1319 Once it has been allowed to use the AMA, a bank is to some extent on its own when it comes to the structure of the calculation or the factor which should be taken into account. Gleeson, *International regulation of banking*, at p. 267.

risk will meet a soundness standard¹³²⁰ able to capture events that will cause severe damages to the bank.

As already indicated above, the introduction of capital charges for operational risk was not without difficulty, due to the challenges that the identification and measurement of operational risk presents. Therefore, it is to be expected that Basel II requirements with respect to operational risks will be subject to changes and further improvements as a result of the evolving and the fine-tuning of practices and processes identifying and measuring this type of risks.

c) *Credit Risk*

Among all the risks arising out of the banking activities, credit risk is the most dominant and most significant type of risk a bank faces. Banking activity in general, and lending activity in particular, like any other business enterprise is not risk-free, but credit risk represents a main concern for banks, because lending is a core activity for a bank, and thus it makes a considerable part of a bank's business. Succinctly, credit risk is defined as the risk that the counterparty will fail to repay in full and in a timely fashion its financial obligation.¹³²¹ It includes not only the risk of default on a loan or bond obligation, but also the risk that a guarantor will fail to meet its obligations.¹³²² The definition of risk includes in itself the risk both from expected and unexpected losses.¹³²³ However, it is the unexpected losses that represent a larger concern for banks, and are therefore of particular interest. It is against these losses that banks need to hold capital in order to avoid insolvency. Therefore it is the purpose of bank capital regulation to determine the extent of the default, which a bank needs to hold capital against¹³²⁴ and to set in this way a floor on the probability of failure of the individual bank.¹³²⁵ Theoretically, a bank faces the risk that all of its exposures, loan or otherwise would default, in which case a bank failure would be unavoidable. However, such a "perfect" default of all of a bank's exposures is

1320 The soundness standard for operational risk measurement to be comparable to the soundness standard of the internal rating-based approaches used for credit risk measurement. See Basel II Accord, paras. 667-8 at p. 151.

1321 Gleeson, *International regulation of banking*, at p. 8 and Hartmann-Wendels, *Basel II*, p. 3.

1322 Gleeson, *International regulation of banking*, at p. 8.

1323 Borio/Furfine/Lowe, in: Bank for International Settlements (Hrsg.), *Marrying the macroeconomic and microprudential dimensions of financial stability, 2001* (hereinafter "Borio et al., in: BIS, *Financial Stability*"), defines "expected losses" as the average or mean losses anticipated over a particular period, while the "unexpected losses" as the degree of uncertainty that surrounds that outcome. "Unexpected losses" could be seen also as losses that exceed "expected losses". See Hartmann-Wendels et al., *Bankenaufsicht*, p. 13.

1324 Gleeson, *International regulation of banking*, at p. 74.

1325 Borio et al., in: BIS, *Financial Stability*, p. 31.

highly unlikely to occur (high-loss low-probability). Moreover, it would be prohibitively costly for a bank to hold capital that would cover to the full amount all of its exposures. Therefore the challenge for bank regulators is to find a mechanism that would measure the highest probability of a default event that would place banks under considerable stress and even cause them to fail.¹³²⁶ Once the highest probability of this default event has been measured, banks could counteract it by holding capital. Under this mechanism, which in the Basel II framework is known as “risk weighting”, a certain “weight” is assigned to an asset or to a portfolio of assets against which a bank needs to hold capital. Thus, the exposure is treated as having a value equal to its weighted value rather than its actual value.¹³²⁷ Hence, also when maximum capital is held by a bank to provide protection against losses related to an asset, that capital would cover not the total value, but only the relative (weighted) value of the asset. Further, these assets are categorized according to the risk weight assigned and then the amount of capital is calculated for each exposure¹³²⁸ that the bank needs to hold in order to meet the capital adequacy requirements.

The measurement of credit risk for the purposes of determining regulatory capital was already required by the Basel I Accord. However, the simplistic approach of Basel I to credit risk was in stark contrast with the sophisticated credit risk assessment models developed internally by large banks.¹³²⁹ Therefore, the regime of credit risk measurement under Basel II was made more risk-sensitive and the risk weights became more granular compared to the crude ones of Basel I. The proliferation of innovative financial instruments by banks increased also their risk profile, and therefore they needed to employ more sophisticated methodologies to measure and manage the increased risk. The use of risk management models was already a widespread practice¹³³⁰ by large banks, but they were employed only internally for allocating economic capital within a bank, but not for regulatory purposes. During the negotiations for the revision of Basel I, large banks insisted that the Committee allow in the revised framework the use of internal risk measurement models¹³³¹ as one of the alternative methods for determining credit risk, and thus

1326 Gleeson, *International regulation of banking*, at p. 74.

1327 Gleeson, *International regulation of banking*, at p. 85.

1328 The requirements of Basel II regarding the calculation of capital charges for credit risk apply only to exposures which are explicitly addressed in the new Accord. Otherwise, exposures, which are not explicitly addressed in the revised framework will be treated according to the requirement of Basel I. See Basel II Accord, para. 52 at p. 19.

1329 Tarullo, *Banking on Basel*, at p. 90.

1330 Because traditionally credit risk was considered to be the most significant risk for financial institutions due to their substantial engagement in lending activities banks gave priority to the development of risk management activities. Gleeson, *International regulation of banking*, at p. 8.

1331 It is suggested that the reason why banks favoured the use of internally developed models for credit risk

also the regulatory capital to be held by banks.¹³³² This would open the way to banks, which possessed the appropriate measuring system as well as the historical data to use the internal rating-based approach. Following the adoption of Basel II, three approaches were provided for the measurement and management of credit risk: the *Standardised Approach* (“SA”), the *Foundation Internal Ratings-based Approach* (“F-IRB Approach”) and the *Advanced Internal Ratings-based Approach* (“A-IRB Approach”). The same as with the operational risk, the three approaches to the measurement of credit risk varied in their complexity and risk sensitivity as well as in their capital saving capabilities, allowing banks of varying sizes, of varying complexity and of varying risk profiles to utilize the approach that suited them best for the purposes of credit risk management. Pursuant to the Revised Framework, banks shall decide on their own which type of bank are they, meaning that they can decide whether they are a standardized approach or an IRB Approach bank. However, the Committee encourages banks to become IRB Approach banks.¹³³³ According to the Committee, it is to be expected that the level of regulatory capital a bank needs to hold against its risk-weighted assets will be lower when a bank chooses the IRB Approach. This expectation is based on the assumption that more sophisticated risk measurement systems are able to measure risk more accurately, and this would lead to better risk management and overall lower risk in the system. The Committee thought that this should serve banks as an incentive sufficient enough to encourage them to move from the more simplistic Standardised Approach to the more sophisticated IRB Approach. Nevertheless, it is unavoidable that some banks will remain Standardized Approach banks because of cost reasons.¹³³⁴

(i) *The Standardised Approach*

The SA allows banks to use a set of prescribed weighting factors according to asset types and external credit assessments in order to determine the likelihood of default risk and thus calculate the amount of capital they need to hold against it.¹³³⁵ As such, the SA has conceptual similarities

measurement and capital regulation rested with their belief that the levels of capital they would be required to hold would decline. See Tarullo, *Banking on Basel*, at p. 101.

1332 For more details on the negotiations for the revision of the rules regarding the measurement of credit risk see Tarullo, *Banking on Basel*, at p. 96 and pp. 98-101.

1333 It is somewhat interesting that the Basel Committee itself was striving to have more banks using the IRB Approach instead of the Standardised Approach, although the latter approach would have provided banks with more capital to withstand financial troubles. This push of the Committee for the use of the IRB Approach might have provided banks with the wrong incentives for choosing this risk measurement model, and the desire to hold as less capital as possible might have provided banks with incentives to underestimate risk and overestimate optimism.

1334 The use of IRB approaches for credit risk measurement involves the employment of sophisticated methodologies which require investments in technology and people. For some banks, these investments may not justify the benefits that will be derived from the use of the IRB approach. See e.g. the minimum requirements for the use of the IRB approach in Basel II Accord, paras. 387-537 at pp. 88-119.

1335 Under the Basel II regime banks have also the choice of a simplified version of the Standardised

with the Basel I regime, which also used prescribed weighting factors for the calculation of regulatory capital.¹³³⁶ However, the new regime introduces more risk sensitivity.¹³³⁷ Under this approach assets are classified into several categories based on the underlying credit risk and the value of exposure is multiplied with a pre-determined percentage. Additionally, the determination of the risk weights is further tailored to the risk profile of the borrower through the use of a credit rating by an external credit assessment institution that meets the eligibility standards set in the Accord.¹³³⁸ This approach makes the risk weighting of an exposure not depending on the borrower's generic nature, but rather on the assessment of a credit rating institution, which judges the risk profile of the borrower.¹³³⁹ In defining the six categories of risk weights, Basel II uses the notations determined following the methodology used by the Standard & Poor's rating agency. However, this is only for illustration purposes and do not indicate a preference of the Committee for any specific credit assessment institution.¹³⁴⁰ Banks are allowed to use any of the eligible credit assessment agencies licenced by bank's supervisors. Basel II requirements prescribe risk weights for defined categories of exposure,¹³⁴¹ out of which in this section only four exposure categories are further discussed below.

Exposures to claims on sovereigns – For the determination of risk weights for exposures to sovereigns, the Accord allows also for the use of country risk scores assigned by Export Credit Agencies (“ECA”). The methodology for the determination of risk scores by an ECA must

Approach. According to this simplified version, banks use pre-determined weighting factors according to the category that assets have assigned to. Thus, standard risk weights for claims on corporates will be 100 per cent, risk weights for retail claims will be 75 per cent, etc. However, the use of the simplified Standardised Approach is very seldom in practice and therefore it will not be further elaborated here.

1336 Additionally, like in the Basel I regime, the Standardised Approach of Basel II regime uses credit conversion factors for off-balance sheet items. Basel II Accord, para. 82 at p. 26.

1337 Basel Committee on Banking Supervision, *The Standardised Approach to Credit Risk. Consultative Document*, 2001 (hereinafter “BCBS, *The Standardised Approach*”), at p. 1 states that the standardised approach would align regulatory capital requirements more closely with the key elements of banking risk by introducing a wider differentiation of risk weights and should produce capital ratios more in line with the actual economic risks that banks are facing.

1338 ECB, *New Basel Capital Accord*, at p. 50.

1339 This approach addresses also one of the main criticisms to the Basel I Accord which allowed for an undifferentiated treatment of borrowers despite their risk profile, resulting in this way in a sort of a subsidisation of loans by “good” borrower to the benefit of “bad” borrowers.

1340 Basel II Accord, at p. 19, Footnote 14.

1341 The exposures for which Basel II prescribed risk weights apply are: claims on sovereigns, claims on public sector entities, claims on multilateral development banks, claims on banks, claims on securities firms, claims on corporates, claims included in the regulatory retail portfolios, claims secured by residential property or by commercial real estate, past due loans, and other assets. For more details see Basel II Accord, paras. 53-89 at pp. 19-27.

subscribe to the OECD agreed methodology for country risk classification.¹³⁴² In comparison to the six risk weight categories of rating agencies, the ECAs risk scores contain seven categories. The credit ratings used by Basel II are divided into six categories,¹³⁴³ with each category carrying a risk weight factor according to the Table 1 below.

Table 1: Risk weight factors for exposures to claims on sovereigns

Risk Weight	0 %	20%	50%	100%	150%	100%
Credit Rating Agencies	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
ECA Risk Scores	1	2	3	4-6	7	

Considering the standard capital adequacy ratio of eight per cent of risk weighted assets, following the risk weight factors above, a bank will be required to hold regulatory capital ranging from zero to 12 per cent of its risk weighted assets.

According to the Basel II requirements, claims on sovereigns will be weighted with a risk factor that varies between zero per cent and 150 per cent based on the credit rating by the credit assessment institution. In contrast to Basel I, in the Basel II Accord the fact whether the claim is against an OECD country or not does not play a decisive role in the risk weight assigned to that claim.¹³⁴⁴

Apart from claims on sovereigns, this risk category comprises also exposures from claims on central banks, including claims on the Bank for International Settlements, the International Monetary Fund and the European Central Bank, which are rated with a zero risk-weight.

Exposures to claims on commercial banks – Further, for claims on commercial banks the Basel II regime provides two options for determining the risk weight. Under the first option, the risk weight assigned to the bank is oriented towards the risk weight of the country of incorporation. All banks incorporated in a given country will receive a risk weight, which is one category

1342 For more details on the OECD methodology for country risk classification see OECD, *The Knaepen Package Guiding Principles for Setting Premia under the Arrangement on Guidelines for Officially Supported Export Credits*, 1997; OECD, *Arrangement on Officially Supported Export Credits*, 2011.

1343 In comparison to Basel I, the Basel II regime introduces an additional risk weight factor of 150 per cent for “bad” borrowers.

1344 BCBS, *The Standardised Approach*, at p. 2.

less¹³⁴⁵ than the risk weight assigned to the sovereign of that country.¹³⁴⁶ Therefore, if a given country is assigned a risk weight of 20 per cent, under the first option banks incorporated in this country will be assigned a risk weight of 50 per cent. However, under this risk measurement option, for banks rated between BB- and B- the risk weight is limited at 100%. Under the second option, the risk weight of a bank will be determined by its external rating assessment. This option provides for a more favourable risk weight, namely one risk category higher (more favourable) for short-term exposures with a maturity of three months or less.¹³⁴⁷ For unrated banks, the risk weight of the country of incorporation provides a floor rating, since these banks cannot be rated more favourable than the country of incorporation. Under the two available options, risk weight factors for banks could vary between 20 and 150 per cent.

Exposures to claims on corporates – Regarding claims on (non-bank) corporates, the Basel II Framework follows only one option for the measurement of risk weight and without relevance to the country of incorporation. The requirements allow for the application of a differentiated risk weight according to the fact whether the corporate is rate or unrated. For claims on unrated corporates, the risk weight is capped at 100%.¹³⁴⁸ Further, in contrast to the treatment of this type of exposure under Basel I, the requirements of Basel II present corporates with a very good rating with the possibility to reduce their risk weight up to 80 per cent.

For rated corporate claims, the Accord prescribes a risk weight that ranges from 20 per cent for credit ratings AA- or better to 150 per cent for credit ratings BB- or worse. Curiously enough, exposures on corporates with no credit rating receive a lower weight, namely 100 per cent, than exposures on corporates with a credit rating BB- or worse. This implies that a company may improve the marketability of its debt instruments by not obtaining a credit rating if it perceives that its credit rating would not be sufficiently positive. Therefore, to address possible anomalies, at the discretion of national supervisory authorities, banks may weight all corporate claims at 100 per cent despite the external rating. However, the supervisory authorities will have to make sure that a bank is using a consistent approach, namely using either external rating or not at all, when weighting a corporate claim.¹³⁴⁹

1345 Understand higher risk rating.

1346 Basel II Accord, para. 61 at p. 21.

1347 *Ibid.*, para. 62 at p. 22.

1348 The standard weighting of all exposures on corporates under Basel I was at 100 per cent. This approach remains also under Basel II the default position except for companies with a credit rating A- or better.

1349 Basel II Accord, para. 68 at p. 23.

Table 2: Risk weight factors for exposures to claims on corporates

Risk Weight	20 %	50%	100%	150%	100%
Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated

Exposure to claims included in the regulatory retail portfolio – The assignment of risk weights on corporate claims caused particular concerns¹³⁵⁰ among small and medium enterprises (“SME”)¹³⁵¹. The reason for these concerns related to the fears that SMEs would have limited access to debt capital due to the role of the credit rating in affecting the terms with which banks provide financing to corporates. The concerns regarding the limited access to debt capital or even to a failure to obtain needed financing related to the requirements of Basel II for companies to obtain a credit rating. The costs of the credit ratings are to be borne by the potential borrower. The inability to obtain a credit rating due to cost reasons or obtaining a negative credit rating would lead to a refusal on the side of a bank to lend money to the company, because the risk profile of the company would not suit to the bank’s policy regarding credit risk portfolio. Banks would be required to hold more capital for lending to SMEs with rating in the speculative grade area and therefore SMEs would suffer from higher capital costs.¹³⁵²

To alleviate these concerns the Committee introduced in Basel II a risk weight of 75 per cent for claims included in the regulatory retail portfolio.¹³⁵³ The introduction of the retail portfolio category was a novelty of Basel II in comparison to Basel I where all exposures to enterprises were categorised under exposures to companies, without regard to the amount of the exposure. The Accord thus allowed banks to group exposures based on similar characteristics and treat them as a single asset. Pursuant to the Basel II requirements, a portfolio of exposures is a retail portfolio if it meets the following four criteria¹³⁵⁴:

- i) *The orientation criterion* – The exposure is towards an individual person or persons or to a small business;

1350 Hartmann-Wendels, *Basel II*, p. 1.

1351 SMEs are defined in the Basel II Accord as enterprises with a consolidated turnover of less than €50 million. See Basel II Accord, para. 273 at p. 64.

1352 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1504, at pp. 1504-5. See also Henneke/Trück, *Banks and Bank Systems*, 2006, 75, at p. 81.

1353 Under Basel I these claims would be assigned a risk weight of 100 per cent.

1354 Basel II Accord, para. 70 at pp. 23-24.

- ii) *The product criterion* – The exposure includes credit lines or loans for a limited number of purposes, such as revolving credit and lines of credit, personal term loans and small business facilities and commitments;
- iii) *The granularity criterion* – The exposure should be sufficiently diversified so that it would deserve the 75 per cent risk weight assigned to it. Sufficient diversification in this case means that the total exposure towards one borrower should not 0.2 per cent of total claims included in the regulatory retail portfolio. *The threshold criterion* – The maximum aggregated exposure to one counterparty should not exceed €1 million.

Under the criteria above, also exposures to SMEs could qualify¹³⁵⁵ as retail exposures and thus benefit from the reduced 75 per cent risk weight. This risk weight is not depended on an obtained rating from a rating agency. Nevertheless, should exposures to SMEs fail to meet the qualifying criteria above and in the absence of a credit rating they will be treated as exposures to unrated corporates and thus weighted at 100 per cent. In this case, Basel II would not treat SMEs any favourably than they were treated under Basel I.¹³⁵⁶ In the contrary, an increase of the costs of capital in the form of higher interest rates could result because of the introduction of capital requirements for operational costs. It should nevertheless be noted that the use of internal ratings-based models for the determination of the risk weight leads, according to some authors,¹³⁵⁷ to a substantial reduction of the capital requirements for banks for exposures to SMEs, because banks can evaluate more accurately the amount of risk contracted compared to the less risk-sensitive model of the standardised approaches.

(ii) *The Internal Rating-Based Approach*

The second approach adopted by the Basel II Accord for the measurement of risk for purposes of calculating the regulatory capital levels is the so-called “Internal Rating-Based Approach” or short the “IRB Approach”.¹³⁵⁸ Under this approach, banks are authorized to undertake the risk classification of assets and to determine the respective risk weights using their own internally developed models. The idea behind the decision of the Basel Committee to provide for this approach was to make use of the expertise accumulated by banks in assessing the creditworthiness of their borrowers and measuring the risks related to the lending activity. It was

1355 Schöning, *KMU-Forschung*, at p. 565.

1356 However, this statement does not consider the capital costs resulting from the capital that a bank is required to hold to cover operational risk.

1357 Schöning, *KMU-Forschung*, at p. 566. However, it is interesting to note that the capital required to be held for identical exposures to non-rated SMEs may vary from bank to bank, depending on the risk-sensitivity of the IRB model used by the bank. Schöning, *KMU-Forschung*, at p. 568.

1358 The IRB Approach was introduced in the Second Consultative Documents of the Basel Committee.

mentioned earlier that banks were already familiar with internal risk measurement models and used these models for the calculation and optimisation of their economic capital.¹³⁵⁹ Therefore, the adoption of the IRB Approach was not thought to cause major familiarization problems to banks. However, the inclusion of the IRB Approach was significant because the measurement of risk using this approach would be recognized for regulatory purposes in the calculation of the capital adequacy ratio. This was the novelty introduced by Basel II.

By recognizing banks' internal risk-measurement models, subject to supervisory approval, banks are effectively determining their minimum capital requirements.¹³⁶⁰ The introduction of the IRB Approach in the Basel Accord was based on the understanding that banks have an incentive to measure accurately and as precise as possible the credit risk of the borrowers, when such measurement is tied directly to the level of regulatory capital they should hold. Precise measurement of risk, could lead to lower regulatory capital levels. Hence, it is this correlation that should induce banks to improve continuously their internal risk management practices, which in turn will contribute to their stability as credit institutions and further, to the stability of the financial system. Moreover, the Basel Committee expected that the use of the IRB Approach would lead to lower regulatory capital levels for banks¹³⁶¹, due to more accurate risk measurement methodologies, serving in this way as another incentive for using the IRB. Consistent with the Basel Committees objectives, the use of IRB Approach would produce capital requirements that reflect each bank's actual credit risk according to the principle: low quality portfolio, higher capital requirements and high quality portfolio, lower capital requirements.¹³⁶²

Although it was the intention of Basel II to encourage all banks to use the IRB Approach for the calculation of the regulatory capital, not all banks will be in the position to do so. The use of the IRB methodology by a bank is subject to approval by the banking supervisory authorities. This approval is tied to the fulfilment by a bank of regulatory and technical standards¹³⁶³, which ensure the application of sound and consistent risk measurement methodologies. Since larger banks were already using internal rating-based models for the calculation of economic capital

1359 Additionally, banks were allowed to use internal risk assessment models for the calculation of the market risk after the 1996 amendments to the Basel I Accord.

1360 Fees/Hege, Center for Financial Studies Working Papers, No. 2004/25, 1, p. 1.

1361 However, some authors suggests that the exactly the opposite might be true. Namely, that the use of the IRB Approach leads to higher regulatory capital levels than when a bank uses the Standardised Approach. See e.g. Weber/Darbellay, *Journal of Banking Regulation*, 2008, 1, p. 11.

1362 Saidenberg/Schuermann, Wharton Financial Institutions Center Working Paper Series, 2003, 3, p. 8.

1363 Basel II Accord, paras. 387-537.

before the adoption of Basel II, it was reasonable to expect that they will be the first banks that will get regulatory approval pursuant to Basel II. For relatively smaller banks, with no previous IRB experience, the decision to migrate from the Standardized to the IRB Approach will be subject to a costs-benefits analysis, since the use of IRB Approach may not necessarily be associated to lower regulatory capital levels¹³⁶⁴ and the benefits from the use of the IRB Approach might not justify the costs for adopting the needed infrastructure for applying the approach.¹³⁶⁵

The differences between the two major approaches regarding the measurement of credit risk in Basel II, namely the Standardized and the IRB Approach rest primarily and substantially on the calibration of the risk measurement methodology, which depends on the input factors responsible for the calibration. Thus, whereas under the Standardized Approach, only the rating and the asset classification were the decisive factors for determining the risk weights for the respective exposure, in the IRB Approach several other factors or risk parameters are taken into consideration to determine the final risk weight. The IRB Approach is based on measures of expected losses (EL) and unexpected losses (UL). The risk-weights determined through the IRB methodology produce the capital requirements for the unexpected losses.

More specifically, under the IRB Approach for the calculation of the regulatory capital to cover unexpected losses pursuant to the Basel II requirements, a bank would need to use four risk parameters. These are:

- (i) PD – the probability of default parameter, which gives for each rating class the probability of default of a borrower within an one-year time horizon¹³⁶⁶;
- (ii) LGD – the loss given default parameter, as the percentage of the exposure that will be lost in case there is a default.¹³⁶⁷ The height of the LGD will depend on the ranking of the exposure (debt) in insolvency as well as whether, and if yes, how much security did the bank hold as collateral.

1364 Saidenberg/Schuermann, Wharton Financial Institutions Center Working Paper Series, 2003, 3, p. 17.

1365 Cluse/Stellmacher, in: Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft (Hrsg.), *Basel II. Handbuch zur praktischen Umsetzung des neuen Bankenaufsichtsrechts*, 2005 (hereinafter “Cluse/Stellmacher, in: Deloitte & Touche, *Basel II*”), p. 207.

1366 In the Standardized Approach, this parameter was captured only implicitly through the risk-weight that was allocated to an exposure based on the rating class. The rating class on itself reflected the probability of the borrower. In the IRB Approach, the PD is measured explicitly by the bank through its internal models.

1367 This risk component is not captured at all in the Standardized Approach, but only in the IRB Approach. The securities provided by the borrower play an important role in reducing credit risk and therefore have a direct effect in the interest rate charged by the bank.

- (iii) EAD – the exposure at default parameter, representing the outstanding amount of exposure when default occurs. This risk factor determines the potential loss through default.
- (iv) M – the effective maturity of exposure parameter.

The IRB Approach is divided in two sub-approaches or models, the Foundation IRB (F-IRB) Approach, which is the “simple” version of the IRB Approach, and the Advanced IRB (A-IRB) Approach, which is the more complex version. The difference between the two models rests among others on the estimation of the risk parameters, the values of which a bank may calculate internally or obtain them from the supervisory authorities. More specifically, while for both models of the IRB Approach, a bank must estimate internally the PD values, the values for the other three parameters, a bank choosing the F-IRB approach will have to obtain from the supervisory authorities, whereas a bank choosing the A-IRB Approach may estimate them internally.

Apart from the risk parameters, the IRB Approach foresees also the classification of exposures (asset classes), following the same pattern as under the Standardized Approach. Thus, the classes of assets include exposures to claims on i) sovereigns; ii) banks; iii) corporates¹³⁶⁸; iv) retail, and v) equity, reflecting in this way the prevailing bank practice in the classification of assets. The definition of the assets classes, i.e. what exposure qualifies under what asset class remain more or less the same as the definition given under the Standardized Approach.¹³⁶⁹

Based on the risk parameters and classification of assets risks, a bank will estimate the risk weight for a given exposure, which is essential for the calculation of the regulatory capital under Basel II requirements. Among the four risk parameters stated above, especially two of them, the PD and the LGD are decisive for the calculation of the risk weight.

The probability of default risk parameter (PD) – One of the essential tasks of a bank that has chosen the IRB Approach is the estimation of the PD parameter. The PD risk parameters captures the average probability that a borrower, classified in one of the allowable rating classes, will default¹³⁷⁰ in the next 12 months. The estimation of the PD is a mandatory requirement for a bank that has chosen the IRB Approach, irrelevant of the fact whether it has chosen the F-IRB

1368 Corporate asset class includes five sub-classes, whereas the retail asset class three sub-classes.

1369 Hartmann-Wendels, *Basel II*, p. 54.

1370 There is a default when the obligor is past due more than 90 days on any material credit obligation to the obligee. Basel II Accord, para.452, at p. 100. However, not in all case a default according to this definition, may not always result in a loss, since a borrower may be with 90 days delay, but will still make good on all of its obligations. See e.g. Schuermann, Wharton Financial Institutions Center Working Paper Series, 2004, 1, p. 5.

or the A-IRB model. The value of the PD is not dependent on the securities or collateral that guarantees the loan. This means that a bank will have to collect the necessary information about the quality of the borrower in order to determine his creditworthiness. To increase the accurateness of the PD estimation, a bank would need to avail herself of the information regarding past defaults. The more information is available on past defaults, the more accurate is the estimation. The requirements of Basel II specify that the information on past defaults should capture the information at least of the past five years. Using data that have been collected and assessed over a minimum time length of five years for the estimation of the PD ensures that the estimated values reflect long-term bank's experiences with regard to credit defaults. The necessary data is collected and assessed through the bank internal rating process. Critical elements for an accurate rating result are the availability of borrower's data and the consistent use of this data to achieve an objective rating result. Since the PD values are estimated for a period of one year, also the rating results are valid for the same length of time, after which a rerating has to take place. The rating process, the types of ratings, internal and external, and the role of rating on the determination of credit risk are described in more details in Section 3 The essential role of credit rating in Basel II.

The Loss Given Default risk parameter (LGD) – The LGD value describes as a percentage the part of the exposure that would be lost or that will not be recovered should the borrower default. Thus, in the case of an exposure towards a corporate, the LGD values are the losses that a bank has to take based on the recovery rates. Under the A-IRB model, banks must estimate these values on their own, and that implies that should a bank not be in a position to estimate these values, than it cannot use the A-IRB model but only the F-IRB and obtain the LGD values from the supervisory authorities.

The LGD values depend among others, especially on the securities that a bank has obtained to mitigate risk as well as on the raking of the debt in insolvency. This means that for unsecured claims banks will estimate a higher LGD and vice versa. The range of assets that can be used as security differs is larger in the A-IRB than in the F-IRB. Collaterals that can be pledged as securities include not only financial assets, such as shares, but also mortgages and physical assets.

Should a default or a failure to repay the loan occur, the LGD parameter includes three types of losses: i) the loss of principal; ii) the carrying costs of non-performing loans (e.g. interest rate foregone), and iii) workout expenses (e.g. legal costs).¹³⁷¹ The LGD values have to be calculated

1371 Schuermann, Wharton Financial Institutions Center Working Paper Series, 2004, 1, p. 6.

individually for each credit and the resulting value shall reflect eventual economic downturn conditions to capture risks related thereto.¹³⁷² Since collateral plays an important role in lowering LGD values, Basel II requires that banks pay the necessary attention to the dependency that might exist between the risk of the borrower and that of the collateral or of the collateral provider. Accordingly, due to the insecurities that banks face in determining the value of the collateral and as well as due to the difficulties in executing collateral expeditiously in case of default, Basel II requires banks to take a conservative approach when estimating the LGD values based on the obtained collateral.¹³⁷³ Estimates of the LGD must be based on historical recovery rates observed by banks. For this reason, Basel II requires that the minimum data observation period that banks should use for the estimation of LGD values cover at least one economic cycle, but in any case no shorter than seven years. However, Basel II allows banks to use longer observation period spans for LGD estimates when the data observed during this period are relevant for the LGD estimation.

The Exposure at Default risk parameter (EAD) – EAD is defined as the expected gross exposure of the facility (credit) default of the obligor. The EAD model of a bank would look at the borrower's ability to increase her exposure when nearing default. This will depend mainly on the type of the facility or financial product available to the borrower and on the ability of the bank to prevent excessive draw down on the financial product especially when the borrower approaches default or insolvency. This means in turn that while for a loan, the amount and the repayment deadline of which is predetermined, estimating the EAD should not present major difficulty, the same thing cannot be said for financial products where amount and repayment date vary. Typical examples of these financial products are lines of credit, where a borrower is theoretically able to draw down at will the facility up to the maximum allowed amount.¹³⁷⁴ The difference between the LGD and the EAD is that whereas the EAD captures the whole loss that a bank could incur as a result of default, the LGD captures that percentage of the exposure that would eventually be lost, should the default occur.¹³⁷⁵

1372 Basel II Accord, para.468 at p. 103.

1373 *Ibid.*, para.469 – 471 at p. 103.

1374 Saidenberg/Schuermann, Wharton Financial Institutions Center Working Paper Series, 2003, 3, p. 22 and Schuermann, Wharton Financial Institutions Center Working Paper Series, 2004, 1, p. 8.

1375 Under the F-IRB, banks must use supervisory estimates of LGD for calculating the risk weight of an exposure. Thus, for unsecured exposures towards sovereigns, banks and corporates, the LGD percentage is at the 45% level. Under the A-IRB, the LGD percentages have to be calculated by the bank itself, which must nevertheless have a sufficient amount of data available, usually for the past seven years, in order to make the estimates pursuant to Basel II.

As with the LGD values, banks choosing the A-IRB model have to assign an EAD value for each facility, otherwise they have to use supervisory values.¹³⁷⁶ Since the EAD values could be influenced by economic cycles¹³⁷⁷, Basel II requires banks to use EAD estimates that appropriate for an economic downturn when these estimates are volatile over the economic cycle. Thus Basel II encourages banks to use conservative estimates in compliance with the overall purpose of Basel II to provide a better protection to banks in times of financial distress, rather than using the bank internal models to lower the regulatory capital.

Maturity (M) – Since a bank is required to hold regulatory capital against risks that might arise in the future, the estimation of the time factor, which represents a risk for the bank is an important element for determining credit risk. The estimation of risks in the longer-term presents substantially more difficulties than the estimation of short-term risks.¹³⁷⁸ This implies that the probability of default of a borrower is higher in the longer-term, due to prediction uncertainties.¹³⁷⁹ Therefore, considering that the maturity of a financial product is a risk driver, it was considered necessary by the Basel Committee to deal with this issue explicitly as part of its efforts to adopt an IRB Approach that was as risk sensitive as possible.¹³⁸⁰

Banks traditionally relate longer maturities with higher credit risk and reflect the increased risk by holding more capital. Uncertainty costs. Therefore to reduce the potential losses as well as the regulatory capital burden, banks impose limits on the maturity of certain facilities or for certain borrowers. Maturity is thus considered an important credit risk mitigation tool. Incorporating maturity directly in the computation of capital requirements for banks would make regulatory capital more risk sensitive and avoid too high capital charges for banks.¹³⁸¹

However the explicit use of maturity as a risk mitigation tool could have the unpleasant effect that it could encourage banks to shift from longer-terms to shorter-term loans, thus driving up the costs of borrowing. The Basel Committee recognised in the Second Consultative Document that long-term finance contributes to a stable financial system, reduces borrowers' vulnerability

1376 Basel II Accord, para. 475 at p. 105.

1377 For example a company facing liquidity problems during an economic downturn, will attempt to increase her leveraging to avoid default.

1378 The shorter maturity of a loan increases bank's flexibility to react in case the financial situation of a borrower deteriorates suddenly. E.g. a bank could deny further credit, increase price to compensate for increased risk or require additional collateral.

1379 Cluse/Stellmacher, in: Deloitte & Touche, *Basel II*, p. 188.

1380 Basel Committee on Banking Supervision, *The Internal Ratings-Based Approach. Consultative Document*, 2001 (hereinafter "BCBS, *The IRB Approach*"), para. 118 at p. 25.

1381 BCBS, *The IRB Approach*, para. 121 at p. 26.

to interest rate risks, and that banking systems with a high proportion of long-term financing show less vulnerability in financial crises.¹³⁸² Therefore, in order to address this problem and to avoid that banks that are more engaged in long-term lending face discriminatory charges on capital¹³⁸³, the Basel Committee decided as a compromise to standardize the factor M for the F-IRB approach.

Thus, under the F-IRB approach, the effective maturity parameter assigned to all exposures is set at 2.5 years, except for some transactions, where the maturity is set at six months.¹³⁸⁴ In the same way as with the other risk parameters explained above, should a bank choose the A-IRB model, it is expected that it will calculate on its own the effective maturity for each exposure.

Once the risk parameters under the IRB Approach are estimated, Basel II requires banks to calculate the regulatory capital it needs to set aside to cover risk. The Basel Committee decided that the regulatory capital should be calculated to cover only the unexpected losses, namely those losses that deviate from the expected losses. The expected losses are to be covered through provisions set aside by the bank, whereas the unexpected losses are left to be covered by bank's own capital.¹³⁸⁵ Based on Basel II requirements, the expected losses are calculated using the formula: $EL = PD \times LGD$.¹³⁸⁶ The bank includes the EL values in the risk calculations for each individual borrower. The calculation of the EL values and of the estimation of the risk parameters, are important since from these values the bank can derive the unexpected losses. More concretely, the values of the unexpected losses are derived after the values for the expected losses are subtracted from the maximum potential losses calculated to 99.9 per cent of the exposure.¹³⁸⁷ As already mentioned above, it is against these losses that a bank must hold regulatory capital. The end outcome is that the sum of the regulatory capital and of the provisions that a bank must hold for a given exposure must equal the maximum loss of a bank for that exposure in an extreme situation that corresponds to losses up to 99.9 per cent of the exposure.

1382 *Ibid.*, para. 123 at p. 26.

1383 E.g. in Germany, where banks often lend at longer-terms would face higher capital costs compared to banks in countries where mainly revolving credits of shorter duration are the norm. See Cluse/Stellmacher, in: Deloitte & Touche, *Basel II*, p. 189.

1384 Basel II Accord, paras. 318 and 324.

1385 Cluse/Stellmacher, in: Deloitte & Touche, *Basel II*, p. 204.

1386 Basel II Accord, para. 376 at p. 86. This formula is used for calculating the expected losses for corporate, sovereign, bank and retail exposures.

1387 Hartmann-Wendels, *Basel II*, p. 80. The capital adequacy ratio of 8 per cent is calculated based on the formula $CAR\ 8\% = LGD \times RWA$, where the value of the risk weighted assets is calculated based on the formula $RWA = PD \times LGD \times M$. See Deutsche Bundesbank, Monatsbericht, 2004, p. 80.

Should the expected values exceed the total provisions made by a bank, then the difference has to be subtracted from the bank's own capital, which forces the bank to raise additional capital to fill up the gaps. However, where the total expected loss amount is less than the total eligible provisions, banks are allowed to recognise the difference in Tier 2 capital up to a maximum of 0.6 per cent of the risk-weighted assets.¹³⁸⁸

To sum up, it was the purpose of the Basel Committee that by adopting the IRB Approach, the risk profile of the credit institutions could be assessed more accurately due to the risk sensitivity of a number of risk parameters. By providing a more risk-sensitive approach to the measurement of credit risk, banks should be able to set aside the regulatory capital they need to cover risk sufficiently.

In order to employ the IRB Approach, banks are required to meet a number of minimum conditions that relate to regulatory as well as to physical infrastructure. The fulfilment of these conditions enables banks to use internally developed models for the estimation of the risk parameters and thus also of the regulatory capital they must hold. It should be in the interest of banks to use these models in a consistent and accurate way, since this will result in a better protection for the bank. As mentioned by the Basel Committee, one of the advantages for banks deriving from the use of the IRB Approach is the resulting low regulatory capital due to a more refined risk measurement methodology compared to the methodology applied under the Standardized Approach. However, this has raised the concerns that Basel II permits the reduction of bank regulatory capital, while not reducing in the same time also the risk in the system.¹³⁸⁹ It is assumed that banks will be more concerned in finding ways how to reduce their regulatory capital even if they hold risky positions, than to ensure that the risk they contract is adequately covered with capital. Thus, the incentive to use the IRB Approach for a more accurate measurement of risk could be defeating its purpose and turn even counterproductive into an incentive to find creative ways how to reduce liabilities but not risks.

Banks would need nevertheless to assess carefully whether migrating from the Standardized Approach to the IRB Approach is economically beneficial in the long-term, since some have suggested that the Standardized Approach often yields lower regulatory capital levels than the IRB Approach.¹³⁹⁰ Banks would have to assess whether the costs for investments in the needed infrastructure for making the bank IRB-worthy justify the resulting benefits. Furthermore, the

1388 Basel II Accord, para. 43 at p. 12.

1389 Weber/Darbellay, *Journal of Banking Regulation*, 2008, 1, p. 8.

1390 Saidenberg/Schuermann, *Wharton Financial Institutions Center Working Paper Series*, 2003, 3, p. 17.

use of the IRB Approach is accompanied also with more disclosure requirements. Should an IRB bank fail to meet the requirements for continuing to use the IRB Approach, switching bank to the Standardized Approach could cause the bank reputation damages, which would effect also the bank's rating position.¹³⁹¹

3. The essential role of credit rating in Basel II

The Basel II rules allocated a new importance to credit rating agencies. Although the use of rating¹³⁹² for the measurement of credit risk was not a new practice,¹³⁹³ the requirements of Basel II, on the one hand, to bind the level of regulatory capital with the borrower's risk, which on the other hand is strongly related to the borrower's credit rating, turned rating agencies into important players in banking regulation and gave them powers they could have only wished for.¹³⁹⁴ It is said that ratings predict the likelihood of default on financial obligations and the expected repayment in the event of default by an incumbent or potential borrower.¹³⁹⁵ It is assumed that through the rating process, the creditworthiness of the borrower will be more accurately measured¹³⁹⁶, and this will have benefits not only for the crediting institutions, but also for the borrowers as well as the third parties dealing with the borrowers.

For example, the rating of a borrower helps the lender to more accurately decide on important questions relating not only the amount of regulatory capital it has to hold, but also on questions regarding the loan terms and conditions, size of loan, maturity length, the use of securities and covenants, as well as the composition of its loan portfolio. Due to the high competition between

1391 Cluse/Stellmacher, in: Deloitte & Touche, *Basel II*, p. 207.

1392 There is considerable literature that provide a scholarly definition of rating. For German literature See e.g. Deipenbrock, *Betriebs Berater*, 2003, 1849; Wolf, *Basel II - Kreditrating als Chance*, 2003 (hereinafter „Wolf, *Basel II*“); Fees/Hege, Center for Financial Studies Working Papers, No. 2004/25, 1; Herfurth, *Ratingagenturen*; Eggers, *Wettbewerbs- und kartellrechtliche Probleme von Ratings*, Als Ms.gedr. 2010 (hereinafter „Eggers, *Probleme von Ratings*“); Vetter, *WM - Zeitschrift für Wirtschafts- und Bankrecht*, 2004, 1701. For English literature see e.g. Partnoy, *Washington University Law Quarterly*, 2001, 491; Partnoy, *U San Diego Law & Econ Reserach Papers*, 2001; Altman/Saunders, *Journal of Banking and Finance*, 2001, 25; Coffee, *European Corporate Governance Institute Working Paper Series in Law*, 2010; Hunt, *Columbia Business Law Review*, 2009, 109.

1393 In Germany for example, a law passed in 2002, in German “*Mindestanforderungen an das Kreditgeschäft der Kreditinstitute*” (MaK), required all credit institutions resident in Germany to have sound and valid processes for the classification of credit risk.

1394 Rödl, in: Reichmann (Hrsg.), *Rating nach Basel II. Herausforderungen für den Mittelstand*, 2006 (hereinafter „Rödl, in: Reichmann, *Rating nach Basel II*“), p. 110. Basel II accelerated the use of ratings in the credit business.

1395 Becker/Milbourn, *Harvard Business School Working Papers*, 2010, 1, p. 11.

1396 So far, credit risk was treated in the same way, despite the different risk profile of the borrower. This was one the major weaknesses of Basel I. Everling, in: Deloitte & Touche GmbH *Wirtschaftsprüfungsgesellschaft* (Hrsg.), *Basel II. Handbuch zur praktischen Umsetzung des neuen Bankenaufsichtsrechts*, 2005 (hereinafter „Everling, in: Deloitte & Touche, *Basel II*“), p. 67.

lenders and the critical role that the borrower's rating takes under Basel II, it is assumed that the accurate measurement of the credit risk will become a decisive factor for the business success of lenders.¹³⁹⁷ Other investors and financial intermediaries use ratings as an indicator of borrower's risk and factor this information in their decision-making when dealing with the borrower. From the borrower's perspective, the rating has positive effects in that it provides a good foundation for the negotiations with the lender regarding the loan terms and conditions. A positive rating improves the marketability or pricing of a borrower's financial obligations and thus increases his chances for favourable financing terms. In this sense, rating becomes an instrument of financial communication between the lender and the borrower.¹³⁹⁸ Moreover, a reliable rating reduces information asymmetries and makes the borrowing firm more credible vis-à-vis investors, who will not rely only on the estimation of the firm about its ability to meet future obligations, but also on the assessment of an independent eligible rating agency about the borrower's creditworthiness. Additionally, a credit rating complements borrower's own assessment about its risk level and could provide the borrower with important information about potential areas in the management of the enterprise that need improvement.¹³⁹⁹ Improving the firm's management helps the borrower to strengthen its negotiation position towards lenders as well as other third party creditors, and sends positive public signals about the stability, solvency and financial strength of the firm. Thus, firms with positive rating should benefit from stable and long-term relations with, for example, suppliers, employees, customers or other third party creditors. This reduces the overall costs of doing business for the firm and provides a good foundation for growth.¹⁴⁰⁰

a) *The meaningfulness of a rating*

Credit rating (or the rating of borrower's creditworthiness) serves as an important gatekeeping mechanism, and rating agents may be considered as performing an important function regarding borrower's screening, an activity, which is not without significance for the protection of third party creditors dealing with these borrowers. By expressing in a succinct way the financial strength and the ability of the borrower to meet future financial obligations over a certain period of time, credit rating is supposed to facilitate the transfer and the understanding of important firm information to and by the investing public and other third party creditors. The

1397 Everling, in: Deloitte & Touche, *Basel II*, p. 67.

1398 Wolf, *Basel II*, p. 19; Rödl, in: Reichmann, *Rating nach Basel II*, p. 120.

1399 Decken, in: Eilenberger (Hrsg.), *Kreditpolitik der Banken und Unternehmens-Rating: Konsequenzen von Basel II. Beiträge zur Konferenz am 28.11.2001*, 2001, p. 26.

1400 Rödl, in: Reichmann, *Rating nach Basel II*, p. 122.

meaningfulness of the rating notes, such as AAA or D, transmits immediately and without barriers the message to the public, irrelevant of the language they speak.¹⁴⁰¹ As a matter of fact, this is also the purpose of rating, namely that it should help the investing public to create an objective view about the financial health of the rated subject and on that basis to make an informed decision about whether or not to enter into a business relation with the particular borrower. It is for these reason that rating agencies play an important gatekeeping role either by making it difficult for firms with low creditworthiness (and thus higher risk of insolvency) to borrow and thus indirectly “forcing” them out of the business, or by warning the investing public from doing business with the borrower, and thus bring pretty much the same effects. An accurate, objective and actual¹⁴⁰² assessment of the creditworthiness and financial health of a borrower in the form a standardised rating could thus increase the stability of the markets by reducing information asymmetries and improving borrowers’ discipline.¹⁴⁰³

b) *How rating functions under Basel II?*

As already noted above, in the context of banking, rating is used to assess the probability of a borrower to repay its debts over a certain period of time, usually one year. Through rating, the probability of default and thus the risk that a lender faces with regard to the repayment of a particular amount of debt is measured. Basel II allow for the use of either of two types of rating for the measurement of the debtor’s creditworthiness, namely the external or the internal rating. The use of either type of rating is connected with the approach that a bank choses to calculate its regulatory capital. Under the Standardised Approach, banks will make use only¹⁴⁰⁴ of external ratings by independent eligible credit rating agencies¹⁴⁰⁵, whereas under the IRB Approach¹⁴⁰⁶, banks can use internally-developed rating models to calculate the riskiness of the borrower, and

1401 Knoppe, in: Eilenberger (Hrsg.), *Kreditpolitik der Banken und Unternehmens-Rating: Konsequenzen von Basel II. Beiträge zur Konferenz am 28.11.2001, 2001* (hereinafter “Knoppe, in: Eilenberger, *Kreditpolitik der Banken*”), p. 44.

1402 An assessment not only of the firm’s circumstances at the moment the rating is issued, but also an assessment of future developments that could affect firm’s ability to meet financial obligations.

1403 Eggers, *Probleme von Ratings*, p. 15.

1404 Only the ratings from such agencies are recognised for the purposes of the calculation of the bank regulatory capital. This is important to ensure the comparativeness of the regulatory charges on the capital of a bank and thus ensure a level playing field among banks.

1405 Basel II contains also criteria with regard to the eligibility of rating agencies for issue Basel II-compliant ratings. Basel II Accord, para. 91 at p. 27.

1406 Within the IRB Approach it is to be differentiated between Foundational and Advanced IRB Approach. More details on these two sub-approaches are to be found in the next section.

thus the probability of the borrower to meet existing and future financial obligations in full and in a timely way.¹⁴⁰⁷

Apart from external and internal, one can differentiate also between a firm rating and a firm's issue rating. The firm rating relates to the assessment of the firm's creditworthiness, whereas a firm's issue rating relates normally to the creditworthiness of a firm's debt issue, such as, for example, a bond issue. However, since the creditworthiness of a firm's issue is assessed in view also of the firm that carries out the issue, it is logical that the rating of the issue is strongly related to the rating of the firm.

From the methodological point of view, the rating process includes two phases: the assessment phase, where the various sorts of firm-related data is analysed and processed to make a picture of the firm's financial and otherwise health; and the results phase, where the results of the completed assessment are announced. The critical elements of a rating assessment are the firm-related data which are assessed. Based on the type of data that are used for the assessment, a rating can be qualitative, quantitative or a combination of both.¹⁴⁰⁸ Since usually both types of information, i.e. qualitative as well as quantitative data¹⁴⁰⁹ are included in a rating process, it is to be expected that the rating result in the end is not a completely objective result. Whereas the objective assessment of the capital structure or financial statements (balance sheet, profit and loss statements, as well as the liquidity position) of a borrowing firm does not seem to present difficulties, one cannot say the same thing about the assessment company information which is known as "soft" or data.¹⁴¹⁰ This includes information about company's management structure and sustainability, the quality of management or qualifications of other leading persons in the firm, personnel management, information about firm's processes and quality management, firm's positions in the market, clients' structure, marketing strategies, etc.¹⁴¹¹

(i) *External rating*

As already shortly mentioned above, external rating under Basel II implies the rating exercise conducted by independent rating agencies (hence external from the bank perspective) that meet the eligibility criteria and have been licensed by national bank or other supervisory authorities to carry out rating services. Rating agencies would provide a rating assessment upon request of

1407 Deipenbrock, *Betriebs Berater*, 2003, 1849, p. 1850.

1408 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1545, p. 1547; Eggers, *Probleme von Ratings*, p. 9.

1409 Also known as "hard" facts or data. See e.g. Wolf, *Basel II*, p. 28. These factors make up to 60 per cent of the rating result.

1410 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1545, p. 1546.

1411 Wolf, *Basel II*, p. 30-1.

the subject that wishes to be rated. When the rating assessment related to a firm, the management of the firm is responsible for supplying the rating agency with the needed information for an objective and accurate rating. It is in the interest of the firm to provide not only the information required by the rating agency, but also any other information that could potentially improve the rating result and thus signals a positive image and financial health for the firm.¹⁴¹²

Based on the information provided by the firm, which includes both qualitative and quantitative¹⁴¹³, the rating agency makes an assessment of the firm's rating result or rating note by using its calculation models that are and will most probably remain a business secret. The calculation model contains the various weights that are given to each piece of qualitative or quantitative information (factors) that allow the rating agency to conclude with a rating note. These weights vary from agency to agency and are therefore susceptible to subjectivity.¹⁴¹⁴ The rating agency communicates the rating note to the firm and allows the firm to express its opinion on the result and if necessary, to provide additional relevant information that could clarify uncertainties in the rating assessment, and eventually lead to the improvement of the final rating note. After this process has been completed, the rating agency and the firm agree on the publication of the rating note.¹⁴¹⁵ Should the firm reject the rating note, there will normally be no publication of the rating result.¹⁴¹⁶

To ensure the credibility of the rating process, and consequently of the rating note resulting from this process, it is required that the rating agencies apply some minimum standards. These standards include the objectivity of the rating process, which implies the employment by the rating agencies of reliable and consistent criteria and standards during similar the rating process.¹⁴¹⁷ Further, the rating process should be characterised by neutrality and independence, which implies the lack of political or economic dependence of the rating agency or of the rating officer from the subject being rated.¹⁴¹⁸ Last but not least, the rating process should be also

1412 Here the management team is under a fiduciary duty to exert sufficient care and to be forthcoming in relation to the rating agency to ensure that the firm will not obtain a negative rating, simply because firm-relevant information that could have improved the rating was not communicated in a clear and timely fashion. In the meantime, the management of the firm is also under an obligation to observe the secrecy of trade secrets. See Hennrichs, *Zeitschrift für Unternehmens- und Gesellschaftsrecht*, 2006, 563.

1413 Or "soft" and "hard" facts.

1414 Vetter, WM - *Zeitschrift für Wirtschafts- und Bankrecht*, 2004, 1701, p. 1703.

1415 See e.g. a description of how a rating is conducted by Creditreform Rating AG. (www.creditreform-rating.de).

1416 Vetter, WM - *Zeitschrift für Wirtschafts- und Bankrecht*, 2004, 1701, p. 1702.

1417 *Ibid.*, p. 1705.

1418 *Ibid.*, p. 1705.

conducted by persons who possess the qualification and the understanding for a professional evaluation of the information submitted by the subject being rated as well as of the sector in which the rated subject is engaged.¹⁴¹⁹

The external rating, when unsolicited, can be subject to considerable costs, depending on the complexity or size of the subject being rated. The costs issue and all efforts related to the rating process, such as, for example, the collection and preparation of information, advisory costs, re-rating costs, etc., make external rating attractive mainly for large companies with lending access to the capital markets, but not necessarily for small and medium-size companies that usually borrow from banks.¹⁴²⁰ It is unsure for these companies whether the benefits from better loan terms would justify or exceed the costs of the rating process. Therefore, it seems reasonable for small and medium-size companies to focus and prepare themselves for an internal rating, which is conducted by banks as part of the decision-making process in loan negotiations.

(ii) *Internal rating*

Despite being conducted by banks following their models, the internal rating process is very much based on the same principles employed also for external rating. During the internal rating process, a bank assesses the creditworthiness of a potential borrower. The rating serves the bank for its own interests and purposes and creates the basis for deciding whether, and if yes, under what terms and conditions it will lend to the borrower. Basel II made rating of borrowers in general a requirement for banks in order to calculate the regulatory capital it must hold as a buffer against credit risk. Moreover, internal rating by banks was even stronger encouraged by the Basel Committee through the Accord as a mechanisms to improve accurate risk measurement and management. It was the belief of the Basel Committee that internal rating by banks would lead to lower regulatory capital levels as a result of more precise risk measurement.

Banks eligible to use internally-developed rating systems for the measurement of borrower's creditworthiness, like external rating agencies, base their assessment on a collection of "hard" and "soft" data, and the rating procedure is very similar to the one employed by external rating agencies.¹⁴²¹ Whereas the "hard" data are taken from the borrower's financial statements and other published records, the "soft" data are more difficult to collect and their assessment is based

1419 *Ibid.*, p. 1705. See also Wittig, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 212, for a list of these standards and their interpretation.

1420 The costs for an external firms rating can vary from 5.000 to 55.000 Euro. See Wolf, *Basel II*, p. 20.

1421 Wolf, *Basel II*, p. 23. Although the rating systems could differ from those employed by the rating agencies, the resulting rating note should lead to the same note as if the rating was conducted by external rating agencies. The same principle applies also if the rating is conducted by two different banks. This principle is important to avoid a discriminatory rating of a borrower.

on the bank's subjective approach. This is nevertheless not a negative development *per se*, since it encourages closer relationships between the lender and borrowers, which could lead to better screening and monitoring once a lending relationship is established. Potential borrowers would feel challenged to proactively disclose information that would lead to a better evaluation of their qualities, and thus better rating note.¹⁴²² This is at least the assumption. It is however to be questioned, whether banks indeed choose to invest in a thorough assessment of "soft" data and thus on real close relationships with borrowers considering the costs that a bank would have to bear for such an examination without being able to pass the costs to borrowers should a lending relationship not materialise.¹⁴²³

Although the rating procedure of banks are similar to the rating by external agencies, a bank is not obliged to accept the rating of an external rating agency as a basis for the decision whether or not to lend to the borrower. This seems a rational approach considering the fact that bank exposure towards a borrower might be considerable and therefore the bank would prefer a closer examination of the potential borrower through the rating assessment rather than relying on the assessment of external agency. Moreover, as it was presented in the previous section (on the IRB Approach) the process of internal rating includes the examination of a broader range of risks than those measured by external agencies.¹⁴²⁴

Bank internal ratings are carried out on a yearly basis to ensure that changes in the creditworthiness of a borrower are captured and accordingly reflected in the lending relationship with the borrower. In contrast to the rating by an external agency, the costs for the internal rating by banks do not fall on the potential borrower, or at least not completely. More specifically, since the internal rating is decisive for the fact whether the bank will lend to the applicant, the costs for the rating are borne in the first place by the bank. If the rating result is such that a bank will find it economically profitable and from the risk profile acceptable to lend to the borrower, it cannot be excluded that at least partially the costs for the rating will be passed to the borrower in the form of slightly higher interest rates. However, should the rating result be such that a bank

1422 For a list of "hard" and "soft" data collected by banks in the process of internal rating see e.g. Wolf, *Basel II*, pp. 28-31; Hundt/Grabau/Stobinski, *Bilanzierung, Rechnungswesen und Controlling*, 2003, 38, p. 39 ff; Bundesverband deutscher Banken, *Bankinternes Rating mittelständischer Kreditnehmer im Züge von Basel II*, 2005 (hereinafter "*Bankinternes Rating*"), pp. 14-28; Lähr, *Bankinternes Rating. Ein Überblick nach Basel II*, 2006, p.54 ff; Frick/Schönherr, in: Deloitte & Touche GmbH Wirtschaftsprüfungsgesellschaft (Hrsg.), *Basel II. Handbuch zur praktischen Umsetzung des neuen Bankenaufsichtsrechts*, 2005, p. 495 ff.

1423 The collection of "soft" data could be easier and less costly if there exists already a long-term relation between the lender and the borrower. Over the course of many years, the bank has acquired important information about the borrower's quality of management, production, personnel, marketing and so on.

1424 See Wolf, *Basel II*, p. 25 for additional differences between the internal and external rating processes.

would reject the application, the costs for the rating would be borne by the bank alone.¹⁴²⁵ Banks are thus under pressure to lower rating costs of potential borrowers. Under this pressure, banks are faced with several options: i) to automatize the information gathering and assessment processes, which could result in less than accurate assessment, especially of “soft” data and thus in less accurate borrower’s risk assessment; ii) lend to borrowers, despite the risk level to recover the rating costs; iii) to deny lending to both “bad” and “good” borrowers and thus make suboptimal investment decisions because of failure to accurately assess borrower’s creditworthiness.

Whatever the outcome of the internal rating, the potential borrower will usually not obtain the rating result¹⁴²⁶, but could get an idea about it when the bank communicates the terms and conditions under which it is willing to lend to the applicant. Although the rating result and the loan terms are strongly related to one another, one should differentiate between the rating result and the decision on the loan terms. More specifically, whereas the borrower could influence the decision about the loan terms by providing collateral and other guarantees, it would not be possible for the borrower to influence the rating result by providing collateral.¹⁴²⁷ Certainly, collateral serves to lower the credit risk and therefore can lead to better loan terms, but they cannot influence the rating of the firm to the extent that they can influence the loan terms. This means that the rating result alone is not the decisive factor that determines the loan terms, but is certainly a major factor.

c) External rating versus internal ratings

From the analysis above, it is obvious that both rating types present potential or incumbent borrowers with advantages and disadvantages.

To summarize, *internal rating* has the advantages that it is economically beneficial for the borrower since it will not have to bear the costs for it. Since, the relation between the bank and the borrower is governed by rules on confidentiality, also the rating result remains confidential. The bank is obliged to keep the secrecy of information disclosed by the borrower in the course of the rating process. Through the rating process, the borrower can obtain valuable information about its strength and weaknesses, and thus draw up a plan to address weaknesses in a more

1425 Deipenbrock, Betriebs Berater, 2003, 1849, p. 1850.

1426 According to an empirical study of German small and medium enterprises, respectively only 25% and 40% of small and medium enterprises know the rating result. See Hummel/Effenberg/Karcher/Richter, Mittelstands- und Innovationsfinanzierung in Deutschland. Ergebnisse und Hintergründe einer bundesweiten Unternehmensbefragung, 2011 (hereinafter „Hummel et al., *Mittelstands- und Innovationsfinanzierung*“), p. 54.

1427 Deipenbrock, Betriebs Berater, 2003, 1849, p. 1582.

targeted and effective way. The internal rating conducted by banks assess a broader range of risks faced by borrowers and could give a more detailed picture of the borrower's creditworthiness. Especially banks that maintain long-term lending relationships with borrowers could assess quality criteria pertaining to borrowers more accurately.

On the downside, an impaired rating by the bank could often lead to an increase in the credit costs for incumbent borrowers or denial of credit for potential borrowers. Further, because the bank carries the costs for the internal rating, banks are forced to lower these costs and such attempts could lead to inaccurate assessments of credit risks or suboptimal decisions regarding the financing of borrowers. Banks that are allowed by regulatory authorities to use internal rating systems, would usually accept only their rating, even if the borrower has already received a rating from an external rating agency. This could increase borrower's overall borrowing costs. Last but not least, while an impairment in the rating grade could bring direct consequences for the borrower in the form of higher credit costs, an improvement in the rating grade does not usually have automatic effects in the form of lower credit costs.¹⁴²⁸ Also the public effects of a rating improvement are not easily observable. Since a bank would like to keep for herself a good borrower, it would be interested to publish the results in the case of good rating for fear of having competitor banks stealing their customers. This could create "lock-in" effects for the borrower and result in higher lending costs.¹⁴²⁹

Regarding positive effects from *external rating* one could mention the positive public effects from the publication of good rating results. In contrast to banks, external rating agencies face no conflicts of interest in publishing the good rating results of their clients. The clients can decide on their own whether to have the rating result published or not. In this way, the rated borrower can determine on how to increase benefits or reduce the damages from the rating process, depending on the rating result.¹⁴³⁰ Moreover, since the external rating is solicited and subject to payment for the services rendered, it is assumed that the rating agency has an interest in issuing a transparent and independent rating result in order to protect its credibility and reputational capital in the rating market, but also to provide the rated borrower with an accurate estimation of its creditworthiness. Since the rating result is the product supplied, the rating agency is under

1428 Any reference for this: See maybe the article by Machauer where he claims that an improvement of the rating does not result immediately in lower interest rates corresponding to the level of the improved rating result.

1429 Simply switching to another lender is not without costs for the borrower, since also the new lender will need to spend time and money to ascertain the good creditworthiness of the borrower. Transferring the information about the company's creditworthiness from one lender to the other is not without costs.

1430 Vetter, WM - Zeitschrift für Wirtschafts- und Bankrecht, 2004, 1701, p. 1702.

the contractual obligation to supply a faultless product. In the particular case of rating, the product must be correct and faultless based on the information supplied by the rated borrower.¹⁴³¹ Furthermore, should the rating result be positive, it increases the flexibility and the bargaining powers of the borrower during loan negotiations with lender.¹⁴³² When the lender, pursuant to Basel II, must make use of external rating agencies credit rating as a precondition to ensure an accurate level of regulatory capital for itself, borrowers having a good rating may exert pressure on the lender to extract better loan terms or else go to a competitor lender. This is however not usually the case when the lender itself conducted the rating internally, since the rating results will not be published. Other relevant, although not essential, advantages of external rating are for example the fact that the rated borrower can determine on its own the speed of the rating process, namely the date of the beginning and the end of the process, according to its capacity to manage the process.¹⁴³³

On the downside, it was mentioned above that an external rating can be costly and therefore not affordable for small- and medium-size companies. Certainly, the issue of price is an issue of a cost-benefits analysis and whether a small or medium-size borrower will choose an external rating agency will depend on the benefits it expects to reap. However, the rated borrower that chooses an external rating agency would need to take into consideration also the additional costs that it would have to bear should the first rating turns out unsatisfactory results. This can put the rated borrower under increased pressure to expend further resources to improve its situation in order to obtain a better rating, especially in cases when the rated borrower cannot hinder the rating agency from publishing a negative rating.¹⁴³⁴ Furthermore, it was mentioned above the assumption that external rating agencies have an interest in maintaining the reputation for accurate and independent rating result. This assumption, however, may not hold always true. As analysed in Chapter 5 on the gatekeeping concept, the above assumption may not hold true when the gatekeepers, in the particular case the rating agencies, have more to win from failing their gatekeeping responsibilities, even if their reputational capital will suffer, at least temporarily. This means that rating agencies, but not only them, might face the pressure and often also the incentive to issue less than accurate and more favourable ratings that suit better to

1431 See also Vetter, WM - Zeitschrift für Wirtschafts- und Bankrecht, 2004, 1701, and Deipenbrock, Betriebs Berater, 2003, 1849, on the categorisation of rating contracts.

1432 Everling, in: Deloitte & Touche, *Basel II*, p. 83.

1433 Everling, in: Deloitte & Touche, *Basel II*, in p. 84 is of the opinion that the rating by external agencies goes into more details compared to the internal rating by banks, due to the fact that external rating agencies face a public pressure to explain the results of their ratings, whereas the bank officer is not subject to this pressure.

1434 Vetter, WM - Zeitschrift für Wirtschafts- und Bankrecht, 2004, 1701, p. 1702.

the wishes of the rated borrower, when gains from such behaviour exceed costs. The recent financial crisis, where structured financial products of dubious value were rated AAA just to be drastically downgraded when it became clear that the rating did not justify the quality of the product, serves as a point in case that external rating agencies do not always rate independently and accurately when their interests, in the short-term, would dictate otherwise.¹⁴³⁵ This behaviour of rating agencies points also to a related issue, namely that of procyclical ratings. Referring again to the recent financial crisis, it was shown that credit rating agencies were rating positively during times of economic boom, but started to downgrade rapidly during the financial distress.¹⁴³⁶ This behaviour casts doubts on the value of information the rating agencies provide to the market and leading to the suggestion that rating agencies actually follow the market reaction and not the other way round.

As a conclusion it can be said that the use of either internal or external rating by borrowers most probably will depend on a case-by-case analysis of costs and benefits. While it seems reasonable in a first consideration that large borrowers, such as listed companies, will use external rating agencies to obtain a rating in order to increase their chances of favourable terms for borrowing in the capital markets, and small- and medium-size borrower have no chance but to be internally rated by banks, since banks are their main source of funding, in a second consideration the decision which rating type to choose might not that clear cut. For example, since the capital markets judge positively a borrower's relationship with a bank, and even more positively when it lends at favourable terms to a borrower, larger borrowers might decide to lend from a bank, subject to an internal rating procedure, just for the sake of the positive effects that such relationship has when borrowing later from the capital markets.¹⁴³⁷ For some other firms, it might be better not to obtain any rating at all and be allocated a risk weight of 100 per cent than to obtain a BB- rating and be risk weighted at 150 per cent. Therefore the borrower would have to

1435 The independency of the rating agencies from the subjects they rate could also be damaged when the rating agencies stand in a business relation or are investors at the borrowers they rate. Deipenbrock, *Betriebs Berater*, 2003, 1849, p.1854. See also Haar, in: Hopt/Wohlmannstetter (Hrsg.), *Handbuch Corporate Governance von Banken*, 1st. Aufl. 2011 (hereinafter "Haar, in: Hopt/Wohlmannstetter, *Corporate Governance*"), p. 224.

1436 Weber/Darbellay, *Journal of Banking Regulation*, 2008, 1, p. 9. See also Hau/Langfield/Marques-Ibanez, *Economic Policy*, 2013, p. 9.

1437 The positive effects are observed even if the firm discloses a lot of information regarding its financial situation. The explanation for this behaviour may rest on the fact that investors view the certification role of banks as valuable, and therefore when a firm borrows at favourable terms from a bank, it implies that the bank has superior information about the borrower and that the superior information allows the bank to effectively monitor the performance of the borrower. See e.g. Berlin, *Business Review of the Federal Reserve Bank of Philadelphia*, 1996, 1, pp. 6-7.

weigh the short- as well as long-term benefits and costs when choosing between internal or external rating.

4. Credit risk mitigation techniques

The Basel II Accord provides banks with the possibility to consider risk mitigation instruments when assessing the risk profile of the borrower. It was mentioned above that these instruments do not influence the rating result of the borrower, but do influence the overall risk profile of the borrower, and therefore also the interest rates the borrower has to pay for the loan.

The credit risk mitigation techniques can be used in both, Standardized as well as IRB Approaches, so long as they fulfil the requirements for legal certainty.¹⁴³⁸ The Basel II Accord recognises among others collateralized transactions, guarantees and credit derivatives as well as netting arrangements as credit risk mitigation techniques, which a bank is allowed to consider when assessing the credit risk of the borrower. For the last two techniques, the requirements for using them are more or less similar for both approaches, Standardized or IRB, whereas the major differences exist regarding the consideration of collateralized transactions, and especially the range of collaterals that are considered eligible.

Collateralized transactions – are defined by Basel II as transactions where the credit exposure is hedged in whole or in part by the collateral posted by the counterparty or by a third party on behalf of the counterparty.¹⁴³⁹ Under the Standardized Approach, the list of eligible collaterals includes financial collateral as specified in paragraphs 145 and 146 of the Accord.¹⁴⁴⁰ Whereas under the IRB Approach, the list of eligible collateral is expanded to include also commercial or residential property¹⁴⁴¹, or other physical assets so long as they fulfil the required criteria about the legal certainty, quality, liquidity and value of assets.¹⁴⁴²

Guarantees – according to Basel II, also guarantees by third parties could be used to secure the repayment of a credit, and thus reduce the credit risk of the bank. However, for such guarantees to be taken into consideration for the purpose of the calculation of the bank capital requirement

1438 See e.g. the minimum standards for legal certainty of credit risk mitigation techniques used under the Standardized Approach in Basel II Accord, para.118 at p. 32.

1439 Basel II Accord, para. 119 at p. 32.

1440 The list of eligible collateral for banks using the IRB Approach includes not only all collateral eligible for a bank using the Standardized Approach, but also additional collateral, such as convertible bonds or mutual funds including convertible bonds.

1441 These types of collateral are especially important for small and medium enterprises, since they constitute often the collateral they use as a credit security when borrowing from banks. *Bankinternes Rating*, p. 12.

1442 Hartmann-Wendels, *Basel II*, pp. 71-2; *Bankinternes Rating*, p. 12.

they should be direct, explicit, irrevocable and unconditional as well as fulfil certain minimum operational requirements¹⁴⁴³ relating to risk management processes. For the reduction of the risk weight, and thus also of the credit risk, to take place, the guarantor must enjoy a lower risk weight than the counterparty that is being guaranteed or protected. This is possible through the so called substitution approach. Under this approach, the guaranteed portion of the exposure is assigned the risk weight of the guarantor or protection provider, thus benefiting from a lower risk weight than it would have obtained in the absence of a guarantor.¹⁴⁴⁴

Netting arrangements – allow banks to reduce overall credit exposure toward a borrower by netting the loans and deposits of the same subject and thus calculate the capital requirements on the basis of the net credit exposure. Under this technique, assets (loans) are treated as exposure and liabilities (deposits) as collateral.¹⁴⁴⁵

Securitization – last but not a least important credit mitigation technique is the use of securitization of credit exposures. Usually, in a normal sale of loans, information asymmetries between the seller, who knows the borrower pretty well, the purchaser who does not know her that well could result in considerable discounts in the nominal value of the loan, since insecurity increases the perceived risk of the purchaser. The securitization procedure avoids this outcome by pooling the claims (or assets) in an independent and bankruptcy-remote special purpose vehicle.¹⁴⁴⁶ This vehicle issues than debt instruments for the investors. The performance of the debt instruments is related to the performance of the underlying assets, and payment to the investors depend upon the performance of the underlying exposure, as opposed to being derived from an obligation of the bank originating those exposures.¹⁴⁴⁷ However, the concerns of investors regarding the quality of the claims are reduced through the rating of the pool by a credit rating agency. Thus, the investor will not have to monitor the performance of the many underlying assets, but rather the rating of the pooled assets.¹⁴⁴⁸

1443 Basel II Accord, paras. 190-201, pp. 46-9.

1444 *Ibid.*, para. 140 at p. 32.

1445 *Ibid.*, para. 188 at p. 45.

1446 Hellwig, Systemic Risk in the Financial Sector: An Analysis of the Subprime Mortgage Financial Crisis, 2008 (Available at: www.coll.mpg.de) (hereinafter “Hellwig, *Systemic Risk in the Financial Sector*”) p. 10.

1447 Basel II Accord, para. 539 at p. 120.

1448 Kübler, in: Tison/Wymeersch (Hrsg.), Perspectives in company law and financial regulation. Essays in honour of Eddy Wymeersch, 2009 (hereinafter “Kübler, in: Tison/Wymeersch, *Perspectives in company law*”), p. 570.

For banks, the securitization procedure has the advantage that it allows them to transform their illiquid assets into very liquid cash, and thus reduce the level of regulatory capital by removing risky assets from its balance sheet.¹⁴⁴⁹ Furthermore, the released cash will allow them to engage in further lending, increasing in this way potential profits through an increased availability of credit for borrowers.¹⁴⁵⁰

As securitisation exposures are considered among others asset-backed securities, mortgage-backed securities, credit enhancements and liquidity facilities. The importance of the use of the securitisation framework by banks, as it was mentioned above, rests with the fact that since credit risk is shifted, the bank that originated the loan can discharge risky assets on third party, and thus reduce the regulatory capital it is required to hold. Basel II considers a bank to be an originator with regard to a certain securitisation if the bank originates directly or indirectly underlying exposures included in the securitisation or if the bank serves as a sponsor of an asset-backed commercial paper conduit or other similar programme that acquires exposures from third parties.¹⁴⁵¹ For the purpose of the calculation of the risk-weight assets, and thus also of the regulatory capital, a bank may exclude the securitised exposures from such calculation upon fulfilment a certain minimum conditions. These conditions aim to ensure a real separation between the bank as the transferor of credit risk and the transferee, the entity upon which the risk is transferred, so that the credit risk is transferred effectively with third parties, which in turn can have claim only on the underlying pool of exposure, but not on the bank itself.¹⁴⁵²

II. Pillar two: Supervisory review process

The second pillar of Basel II promotes the review process by the supervisory authorities and represents an essential element of the new Basel Accord. It contains requirements regarding the supervisory review of internal bank assessments of capital relative to risk. Pillar two of the revised framework encourages banks to look beyond the simple quantification of risks for regulatory capital purposes. The fast changing risk profile of complex banking organisations requires banks to give “explicit recognition to the quality of the risk management and control process and to risks not fully addressed in Pillar 1.”¹⁴⁵³ If the first pillar was about the specific risk assessment methodologies and the calculation of regulatory capital levels, the second pillar

1449 Hellwig, *Systemic Risk in the Financial Sector*, p. 11. In principle risk is shifted to other market participants who are better able to bear it.

1450 Kübler, in: Tison/Wymeersch, *Perspectives in company law*, p. 570-1.

1451 Basel II Accord, para. 543 at p. 120.

1452 *Ibid.*, para. 554, pp. 122-3.

1453 Saldenberg/Schuermann, Wharton Financial Institutions Center Working Paper Series, 2003, 3, p. 12.

purports to draw attention to the fact that just the calculation of regulatory capital is not sufficient to ensure the stability of a credit institution. A continuous and systematic assessment of the risks faced by the credit institution and the provision of adequate capital to counter the risks faced should become a regular exercise of bank management. Furthermore, since Basel II provided for the adoption of the IRB Approach, as an alternative way for calculating credit risk, according to which banks could supply internally the credit risk parameters, it becomes paramount that supervisory authorities ensure the credibility and robustness of banks' internally processes determining these parameters.¹⁴⁵⁴ The review of these bank internal assessments by banking supervisory authorities should provide the necessary pressure on bank management to take these processes seriously.¹⁴⁵⁵

The purpose of the Basel Committee with the second pillar was to balance the regulation of banks by providing not only quantitative rules based on defined formulas, but also qualitative rules based on an active participation of the supervisory authorities in ensuring a level of standards regarding the proper management of banking institutions.¹⁴⁵⁶ It is thus expected from bank supervisory authorities that they do not limit their activity in simply checking whether banks observe the capital ratio or risk limits allowed. Instead, under the revised Basel II rules, it is expected that supervisory authorities take an active approach to continuously ensure that banks' activities are not endangering the stability of the system by contracting unsustainable risky behaviour. To enable that, supervisory authorities are granted new powers under the revised framework to step in and oblige a bank to take additional measures when it perceives that, despite the bank fulfilling the requirements about regulatory capital, its risk profile warrants additional capital.¹⁴⁵⁷ Four important principles stipulated by Basel II provide a basis for supervisory authorities to intervene in order to ensure when bank's capital needs do not respond to their risk profile. More specifically, these principles require that: 1) banks should have in place systems to assess their overall capital adequacy in face of their risk profile, and have also a strategy to ensure the maintenance of their capital levels in view of their changing risk profile; 2) supervisors should review and evaluate the assessments made by banks regarding their capital adequacy levels as well as the ability of banks to monitor adequacy ratios, and be able to intervene if they are not satisfied with bank's assessment process; 3) banks should maintain

1454 *Ibid.*, p. 11.

1455 *Ibid.*, p. 7.

1456 Schönig, *KMU-Forschung*, p. 563.

1457 Hartmann-Wendels, *Basel II*, p. 13. Basel II stipulates also for the bank management the responsibility that it ensures that the bank has adequate capital to support its risks beyond the core minimum requirements. See para. 721.

capital above the minimum required levels and that supervisors should have the ability to require banks to do so; and 4) supervisors should be able to intervene early enough to prevent that capital levels fall below the required minimum ratios relative to the bank risk profile and be able to enforce remedial actions if capital is not maintained or restored.

Of special importance is the third principle. This principle recognises the need that minimum capital requirements are what they say they are, namely minimum, and that the protection provided by these capital levels is therefore also minimum.¹⁴⁵⁸ It provides protection against uncertainties that affect the banking population as a whole, but not necessarily the specific bank in particular. To address risks that are particular in a given market, Basel II requires supervisors to ensure that banks in the markets they operate will maintain additional capital able to withstand also market-specific risks. Some authors define this capital as “optimum capital”.¹⁴⁵⁹ Since this level of capital more of a subjective, rather than objective figure, it has to be determined individually depending on the risk profile of the bank. Basel II encourages supervisors to become proactive in obtaining information about the health and soundness of the banking institutions they are mandated to supervise, and thus be able to conduct informed monitoring and supervision. Without an informed supervisory system about the banks risk profiles and risk management systems it would be difficult to impose on banks optimum capital levels that ensure better protection for the individual banks and more efficient financial system.¹⁴⁶⁰ Therefore, to minimize information deficits the requirements of second pillar of the Basel Accord encourage supervisors to monitor banking institutions in a proactive and continuous basis. The second pillar allows supervisors to take a flexible approach regarding the level of optimum capital that takes into consideration the variations in risk profile, legal structure and level of sophistication of the banking institutions.¹⁴⁶¹

1458 Moreover, regulatory capital alone cannot function as a buffer, since this capital is needed to satisfy the regulator, as the term denotes. Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, p. 9.

1459 Estrella, *Regulatory Capital and the Supervision of Financial Institutions: Some Basic Distinctions and Policy Choices*, 14-15 January, 2000 (hereinafter “Estrella, *Regulatory Capital*”), p. 1 defines the additional capital that supervisory authorities can impose pursuant to Pillar 2 as “optimum capital”, the level of capital that maximizes social welfare in some sense. The role of supervisory authorities in determining an adequate level of optimum capital is important since they can ensure that the levels of optimum capital are not distorted by perverse incentives, such as safety nets, faced by banks.

1460 Estrella, *Regulatory Capital*, p. 4.

1461 Saidenberg/Schuermann, Wharton Financial Institutions Center Working Paper Series, 2003, 3, p. 28.

III. Pillar three: Market discipline

Although the third and second pillars are not treated in the Basel II Accord as extensively as the first one, it is remarkable that they are put at the same level of hierarchy as the first pillar. Therefore, they are not to be considered as discretionary, but rather as essentially complementary to the first pillar. Without the last two pillars, pillar one would remain a regulation on the use of certain mathematical formulas, without ensuring their sound and consistent use.

The third pillar of the revised Basel II framework purports to use public disclosure and transparency as a tool to encourage market discipline of banking institutions. It comprises disclosure requirements that allow the investing public to assess sufficient information about the risk profile and the capital adequacy and capital formation of banks. The discipline exerted by the markets should promote the stability of the system and in the same time put pressure on bank management to take necessary measures to ensure that bank capital is commensurate to its risk profile.

Basel II attempts to use market discipline as a mechanism to correct faulty bank behaviour, but does not define it. Definitions found on financial literature about market discipline imply the discipline imposed by a number of subjects who are interested and have the incentives to monitor bank behaviour to avoid default or incur high losses. These subjects include not just shareholders, as the legitimate owners of the bank shares, but also short- and long-term creditors, ranging from, bank depositors, bank clients to bank employees. Moreover, also the market for corporate control imposes discipline on bank management, and thus also on the performance of the bank.¹⁴⁶²

To enable market participants to gain an accurate view of how healthy a bank is, the third pillar of Basel II requires that bank disclose key pieces of information on their capital structure, including details on the various tiers of capital, their risk exposures as well as the processes that lead to the particular risk assessment, and last but not least the adequacy of its capital vis-à-vis contracted risks.¹⁴⁶³ This key information should allow market participants to understand or at least perceive whether a bank is able to accurately measure risk and provide adequate capital to cover it, as well as whether a bank is able to manage risk appropriately by taking measures to limit it should dangerous situations for a bank arise. By allowing market participants this kind of insight in the financial situation of a bank, Basel II spreads the power of control of banking

1462 See Martin Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2005/19, 2005, 1, pp. 2-3 for a number of definitions of market discipline.

1463 Basel II Accord, para. 809 at p. 226.

institutions to include not only supervisory authorities but also the investing public. It is for this reason that the second and the third pillar are assumed to supplement the first pillar in ensuring a stable banking sector and the protection of depositors. Supervisory authorities use bank public information to assess bank's financial health and stability, whereas the market benefits from the publication of information gathered and assessed by supervisory authorities to exert pressure on banks to increase capital levels or improve risk management. The interrelation between supervisory review process and market discipline is materialized in the fact where there is a need for corrective measures on a bank, it is the supervisory authorities who will bring the discipline on the basis of the market signals, since market participants cannot intervene directly on the banking institution.¹⁴⁶⁴

Although the disclosure requirements apply to all banks under the Revised Framework, they are particularly important for banks using the advanced approach for the measurement of credit risk. Since under the IRB Approach banks are allowed to supply internally developed estimation of risk parameters, the need for public scrutiny of these models, as far as this is possible considering the complexity of these models, is higher. With the goal to strengthen the role of disclosure in disciplining banking institutions, Basel II Accord makes disclosure on certain occasion a qualifying criterion for a bank to obtain lower risk weightings for certain exposures.

Regarding the frequency of disclosures, the Basel Committee recognises that for disclosures to be a meaningful disciplinary mechanism they should occur in a frequency that would allow the market to obtain material bank information on a timely and continuous basis. As a general rule, disclosures required under the third pillar should occur on a semi-annual basis. Although certain exceptions¹⁴⁶⁵ to this frequency apply, banks are required to publish material information as practicable as possible in order to allow the market to be informed. Material information is defined as information, the omission or misstatement of which could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.¹⁴⁶⁶ With these requirements, the Basel Committee has tried to strike a balance between the materiality of information and the time of its disclosure, in order to enable the market to discipline banks accordingly.

1464 Martin Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2005/19, 2005, 1, p. 3.

1465 See e.g. para. 818 of Basel II Accord.

1466 *Ibid.*, para. 817 at p. 227.

E. A brief assessment of the Basel II Accord

The revised Basel II framework focuses substantially on quantitative banking regulation by defining limits and ratios regarding the amount of risk that banks are allowed to contract during their activities. It describes methods for the quantification of the various types of risk and obliges banks to provide own capital to cover that risk. The way how Basel II rules were thought to function would have provided banks with a backstop mechanism in the sense that if banks could not raise additional own capital, they could not expand further their activities and their balance sheets.

One of the main advantages of quantitative regulation is that it is relatively easy to verify whether the rules are being kept. Thus, by determining strict ratios or limits regarding the measurement of risk as well as the formulas for calculating the ratios or limits, it is easy to assess whether the capital adequacy levels correspond to the contracted risk. The relative easiness to determine unequivocally whether or not the ratios or limits have been kept, allows the supervisors to apply corresponding sanctions to ensure that risk is brought under the accepted limits. This creates legal certainty for both, banks and supervisors, as well as for other third parties that are interested in the viability of banks and stability of the system. The quantitative rules of Basel II regarding capital ratios and risk limits together with rules on the use of internally-developed models by banks for the measurement of ratios and limits attempted to create an incentive for bank managements to improve their risk measurement and management system. An improvement and calibration of these systems that would lead to better quantification of risk contracted by banks would consequently also lead to lower regulatory capital for banks. This would improve banks' return on equity and that would certainly be good news for the bank's shareholders and management.

However, this kind of banking regulation comes not without hazards. Defining strict quantitative rules gives rise to a moral hazard problem, since it could create the wrong perception that a bank is safe and stable so long as it observes the given capital ratio or the allowable risk limits. The real individual risk profile of a bank cannot be determined simply by using the capital adequacy ratio formula. Under the pressure to optimize the use of own capital in order to increase the return on equity¹⁴⁶⁷, banks could be incentivized not to hold free capital beyond the level that satisfies the regulators, i.e. beyond the regulatory level, as required under Basel II rules. Since regulatory capital is measured only against risk-weighted assets, banks could as a matter of fact

1467 The catch phrase of the banking industry being "Economizing on equity". Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, p. 6.

expand their balance sheet 40 to 60 times its equity capital.¹⁴⁶⁸ Hence, it becomes clear that bank own capital will never suffice¹⁴⁶⁹ should the materialized risk be larger than what the bank perceived it to be. Further, allowing banks to use internally developed models for the measurement of risk creates conditions for disaster myopia¹⁴⁷⁰ as well as incentives for bank management to minimize risk by taking a distorted view of it. Underpricing risk in order to lower the level of regulatory capital by banks can have serious repercussions for the stability of the bank. An inaccurate quantification of risk would allow banks to increase their leveraging to levels, which would be unsustainable for the capital level they would possess. Bank regulation relying on capital requirements based on risk-weights is useless if the measurement of those weights is based on faulty models that fail to capture risks adequately. Actually, some authors consider the bank-based models for the measurement of risk and the calibration of regulatory capital to the measured risk as the reason why banks entered the 2008 crisis with so little equity capital.¹⁴⁷¹ These problems, coupled with the dangers inherent in the maturity transformation function of banks, did exacerbate bank's liquidity position at a quick pace and resulted fatal for the existence of many banks, and almost brought the whole financial system to a meltdown.¹⁴⁷²

Basel II attempted to increase risk sensitivity of bank capital levels to their risk profile. This however, increased also the procyclicality of bank capital. Banks expanded lending during periods of economic booms, and contracted during downturns. Excessive lending during times of economic booms was accompanied with lax crediting practices, and thus an increase of risky creditors. Risk perceived during these times is low, and therefore regulatory capital lowers as well. The reverse occurs during times of economic downturns, where banks are compelled to reduce exposure and tighten lending practices in order to limit losses. This leads to a credit

1468 Hartmann-Wendels et al., *Bankenaufsicht*, p. 36.

1469 See Miu/Ozdemir/Giesinger, *Can Basel III work? - Examining the new Capital Stability Rules by the Basel Committee. A Theoretical and Empirical Study of Capital Buffers*, 2010 (hereinafter "Miu et al., *Basel III*"), p. 30 stating that no amount of capital is a substitute for a lack of sound risk and capital management by a bank. Therefore overreliance on capital buffers for the aversion of credit risks should be avoided.

1470 Disaster myopia refers to the tendency to underestimate the likelihood of high-loss low probability events that would cause severely endanger the existence of a bank. See Herring, *Oxford Review of Economic Policy*, 1999, 63, and Borio et al., in: BIS, *Financial Stability*, on the concept of disaster myopia.

1471 See Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, for an analysis on this issue.

1472 Repercussions for the whole banking system were also amplified due to the moral hazard phenomenon when a bank is "too big" or "too connected to fail".

crunch and damages the real economy. The proposals of the Basel Committee summarized in the so-called Basel III attempt to address this issue by introducing countercyclical buffers.¹⁴⁷³

Basel II strengthens the role of supervisors in ensuring the adequate risk as well as institutional management of banks, by granting them powers to intervene and enforce additional measures even when the bank had met minimum requirements stipulated by the Accord. However, the ability of the supervisors to intervene rests on the premise that they have the means and the expertise to understand sometime extremely complex bank operations and the risks they are taking.¹⁴⁷⁴ Moreover, it is important that the supervisory authorities while focusing on the capital adequacy of individual institutions (micro-prudential level), pay attention also to the systemic implications of institution's behaviour¹⁴⁷⁵, since the system is not simply the sum of individual banking institutions.

On the issue of market discipline through mandatory disclosures, Basel II builds on the premise that more transparency, and thus better informed public, will be able to force banks improve their risk management. However, while it seems desirable from a theoretical perspective to rely on markets to discipline¹⁴⁷⁶ deviant banks that fail to hold optimum levels of capital to counter risk, the benefits from market discipline are uncertain. The basic idea of the third pillar is for the banks to inform market participants about the relevant material information on risk measures. A better informed market participant will price risk accordingly and make better informed investment decisions, which may punish or bless the bank. The third pillar becomes in this one a very tool of bank monitoring where the informed market participant is turned almost to a *de facto* supervisor and enforcer of prudential regulation.¹⁴⁷⁷ This is at least the assumption. Whether this mechanism really functions so smoothly could be observed during the recent financial crisis. In short, although most of the risks that lead to the financial debacle were disclosed, markets failed to understand them and thus to constrain them. Disclosure of information is not equal to understanding them appropriately. Some authors have argued that many investors had sufficient information about the risk products, and yet they were unable to properly process the available information and adjust their positions accordingly. Reasons for this failure range from the incapability of boundedly rational investors to understand the

1473 See below for details on this issue.

1474 Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, p. 17.

1475 Avgouleas, European Company and Financial Law Review, 2009, 440, p. 449.

1476 For a list of benefits from disclosure see Avgouleas, European Company and Financial Law Review, 2009, 440, p. 447.

1477 *Ibid.*, p. 443.

complicated financial products to tendencies of herd behaviour and lack of desire or capacity to take rational and sometimes contrarian positions to the rest of the investors.¹⁴⁷⁸ Other behavioural factors include investor or market euphoria leading investors to ignore warning signals about the quality of the financial products as well as distorted or mis-aligned incentives due to the moral hazard created by the “too big (or too important) to fail” phenomenon. Thus market discipline can function if those who are supposed to monitor have an incentive to do so and the information signals that enable monitoring are not impeded or distorted.¹⁴⁷⁹ Thus, these problems and the issue of moral hazard limit the role of market to discipline banks effectively. Another author, criticising the increased role of market in disciplining banks, focuses on the levels of capital imposed on banks by the market, which are higher than what is socially optimal¹⁴⁸⁰, thus impeding the role of financial institutions to provide efficient financing.¹⁴⁸¹ Since market standards can easily change, market requirements on bank capital would provide more of a source of instability for the bank and for the financial system as a whole, pointing to procyclical behaviour of market participants.

F. Basel III: the enhanced Basel II framework

The Basel II reform package in the form of two documents, respectively “Basel III: A global regulatory framework for more resilient banks and banking systems” and “Basel III: International framework for liquidity risk measurement, standards and monitoring”, known also as the “Basel III” was adopted by the Committee in December 2010. The reform package of Basel II came as a necessity to address some of the weaknesses of Basel II, which were laid bare through and during the aftermath of the 2008 financial crisis. Bank failures became widespread affecting and almost bringing down the whole financial system, and causing the real economy to face extreme financing conditions. Therefore, the Basel Committee decided to intervene to revise the incentives created through Basel II that lead banks to take over excessive risk and to provide for stricter capital requirements. The purpose was to reduce banks’ ability to damage the financial system by taking over excessive risk as well as increase banks’ capital levels to ensure higher liquidity and stronger buffers against risk.

1478 Avgouleas, *European Company and Financial Law Review*, 2009, 440, p. 444.

1479 Hellwig, *Systemic Risk in the Financial Sector* and Avgouleas, *European Company and Financial Law Review*, 2009, 440, point to the problem that due to confidentiality agreements, banks will either not disclose at all certain crucial data on bank business or will disclose disaggregated way making it difficult for the market to assess bank’s risk profile.

1480 Higher even than the capital levels imposed by the supervisory authorities.

1481 Alexander, *Journal of Banking Regulation*, 2004, 6, p. 8.

I. Major problems that Basel III purports to address

Most of the problems that were manifested with the Basel II Accord during the recent financial crisis related to the requirements under the First Pillar of the Accord. These problems included the following:

1. Insufficient high-quality capital

Major weaknesses, which were blamed for the poor state of banks during the crisis included problems both at the micro as well as macro prudential level. At the micro prudential level, problems from Basel II related to the insufficiency and inadequacy of quality capital of banks able to absorb losses in times of financial distress.¹⁴⁸² One of the reasons for that rested on the definition of what constituted eligible bank capital for the purposes of the capital adequacy ratio. Additionally, during the 2008 financial crisis it was observed that banks entered the crisis with very low levels of own capital relative to the risk-weighted assets. When the crisis was at its peak, banks' own high-quality capital was quickly consumed, whereas the other elements of capital, which were recognised by Basel II under Tier 2 and 3 capital could not absorb the losses suffered by banks, thus pushing them toward breakdown. Therefore, it was the purpose of Basel III to consolidate what was already achieved through Basel II and in the meantime strengthen the liquidity potentials of banks to increase the resiliency and the stability of the system.

2. Pro-cyclical effects

Additionally, Basel II gave rise also to macro prudential problems. Basel II allowed banks for the first time to use their internally developed risk models for measuring credit risk for purpose of calculating the capital adequacy ratio. According to some, these internal models employed by banks were overly sensitive in their implementation and generated as a result pro-cyclical effects.¹⁴⁸³ Actually, the procyclical effects were inherent in the Basel II requirements.¹⁴⁸⁴ The

1482 Hellwig, in: *Verhandlungen des 68. DJT*, p. E43; Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, p. 2; Hannoun, Bank for International Settlements Management Speeches, 2010 (Available at www.bis.org/speeches/sp100303.pdf), p. 10.

1483 Atkinson/Blundell-Wignall, Organisation for Economic Cooperation and Development Journal: Financial Market Trends, 2010, 9, p. 13. The most basic reason for the Basel system to be procyclical is that judgments tend to underestimate risk in good times and overestimate it in bad times. See also Goodhart, National Institute Economic Review, 2005, 118, p. 123 ff and Ojo, Basel III and Responding to the Recent Financial Crisis: Progress Made by the Basel Committee in Relation to the Need for Increased Bank Capital and Increased Quality of Loss Absorbing Capital, 2010 (Available at mpira.ub.uni-muenchen.de/25291/1/MPRA_paper_25291.pdf) (hereinafter "Ojo, *Basel III*") p. 3.

1484 Atkinson/Blundell-Wignall, Organisation for Economic Cooperation and Development Journal: Financial Market Trends, 2010, 9, pp. 13-4 cite a number of factors which lead to procyclicity in Basel II. Such factors include e.g. the fact that bank risk measurements tend to be point-in-time and not measures over the whole cycle (hence positive in good times and negative in bad times), counterparty credit policies are easy in good time and tough in bad times, profit recognition and compensation

issue of procyclicality in the financial system is strongly related with a problem widely encountered in financial contracting, namely with information asymmetries between lenders and borrowers. In times of good economic conditions, borrowers find it easier to obtain credit since banks perceive the level of risk to be low. This leads banks to lower the level of regulatory capital they retain to counter risk. However, when economic conditions deteriorate, banks tighten credit since they perceive an increased risk. Borrowing becomes difficult and information asymmetries exacerbate the situation. Also “good” borrowers with profitable projects find it difficult to obtain financing. Banks translate increased risk into increased levels of retained regulatory capital. Bank behaviour thus follows the economic cycle, i.e. it credits more in good times, while lowering regulatory capital, and the opposite, it credits less in bad times, while increasing regulatory capital. The problem with the procyclical behaviour of banks was that they tended to have excess credit exposure (also due to a general relaxation of credit conditions) during booms, but suffer larger losses during recessions.¹⁴⁸⁵ In such times, when capital becomes scarce and shareholders and creditors cannot distinguish the “good” bank from the “bad” one, banks find it difficult to ensure their liquidity and therefore become prone to failures, the repercussions of which were explained in Chapter 6.

The procyclicality of bank behaviour would negatively affect not only the bank itself, but also the real economy at large,¹⁴⁸⁶ where the firms relying on bank loans as a source of debt capital would be hit hard. Bank decisions regarding providing further lending (through reorganisation) or letting a distressed (but potentially “good” with profitable projects) firm would be strongly influenced towards apparently cutting down their own risk by reducing exposure. Thus firms would suffer as a result of bank inefficient lending decisions.

3. Insufficient and inconsistent disclosure

Furthermore, Basel III identified the insufficiency and inconsistency of disclosures made by banks regarding capital as a factor that exacerbated the crisis. In the peak of the crisis, the market could not fully assess and compare the quality of capital between banks and thus could not discern accurately between stable and broken banks.¹⁴⁸⁷ The already present information asymmetry in the financial markets was further exacerbated, and market players made inefficient

schemes encourage short-term risk taking but are not adjusted for risk over the business cycle, etc.

1485 Hannoun, Bank for International Settlements Management Speeches, 2010 (Available at www.bis.org/speeches/sp100303.pdf), p. 16.

1486 Procyclicality is described as the self-enforcing mechanism within the financial system and between the financial system and the real economy. Hannoun, Bank for International Settlements Management Speeches, 2010 (Available at www.bis.org/speeches/sp100303.pdf), p. 16.

1487 Basel III Accord, para. 8 at p. 2.

investment decisions, which negatively impacted also healthy institutions. As a result, markets could not play efficiently their disciplining role foreseen by the Basel II requirements.

II. The enhanced measures of Basel III

To address a range of problems identified with existing accord, Basel III package introduces a number of measures, which the problems identified, include measures at the micro as well as macro prudential level. The measures taken included for example tightening the definition of common equity capital, limiting the range of financial instruments that qualify as Tier 1 capital, introducing prudential filters and additional capital buffers and enhancing transparency and disclosure requirements regarding the level of capital held by banks.¹⁴⁸⁸ Below is a summary of these most essential measures.

1. Enhanced capital quality and adequacy

Basel III, while keeping unaltered the ratio of capital banks are required to hold against risk weighted assets, it did alter the ratio of the percentages of tier one and tier two capital in the overall level of capital of a bank and simplified overall the capital structure of a bank.¹⁴⁸⁹ More specifically, while Basel II asked for a minimum four per cent tier one capital out of the general amount of eight per cent, Basel III increases the percentage of tier one capital to six, leaving thus only two per cent of the capital as tier two capital.¹⁴⁹⁰ Additionally, tier one capital is made of “common equity tier one” capital and “additional tier one” capital. As noted above, “common equity tier one” capital represents high quality, highly liquid capital that provides the bank with immediate money, as the funds come from common shares issued by the bank, share premia, retained earnings, legal reserves or other disclosed reserves. In view of its objective to improve the capital adequacy and resiliency of banks, Basel III not only requires that tier one capital increases from four to six per cent, but also stipulates that at least 4.5 per cent of the tier one capital be of the most liquid capital, namely “common equity tier one” capital. Thus, Basel III raises substantially the capital requirement for this type of tier one capital from 2% in Basel II to 4.5% in Basel III.¹⁴⁹¹ The rest of tier one capital, 1.5 per cent, is constituted of “additional tier

1488 Hannoun, Bank for International Settlements Management Speeches, 2010 (Available at www.bis.org/speeches/sp100303.pdf), p. 11.

1489 Guericke, in: Hopt/Wohlmannstetter (Hrsg.), *Handbuch Corporate Governance von Banken*, 1st. Aufl. 2011 (hereinafter “Guericke, in: Hopt/Wohlmannstetter, *Corporate Governance*”), p. 290.

1490 Basel III Accord, para. 50 at p. 12.

1491 See *Ibid.*, para. 94, at p. 28.

one” capital, enjoying some of the capacities of common equity, such as loss absorption ability, but differing from common equity in questions of subordination and priority of repayment.¹⁴⁹²

Apart from the new requirements on tier one capital, Basel III introduced new requirements also for tier two capital. More specifically, Basel III reduces the percentage of tier two capital in the overall minimum capital adequacy ratio of a bank from four per cent according to Basel II to two per cent according to the new requirements.¹⁴⁹³ As with the instruments constituting tier one capital, also for the instruments making up tier two capital Basel III provides a list of criteria for their inclusion in this capital tier.¹⁴⁹⁴ The list purports to tighten the definition of capital and provide more clarity on the international level as to what is to be considered tier two capital. Tier 2 capital and the elements constituting it are heavily regulated in Basel III and the overall level of Tier 2 capital held by a bank is limited to 100% of Tier 1.

2. Increased loss absorption capacity at the point of non-viability

To strengthen the capacity of banks to absorb losses Basel III requires additionally that all non-common Tier 1 and Tier 2 (i.e. additional capital) capital instruments provide loss-absorption capacities at the point of non-viability before taxpayers are exposed to losses. Thus, while the eligibility criteria for a capital instrument to be qualified in the Tier 1 capital was that it provide loss-absorption capacities in a going-concern basis, for the additional capital the eligibility criteria is that it provides loss-absorption capacity in a gone-concern basis. More specifically, this requirement stipulates that the bank include in each of their Additional Tier 1 and Tier 2 capital instruments a clause providing that these instruments be written off or converted into common equity, at the option of the relevant banking authority when a trigger event occurs, which endangers the going concern nature of the bank.¹⁴⁹⁵ The goal is to safeguard a bank from unexpected losses. Therefore, Basel III moved away from hybrid capital instruments as part of tier two capital, because these instruments failed to be loss absorbing in periods of bank stress.¹⁴⁹⁶

1492 See criteria for “Common Equity Tier One” capital and for “Additional Tier One” capital in Basel III Accord, paras. 52-56, at pp. 13-17.

1493 *Ibid.*, para. 50 at p. 12.

1494 *Ibid.*, para. 58, at p. 18.

1495 However, more details on what is to constitute a “trigger event” are missing.

1496 Walter, *Basel III*, at p. 3/12. Additionally, it is suggested that total common equity to risk-weighted assets is a better predictor of bank’s distress than other ratios that include also other capital instruments. See Miu et al., *Basel III* at pp. 10-11.

In line with one of its main objectives, namely to provide for capital instruments able to absorb losses either on a going- or gone-concern basis, Basel III provides for a longer catalogue of deductions or regulatory adjustments applied mainly in the calculation of Common Equity Tier 1 capital for the purposes of defining the capital adequacy ratio.¹⁴⁹⁷ By providing for additional deductions for the calculation of Common Equity Tier 1 capital, Basel III contributes to the increase of the quality of bank core capital and helps create a more accurate picture of a bank's possibilities to absorb losses in times of financial difficulties. Coupled with strengthened disclosure requirements, Basel III requirements are set to improve market discipline, one of the novelties of Basel II, through increased transparency regarding the level of regulatory capital.

Last but not least, an essential step towards the improvement of the loss-absorbing capacity of bank capital was also the elimination of Tier 3 capital under the requirements of Basel III.

3. Development of minimum global liquidity standards

To increase the resiliency of the banks in times of financial distress, Basel III develops two regulatory standards for liquidity risk to achieve both short- as well as medium- and long-term resilience of a financial institution. The goal of these liquidity standards is to ensure the survival of banks in a situation of acute financial stress. As a short-term resilience range, Basel III stipulates a time period lasting 30 days, whereas as medium- to long-term resilience range a time period of one year is chosen.¹⁴⁹⁸

a) The Liquidity Coverage Ratio

More specifically, Basel III develops the Liquidity Coverage Ratio ("LCR"), a liquidity standard that ensures that a bank has sufficient high quality, high loss absorbing capacity capital to meet its liquidity needs for a 30 calendar day time horizon under a scenario of significantly severe liquidity stress. The purpose is to ensure that the bank will possess sufficient capital within this short-term time horizon to meet its financial obligations while in the meantime it can take the necessary corrective actions to resolve the critical situation. Under Basel III banks are required

¹⁴⁹⁷ Apart from deductions foreseen by Basel II, such as, goodwill, increases in equity capital resulting from a securitization exposure and investment in subsidiaries engaged in banking and financial activities which are not consolidated in national systems, Basel III Accord adds to the deductions also deferred tax assets, cash flow hedge reserves, shortfalls of the stock of provisions to expected losses, defined benefit pension fund assets and liabilities, investment in treasury stock as well as gains and losses resulting from changes in own credit risk on fair valued financial liabilities. The rules of Basel III Accord requires that gains resulting from the instruments above be not recognised for the calculation of the Common Equity Tier 1 capital level, and the de-recognition of losses from these instruments cannot lead to an increase of the Common Equity Tier 1 capital level. For more details see Basel III Accord, paras. 66-90, at pp. 21-27.

¹⁴⁹⁸ *Ibid.*, para. 12 at p. 3.

to calculate the LCR for 30 calendar days into the future considering the total net cash outflows for this period.¹⁴⁹⁹ Banks must meet the LCR requirement continuously, according to the potential liabilities for the relevant short-term time horizon, and are required to hold a stock of unencumbered high quality liquid assets as a defence, should the distress scenario materialise.¹⁵⁰⁰ When designing this liquidity standard, the Basel Committee considered many of the shocks that banks experienced during the financial crisis that started in 2007 and culminated in 2008. The ratio of the LCR standard will be calculated according to the following formula:

Figure 9: Formula for calculating LCR according to Basel III

$$\text{Liquidity Coverage Ratio} = \frac{\text{Stock of high-quality liquid assets}}{\text{Total Net Cash Outflows over next 30 days}} \geq 100\%$$

b) The Net Stable Funding Ratio

The second liquidity standard developed by Basel III, the Net Stable Funding Ratio (“NSFR”) purports to promote a medium- to long-term funding of the assets and activities of a bank. Under this liquidity standard, a banking institution is encouraged through incentives to fund its assets and activities with more stable funding sources considering its liquidity needs for a time period of one year. Basel III requirement on the NSFR aim at promoting a better assessment of risk by banks, considering both on and off balance sheet items, and attempt to address one critical problem strongly related to the functions that banks perform, namely the mismatch between the maturity of a bank’s assets and that of its liabilities.¹⁵⁰¹ The “one year horizon” liquidity buffer that the NSFR develops complements the LCR standard to encourage long-term planning of banks with regard to funding of assets and activities. The NSFR is defined as the amount of stable funding that a bank possesses to the amount of stable funding¹⁵⁰² that is required from a bank. The ratio must be greater than 100 per cent according to the following formula:

Figure 10: Formula for calculating NSFR Ratio according to Basel III

$$\text{NSFR Ratio} = \frac{\text{Available amount of stable funding}}{\text{Required amount of stable funding}} > 100\%$$

1499 The “total net cash outflow” is defined as the total expected cash outflows minus total expected cash inflows in the specified stress scenario for the subsequent 30 calendar days. Basel III Accord, para. 50 at p. 12.

1500 Basel III Liquidity Risk, paras. 15-6 at p. 3.

1501 Ojo, *Basel III*, p. 8.

1502 “Stable funding” is defined as the portion of those types and amounts of equity and liability financing expected to be reliable sources of funds over a one year time horizon under conditions of extended financial distress. Basel III Liquidity Risk, para. 122 at p. 25.

The LCR standard will be introduced as of 1 January 2015 whereas the NSFR as of 1 January 2018.

4. Capital preservation buffers

With the view to strengthen the resiliency of banks, Basel III provides further for an additional buffer of high liquid capital with the same qualities as the “common equity tier one” capital. This additional buffer, called the “capital preservation buffer” is designed to ensure that banks build up capital outside stress periods, which can be consumed when losses are incurred.¹⁵⁰³ The “capital preservation buffer”, set at a level of 2.5 per cent, prevents the quick corrosion of the bank’s capital through losses, and thus the risk of breaching the minimum capital requirements rules. When the “capital conservation buffer” level of a bank falls below the set minimum, its operations are not affected. Instead, the constraints imposed relate only to the discretionary distribution of earnings¹⁵⁰⁴ of the bank. The extent of the distribution constraints will depend on extent of deviation from the minimum required level for the buffer. This requirement is designed to give banks, when experiencing losses, valuable time to build up their capital reserves without hindering the bank’s business operations. Additionally, should a bank breach the minimum allowable level for the capital preservation buffer, it does not risk becoming subject to regulatory intervention. However, it is required to replenish the buffer with high-quality capital, a measure which, from the effects, is equal to increasing the common equity Tier 1 capital level.¹⁵⁰⁵ The goal of this capital preservation measure is to maintain the stability of the bank capital levels and prevent that in the event of stress, bank stakeholders receive compensation at the expense of bank creditors, depositors and taxpayers.¹⁵⁰⁶ This phenomenon was observed during the 2007 crisis when banks, despite having depleted their capital buffers, kept distributing profits to shareholders to signalize financial strength to the market, however endangering in this way the interest of depositors.¹⁵⁰⁷ According to the Basel III requirements, banks can build up this capital either by raising new capital or by reducing discretionary distribution of earnings.¹⁵⁰⁸ This

1503 Basel III Accord, para. 122, at p. 54.

1504 *Ibid.*, para. 129, at p. 55. These are payments, which in periods of crisis can either be reduced or eliminated entirely in order to ensure the “going concern” nature of a bank. They include, but are not limited to, dividends on both ordinary and preferred shares of the bank, share buy-backs, bonus compensations, payments to pension plans, etc. See Miu et al., *Basel III*, at p. 7.

1505 Guericke, in: Hopt/Wohlmannstetter, *Corporate Governance*, p. 294.

1506 Miu et al., *Basel III*, at p. 7.

1507 Basel III Accord, paras. 126-128, at p. 55. See also Miu et al., *Basel III*, at p. 7.

1508 *Ibid.*, para. 125, at p. 54.

additional requirement for core tier one capital brings the overall level of the “common equity tier one” capital of a bank to a maximum of seven per cent. This represents a substantial increase in the capital adequacy of a bank compared to the pre-crisis levels of 2007.

However, the “capital preservation buffer” is not included in the total capital of a bank when calculating the capital adequacy ratio, as the purpose of this component of capital is to serve to a bank as an additional security buffer in times of financial difficulties rather than replace the core capital.

5. Countercyclical buffers

To address the procyclicality problem, Basel III establishes the so called “countercyclical buffers”. Banks would be compelled to build up these buffers in times of excessive credit in the system which increase risk and subsequently also loan losses, and consume them to offset losses (should they materialise).¹⁵⁰⁹ Normally, it should be easier and cheaper for banks to prop up their safety buffers in good times. In good states of the world capital is not scarce and banks would normally not have to pay a premium for increased risk. The opposite is true for bad state states of the world. Hence, the need to counter the procyclical effects through countercyclical buffers.

The fact that these buffers are on top of the minimum capital serves to reinforce their role as loss absorbers in times of financial distress for banks by lowering insolvency risk. This would provide banks with a “lifeline”¹⁵¹⁰ of capital as well as spare time before they are obliged to raise new capital. Furthermore, the buffers are supposed to play also the role of a “stopping” mechanism by discouraging banks to engage in excessive crediting if they cannot provide additional capital buffers for these risks.

The forward-looking approach of the countercyclical buffers attempts to capture potential loan losses before they materialise by covering them with capital while cheap, instead of attempting to deal with these losses after they have materialised and under distressed financial conditions in the market.

Basel III requirements specify that the level of the countercyclical buffer will vary between zero and 2.5 per cent¹⁵¹¹ to total risk weighted assets and it will be applied at the consolidated level.¹⁵¹²

1509 *Ibid.*, para. 137 at p. 57. See also Hannoun, Bank for International Settlements Management Speeches, 2010 (Available at www.bis.org/speeches/sp100303.pdf), p.16; Ojo, *Basel III*, p. 6.

1510 Although this is not new capital injected in the bank, it does provides bank with spare resources before bank capital of Tier 1 and 2 is consumed, thus triggering the obligation for banks to raise new capital.

1511 Due to the phasing-in procedure for the introduction of the buffer.

1512 Basel III Accord, para. 142 at p. 58.

For the countercyclical buffer to play its loss absorbing function, Basel III requires that the buffer be met with Common Equity Tier 1 or with other fully absorbing type of capital, without specifying what kind of capital would that be. However, as long as the Basel Committee has not issued further guidance of this issue, the only eligible capital for the countercyclical buffer would be the Common Equity Tier 1 capital.¹⁵¹³ Should a bank fail to meet the requirements on the countercyclical capital buffer, it will be subject to restrictions on distributions as in the case of the capital preservation buffer.

Regarding its implementation, the requirements of Basel III specify that the countercyclical buffer regime will be phased-in (in parallel with the capital preservation buffer) starting from 1 January 2016 until end of year 2018, and it will be fully effective starting from 1 January 2019 when it will also reach its maximal level of 2.5 per cent of risk weighted assets.¹⁵¹⁴

6. A “backstop” measure to supplement the risk-based approach

It was observed during the 2008 financial crisis that banks had built in excess leverage in off- and on-balance sheet exposures. As a result of the crisis and under pressure from the markets, banks were forced to deleverage their positions. Fire-sale of assets exerted downward pressure on asset prices, amplifying the losses suffered by banks. The losses incurred impacted negatively the asset side of the balance sheet, leading to a reduced bank capital base. A lower capital forced banks to contract the availability of credit, causing a credit-crunch in a crisis situation. In order to break this procyclical circle, Basel III introduces the so called “leverage ratio”, as a measure to constrain excessive bank leverage and in the same time to introduce additional safeguards against risks deriving from measurement errors of the risk weights under the risk-based approach of Basel II.¹⁵¹⁵ The inherent problem with the risk-based approach is that the capital ratio of a bank is required to be measured against only a part of the assets, namely those assets that carry a risk weight, and not against the total assets of a bank. During the 2008 financial crisis this implied that although banks were meeting the capital adequacy ratios at the peak of the crisis, due to the large leverage positions they had built by expanding their business, they were faced with a liquidity crisis, because assets, which were considered with a neutral risk weight failed. Therefore, Basel III attempts to address this problem by introducing the leverage ratio.

The leverage ratio will not be calculated against risk-weighted assets of a bank. The reason for this approach rests with the fact that, as noted above, pursuant to the risk-based approach by the

1513 *Ibid.*, para. 142 at p. 58.

1514 *Ibid.*, para. 150 at p. 60.

1515 *Ibid.*, para. 16 at p. 4.

Basel system, banks tend to assess risks as low¹⁵¹⁶ in good states of the world, and thus hold little capital against that risk.¹⁵¹⁷ With only 8 per cent capital adequacy ratio against only risk weighted assets, banks would have enormous room for expanding their business and increasing their leverage. However, should banks have miscalculated risk because of inadequate risk measurement systems, the repercussions for the bank as well as for the financial system could be substantial. Hence the approach of Basel III to establish a leverage ratio, which will not be measured against risk-weighted assets, but against the bank's total assets. This makes the leverage ratio independent from the business risks of a bank. It serves as a maximum limit of bank leverage against its Tier 1 capital. Hence, the "backstop" effect.

The leverage ratio will be measured as the ratio of Tier 1 capital of a bank, as newly defined under the enhanced framework of Basel III, over total assets (exposure) including assets outside the balance sheet. This ratio should be at least 3 per cent during the parallel run period starting from 1 January 2013 to 1 January 2017. During this period, the leverage ratio will have the character of a non-binding requirement, which will be subject to monitoring pursuant to the requirement so the Pillar 2 of the Basel accord. Due to the novelty of the leverage ratio, the parallel run period will be used as a monitoring phase in order to gather necessary information and data for the needed calibrations. After this period it is foreseen to move the leverage ratio requirement from Pillar 2 to the Pillar 1 of the Basel accord, and thus make it mandatory for banks.¹⁵¹⁸

At the time of the adoption of the Basel III, the Basel Committee on Banking Supervision stated that the proposed ratios will be revised in order to address unintended consequences, by considering also the available data gathered during the observation period. Thus at a meeting of the Group of Governors and Head of Supervision, the oversight body of the Basel Committee on Banking Supervision on 6 January 2013, amendments to the Liquidity Coverage Ratio standards were endorsed. The endorsed amendments affect not only the nominator but also the denominator.

Thus, definition of the nominator, namely of the total stock of high quality liquid assets ("HQLA") of a bank was amended to include in the stock, apart from Level 1 and Level 2 assets, also Level 2B type of assets as eligible to help a bank under a severe liquidity stress scenario. Pursuant to the amendments, banks will be able to rely on a wider basis of liquid assets towards

1516 Normally, bank management would have enough personal as well as business incentives to assess credit risk as low.

1517 The procyclical effects of the risk measurement is inherent in the Basel system.

1518 Basel III Accord, para. 167 at p. 63.

their buffers than previously planned, and these assets will include also high-quality mortgage backed securities. Part of the eligible Level 2B type of assets are considered also some equities, such as corporate bonds rated as low as BBB- with a haircut of up to 50%. Additionally, the amendments introduced caps to the Level 2B assets of up to 15% of the total HQLA, whereas the cap for Level 2 assets remains at 40% of HQLA stock.

Regarding the denominator, namely the total net cash outflow in the next 30 days, which is defined as the total expected cash outflows minus the total expected cash inflows in the specified stress scenario, the endorsed amendments reduced the rate of outflows for certain types of deposits and liquidity facilities.¹⁵¹⁹

Changes were endorsed also with respect to the implementation of the LCR. Hence, the deadline for the full implementation of the LCR was extended by four years, by requiring that banks hold a LCR of 60% in 2015¹⁵²⁰, and the ratio will be increased 10% each year until 2019.

7. Enhanced disclosure requirements

Last but not least important in the row of measures agreed under Basel III are requirements that purport to enhance disclosure of bank capital, as a means of improving market discipline. Therefore, apart from strengthening the quality and quantity of Tier 1 capital, Basel III requires enhanced disclosure of all elements of Tier 1 capital, namely core (common equity) Tier 1 capital, the rest of Tier 1 capital and additional Tier 1 capital, all regulatory adjustments, main features of the instruments making up bank capital, as well as explanations how the respective ratios were calculated.¹⁵²¹ Moreover, also the additional ratios, such as the leverage ratio, will be disclosed pursuant to the enhanced framework of Basel III.

III. A brief assessment of the enhanced Basel III measures

In a nutshell one can surely say that while the focus of Basel II was on internal models developed by banks for the measurement of credit (as well as other) risk and thus for determining the capital adequacy ratio, the focus of Basel III was on the enhancement of the quality and quantity of bank capital as an essential condition for mitigating risk contracted by banks and increasing bank resiliency in times of severe financial distress. A simple capital ratio will not bring the needed stability and protection if the elements that make up the capital are not solid and do not provide

1519 Basel Committee on Banking Supervision, Annex 2: Complete Set of Changes to the Formulation of the Liquidity Coverage Ratio published in December 2010, 2013, p. 1.

1520 Under the first draft of the LCR standard, 2015 was the deadline for full implementation.

1521 Guericke, in: Hopt/Wohlmannstetter, *Corporate Governance*, p. 292.

banks with the needed flexibility to meet their obligations, especially in times of financial distress. This is one of the major contributions of Basel III. By increasing the level of high-quality liquid capital that banks are required to hold, as well as by developing additional capital buffers, Basel III increases the resiliency of banks in distressed times, while it provides them with spare time to undertake necessary actions to bring back stability in the system.

The objective of Basel III reforms is to reduce the probability and the severity of future financial crises, of the same intensity or even higher than the 2008 financial crisis.¹⁵²² Therefore, Basel III purports to encourage forward-looking planning by banks through the development of minimum global liquidity standards both in the short-term as well as medium- to long-term perspective. In the meantime, these liquidity ratios provide also early warning signals to regulators and investors about the solvency of a bank. Moreover, Basel III attempts to counter the negative effects of procyclicality observed during the 2008 financial crisis through the establishment of a countercyclical buffer. These measures should mitigate chain effects from a loan losses-triggered banking crisis from directly spilling over to the real economy. Banks taking over excessive credit risk during “boom” periods are required to also provide adequate capital buffers against these risks while the market conditions are favourable to do so. Basel III compels banks to be “wise” about tomorrow’s dangers while they contract those dangers, and not when these dangers materialise. The additional buffers should enable banks to withstand severe shocks, while remaining a going-concern and continuing business operations.

The question still remains: will Basel III prevent another financial crisis and make banks safer? There is certainly no easy answer to this question. Opinions vary widely.¹⁵²³ Some of the concerns regarding the enhanced requirements relate to the higher operational costs to be borne by banks due to the obligation to hold larger holdings of liquid but low return assets as a buffer against liquidity risk. Higher capital ratios might force banks to tighten their lending standards in order to meet the new ratios. All these measures will translate into higher interest rates for borrowers or less loans for the economy.¹⁵²⁴ Or alternatively, it might push banks, under

1522 Walter, *Basel III*, at p. 2/12.

1523 See article by Guerrero/Pimlott FT vom 25.10.2010. “Pandit and King clash over Basel III”, where the Governor of the Bank of England complained that Basel III measures did not go far enough and the increased capital levels would not prevent another crisis, stating that “only very much higher levels of capital – levels that would be seen by the industry as wildly excessive most of the time – would prevent such a crisis”. Contrary to this position, the CEO of Citigroup complained that the enhanced Basel III measures go too far and risking to exacerbate problems that lead to the financial crisis.

1524 Small and medium enterprises will be most hard hit since they rely primarily on bank debt for capital. However, in a recent publication by Admati/Hellwig, *The Bankers' New Clothes. What's wrong with banking and what to do about it*, 2013., the authors make an attempt to shed light into wrongly assumed mantras that increase of a bank’s equity capital will lead into less lending. The authors rightly explain that bank capital is not a cash reserve that banks hold and that cannot be used for making loans.

strong competition pressures, to engage in activities that are more profitable but at the same time also more risky.¹⁵²⁵ This would be counterproductive since it could damage the soundness of the financial system. Some authors however state that the costs¹⁵²⁶ that banks could pay from increased levels of regulatory capital will not be as high as banks claim they would be.¹⁵²⁷ They go on to suggest regulatory capital as high as 20 per cent of risk-weighted assets or even 20 – 30 per cent¹⁵²⁸ of the unweighted assets compared to the slightly lower than 10 per cent of risk-weighted assets as suggested under Basel III.¹⁵²⁹

Improving the quality of bank capital and increasing the level of high-quality capital is one issue, but the discussion whether the overall capital adequacy ratio of 8 per cent is sufficient to prevent future financial crisis is a totally different issue. Basel III did not deal at all with this question. After all, the enhanced framework, which was also named Basel III, does not represent a new framework but rather supplements the previous Basel II accord and confirms the already established requirements of this accord. It is however questionable why the Basel Committee did not attempt to increase the capital adequacy ratio, considering that most of the internationally active banks affected by the new requirements do already maintain capital ratios which are 2 to 3 points higher than the minimum. During the 2008 financial crisis, it became obvious that banks not only did not have sufficient high-quality capital, but they also did not have overall sufficient capital to cover the losses triggered by the crisis. Therefore, increasing the level of capital adequacy ratio in the first place, and not only the level of common equity Tier 1 capital, would have been a step in the right direction to provide more stability in the system.¹⁵³⁰

Therefore, capital regulation does not tell banks what to do with their funds. Instead, what the capital regulation does is requiring banks that a sufficient fraction of a bank's investments or assets be funded with "unborrowed funds", i.e. with equity capital coming from the bank shareholders or owners. See pp. 6 – 7.

1525 Larosière FT vom 25.10.2010. in "Basel Rules Risk Punishing the Wrong Banks".

1526 It is argued that the requirement to hold larger amounts of equity capital increases the lending costs, because equity capital is more expensive, due to shareholders demanding higher return rates on this capital, compared to debt capital. Müller/Brackschulze/Mayer-Fiedrich, *Finanzierung mittelständischer Unternehmen nach Basel III. Selbstrating, Risikocontrolling, Finanzierungsalternativen*, 2. Aufl. 2011, p. 7.

1527 See e.g. Miles/Yang/Marcheggiano, *The Economic Journal*, 2012, 1, p. 2 who claim that "[...] even proportionally large increases in bank are likely to result in a small long-run impact on the borrowing costs faced by bank customers. Even if the amount of bank capital doubles our estimates suggest that the average cost of bank funding will increase by only around 10-40 basis point."

1528 Regulatory capital levels of 20 to 30% of unweighted assets were normal for banks at the beginning of the 20th century. See Hellwig, in: *Verhandlungen des 68. DJT*, p. E 50.

1529 See e.g. Hellwig, in: *Verhandlungen des 68. DJT*, p. E 50 or Miles/Yang/Marcheggiano, *The Economic Journal*, 2012, 1, p. 2.

1530 See Recommendation by the European Banking Authority of December 2011 (EBA/REC/2011/1) regarding the temporal increase of core Tier 1 capital to 9 per cent with the purpose to restore market confidence as a result of the sovereign debt crisis. The increase has to be effectuated until June 2012.

While Basel III deals considerably with the numerator in the capital adequacy ratio formula, it leaves the denominator out of its scope. Since the ratio is measured against the risk weighted assets of a bank and since the risk weighting by banks was shown during the latest financial crisis to be inaccurate, the asset base against which the adequacy of capital is measured is very important. However, Basel III does not deal in any obvious way with the denominator, namely with fine-tuning the risk-weight baskets, but it suffices itself with the establishment of the leverage ratio. Although the leverage ratio is an important step towards limiting excessive risk by banks, the set level of level 3 per cent is considered low, since it would allow a bank to leverage its capital 33 times. Therefore, there is still room for further increasing the leverage ratio level of banks as a measure to restrain the expansion of bank balance sheets to levels which are not sustainable. Because in a bank failure, bank debts include all balance sheet assets, rather than only the risk-weighted assets, it is also logical to ensure that banks truly have sufficient capital considering total exposures. The recent amendments to the liquidity coverage ratio were not faced without criticism for loosening the tight requirements of the first draft regarding the high quality liquid assets and thus increasing the risk profiles of the banks.¹⁵³¹ In view of these amendments, calls for a higher leverage ratio seem justifiable.¹⁵³²

Available at www.eba.europa.eu.

1531 Masters/Stevenson FT vom 07.1.2013..

1532 Schäfer, Deutsches Institut für Wirtschaftsforschung Wochenbericht, 2011, 11, p. 17. Hellwig, Max Planck Institute for Research on Collective Goods, Preprint No.2010/31, 2010, 1, p. 12 suggests a capital requirement at the level of 20 per cent of the unweighted balance sheet of bank, in order to lower the deleveraging multiplier. Although also this capital requirement would be procyclical, a deleveraging multiplier of 5 is much to be preferred than a multiplier of 40 or 50.

§ 10 Bank's gatekeeping and monitoring performance under Basel II

Basel II requirements were adopted from the perspective of bank regulators and supervisors primarily to increase the stability of the financial system. These requirements affect bank's incentives in performing their gatekeeping role in the financial system, but in the same time also bank's incentives in engaging in relationship lending. It is the purpose of this chapter to examine the influence of Basel II on relationship lending and how this impacts bank's performance with regard to the protection of third party creditors. Since it was previously explained that relationship lending as a lending technique by banks improves borrower's performance and makes a positive contribution regarding the protection of creditors, it remains now to be seen whether, and if yes, how Basel II and the regulations adopted therein affect relationship lending. The question to be addressed is whether Basel II encourages banks to engage in relationship lending, and thus making an added contribution to improved creditor protection? Or is Basel II, through the incentives created by the employment of risk measurement and management techniques, creating a more favourable climate for banks to engage in transactional lending? How do Basel II rules affect bank's incentives to engage in adequate screening and monitoring? The discussion in this chapter will focus on three major advantages provided through relationship lending with respect to the protection of creditors and how Basel II impacts these advantages. More specifically, these advantages are: improved ex-ante screening; improved ex-post and interim monitoring; efficient decisions in financially distressed times.

A. Ex-ante screening – Effects of Basel II on the information-intensive nature of relationship lending

It was explained in Chapter 8 that relationship lending provides incentives for an improved screening of borrower ex-ante. The reason for that lies in the fact that since relationship lending is an information-intensive relationship, the lender will build up on this information advantages vis-à-vis other lenders. These advantages will allow the relationship lender to reduce default risk and increase profits in the long-term. Therefore, the lender has an interest in the careful ex-ante screening of the borrower, since information will be reusable. It was shown that the reusability of information increases incentives for the lenders to put sufficient efforts in collecting accurate and qualitative borrower information in the first place.¹⁵³³

The screening of a borrower implies an examination process conducted by the lender before a decision on lending is made. The screening, as the term denotes, serves the lender to identify the

1533 Chan/Greenbaum/Thakor, *Journal of Banking and Finance*, 1986, 243, p. 244.

characteristics of the borrower, which could make the potential lending relationship an easy or a difficult one. After identifying these characteristics, a lender can decide whether they warrant a lending relationship falling within the limits of risk and return that the particular considers reasonable.

Seen from the perspective of the gatekeeping concept, screening helps to sort out those borrowing applicants that are considered by the lender as too risky to be allowed access in the market of debt capital. It is reasonable to state that the lender performs this sorting out function not necessarily having in mind the protection of the debt market as a system,¹⁵³⁴ but rather the protection of her own financial interests.

In the process of screening, the lender gathers “hard” as well as “soft” borrower information. The gathered “soft” information is not always documented and includes also impressions from, for example, on-site visits or experiences of the loan officer collected over the years of the relationship with the borrower. However, the lender has the flexibility¹⁵³⁵ to assess this information and the freedom to use the gathered information in the process of deciding whether or not to grant a loan. This “soft” information is valuable for the lender, because although it is not immediately verifiable through external sources, it nevertheless gives her insight into the quality and ability of the borrower to meet the financial obligations. One could say that exactly because this information is not immediately verifiable by third parties and easily transferrable to third parties, it gives the lender an informational advantage over other lenders and creates more bonding between relationship lender and borrower. This bonding is important as regards the opportunistic behaviour, from a mitigation of which all creditors, and not just the bank, stand to benefit.

Therefore, the ex-ante screening of the borrower, as an aspect of the gatekeeping role of the lender indirectly serves to protect third party creditors as well by sorting out “bad” debtors and forcing economically inefficient firms out of the market.

1534 The stability of the financial system is a goal of banking regulation. To achieve this, supervisory authorities set certain limits on the risk that a lender can contract, by making it too expensive (e.g. by requiring higher regulatory capital levels) and thus unattractive for banks to lend to a certain category of risky borrowers.

1535 This flexibility and freedom allows the lender to grant a loan to a borrower even where it could make a loss in the short-term but generate incomes in the longer terms sufficient to exceed losses in the first period. Hence, the function of intertemporal smoothing of interest rates or credit terms under relationship lending.

I. Rating as an instrument of borrower screening

In the framework of Basel II, borrower screening is conducted through the rating process. It was shown above that rating agencies play an important intermediary role in the reduction of information asymmetries in the capital or credit markets. By providing an assessment on borrower's creditworthiness, rating agencies contribute to a reduction of transaction costs between borrowers and lenders. Moreover, the general positive effects of rating, either internal or external point to an increase of transparency regarding borrowers' ability to fulfil financial obligations. It induces borrowers to take a proactive role in disclosing information¹⁵³⁶, which is important in the rating process and that may help in obtaining a positive rating result. Withholding relevant information, either from the rating agency or from the bank, could damage the rating result and thus also the chances of the rated subject to borrow at favourable terms, since missing information will not be assessed neutrally with regard to the borrower's rating, but rather negatively.¹⁵³⁷ Additionally, increased borrower transparency and a closer examination by banks through internal rating processes could also serve to mitigate the negative effects of procyclicality, present in the Basel II Accord. Since the main causes of procyclicality lay on information asymmetries inherent in financial transactions¹⁵³⁸, it could be derived that these asymmetries would be mitigated through closer borrower examination by banks in the process of internal rating.

Further, rating is also a useful tool for interim monitoring. This can be especially observed when the rated borrower and the rating agent, be that an external rating agency or a bank, maintain a long-term business relation.¹⁵³⁹ In the case of external rating agencies, the existence of long-term and durable business relationship between the rated object and the rating agency provides a strong foundation for an accurate assessment of borrower's creditworthiness and capacities to meet existing and future financial obligations. Through continuous rating, (first rating and re-rating) borrower's creditworthiness degree is updated and this allows investors to react accordingly. This could put pressure on the borrower to maintain or increase its creditworthiness reputation to avoid negative effects related to the cost of capital from a rating impairment.

1536 For arguments on the increase of transparency of borrowers see e.g. Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1545, p. 1547-8.

1537 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1545, p. 1547.

1538 For a critical analysis on the procyclical effects of Basel II see Borio et al., in: BIS, *Financial Stability*.

1539 Reichmann, *Rating nach Basel II. Herausforderungen für den Mittelstand*, 2006, p. 123.

As for the internal rating conducted by banks, the effects of improved debtor monitoring through rating could be even stronger. Banks that are engaged in relationship lending possess an informational advantage regarding the financial situation of the borrower. Through internal rating, this informational advantage is strengthened further and allows the bank to monitor borrower's performance on a continuous basis. Internal rating enables the bank to monitor borrower's performance not only from the "hard" facts, but also from the "soft" facts perspective gaining in this way a deeper view of the borrower's management. This should make banks into informed monitors. The existence of long-term relationships with borrowers provides banks with historical information about borrowers past performances. It is this information, which serves as an important input for bank rating models in assessing borrower's creditworthiness, since these models are oriented toward historic data, meaning that historic data are used to calculate future trends. Despite the fact that internal rating by banks are not made available to the public, the investing public will nevertheless obtain signals about borrower's creditworthiness through bank's decisions, when it decides to lend to the borrower for the first time, and especially when it decides to continue the lending relationship with the borrower. Since investors seem to hold banks as better informed creditors, they assign value to bank's actions in relation to borrowers. This illustrates again the impact of signals issued by banks in relation to borrowers regarding the disciplining of borrower's management.

It is also submitted that rating could exert pressure on borrowers to improve their capital structure. Thus, an essential element of the "hard" data gathered during the rating process is the capital structure of the borrower. A well-capitalized borrower is likely to receive a good rating result, since she is perceived as carrying lower risk. Because the evaluation of the hard data makes up to 60 per cent of the rating note, one could suggest that Basel II might be encouraging borrowers to prop up their capital structure in the hope of a better rating result, and thus better lending terms. However, well-capitalized borrowers were always considered as bearing a lower risk default. A well-capitalized borrower shows also more trust in the success of her own projects and therefore the owners are also willing to invest more. Therefore, a well-capitalized borrower might not be so much the result of the direct pressure to obtain a better rating, but rather more the result of the willingness and ability of the owners of the borrowing firm to invest more in the firm because they consider the investment projects as "good" ones. Nevertheless, a certain positive effect in this direction could not be denied.

Additionally, rating could make an important contribution also as regards the improvement of borrowers' corporate governance.¹⁵⁴⁰ The evaluation of soft-facts in the framework of the rating

1540 The rating of a borrower has become today a form of "governance rating". Großfeld, *Neue Zeitschrift*

process allows the external rater or the bank to gain an insight on the borrower's management structures. By analysing how the borrower is managed and factoring this information in in the rating result, rating agents provide an incentive to borrowers to improve internal governance structures with the view to obtain a better rating. Since external rating agencies are usually prohibited, due to conflicts of interest concerns, to provide advisory services to the borrowers they rate regarding management, capital, legal, asset structure or other activities¹⁵⁴¹, the role of external rating agencies in influencing the corporate governance of the borrowers they rate is limited mainly in the analysis of the "soft" facts. Different could be the case with banks. Since banks are creditors in relation to the borrowers they rate, they have an interest in improving borrower's corporate governance, as this increases borrower's financial stability and thus also its creditworthiness. Therefore, in a first sight, there is no hindrance for a bank to get engaged in advisory activities with the borrowers if that would increase borrower's chances to repay the loan. There is even a potential that banks could offer these additional services through cross selling. Especially banks engaged in relationship lending, where cross-selling takes place often, could be better placed to expand their business relations with potential borrowers beyond traditional lending, and now also beyond credit rating. In this way, a relationship lender is not only a traditional supplier of debt capital, but contributes also in optimising borrower's management structures.¹⁵⁴² Especially for small- and medium-size borrowers that rely primarily on bank lending as a source of debt capital, banks could find themselves in a more advantageous position to expand their engagement with these borrowers.

The more banks streamline the services they provide to incumbent or potential borrowers with regard to lending and to credit rating, the more it is expected that banks could replace external rating agencies, at least as much as corporate rating is concerned.¹⁵⁴³ Being in a position to bundle rating services with other advisory services, it could be expected that in the future banks would charge for the internal rating, but still at terms which are more favourable than fees charged by external rating agencies, since banks could use other services provided to subsidise rating

für Gesellschaftsrecht, 2003, 841, p. 842.

1541 Haar, in: Hopt/Wohlmannstetter, *Corporate Governance*, p. 229. A case in point of the potential conflict of interest is the case where the rating agencies were serving as advisors to financial institutions engaged in securitization. The advisory services in this instance focused on how should the structure of the securitized liability should be set in order for them to receive best ratings. See e.g. Hellwig, in: *Verhandlungen des 68. DJT*, p. E36.

1542 Meeh/Sattler, *Deutsches Steuerrecht*, 2005, 1545, p. 1548.

1543 The prime role of banks in providing rating services is to be dedicated also to the requirements of Basel II tying borrower's rating with the lending terms and thus with the regulatory capital of banks. See also Knoppe, in: Eilenberger, *Kreditpolitik der Banken*, p. 47.

services, in the same way as banks engaged in relationship lending do when they subsidise lending costs with the profit they generate from other services provided to the borrower.

Basel II encourages a “gatekeeper-creditor” model, where banks serve in the same time both roles. Especially for banks using the IRB Approach, banks serve as gatekeepers when they assess borrowers’ creditworthiness and thus keep the gate that would allow them access to the funds. In the same time, they keep also the funds, and therefore they are also creditors. Because of this double role, it is assumed that banks have the incentive to accurately assess the creditworthiness of the potential borrower, since they will bear the consequences of their assessment either through higher regulatory capital levels or through larger credit losses. Regarding the impact of internal rating on improving bank’s incentives to monitor borrowers due to an increased sensitivity towards the borrower’s risk profile, in the long-term Basel II might be encouraging the development of specific borrower’s monitoring models by banks, according to the nature of the individual borrower. The level of individuality of these models will certainly depend on the added value and benefits for the bank, but with the longevity of the bank – borrower relationship, the costs for an individualized borrower monitoring should reduce, with the bank being in possession of substantial borrower information. In this respect, it seems that Basel II acknowledges implicitly the benefits of relationship lending for both bank and borrower. On the other side, relationship lending allows both the bank and the borrower to benefit from lower regulatory capital levels and lower interest rates following the application of the Basel II requirements.

The individualization by the bank of borrower monitoring will certainly require also a closer cooperation between the borrower and the bank in order for this cooperation to be successful. A closer cooperation means first of all higher transparency of the borrower’s business and the way how it manages it. Without this transparency, the benefits of Basel II from more risk sensitivity in determining regulatory capital levels for banks and rewarding lending terms for borrowers will be limited. However, more transparency by borrowers and closer cooperation with the lender means also that borrowers will have to accept more controlling by the lender.¹⁵⁴⁴ This is a matter of choice for the borrower in weighing the costs and benefits from increased lender controlling. Additionally, also the lender will have to consider how far to get involved in controlling the borrower, in order to avoid circumstances that could lead to potential lender liability. However, what is certain is the fact that small- and medium-sized borrowers, which are the type of borrowers that historically depend on bank loans for debt capital, will have no choice but to

1544 Knoppe, in: Eilenberger, *Kreditpolitik der Banken*, p. 48.

invest in closer relationships with lender, if they wish to benefit from favourable loan terms or for liquidity in distressed times.¹⁵⁴⁵

II. Rating as a signalling mechanism to other investors

Rating agencies perform also signalling functions regarding the ability of borrowers to meet financial obligations. It is assumed that rating agencies have an interest in performing these functions accurately, since failure to do so would affect their reputational capital, which is accepted to be the foundation of their existence. Because the quality of the rating cannot not be assessed ex-ante, but only ex-post, rating agencies have an incentive to ensure the quality of their rating in order to ensure that they will continue to operate. This assumption is based on the premise that competition pressures would force a provider of services out of the market if the market lacks quality.

However, with respect to the rating market, there are problems with respect to the effectiveness of the reputation mechanism and of the competition pressures to discipline rating agencies to ensure the rating quality. Thus, since reputation takes time to build, the existing rating market is concentrated in the hands of 3 large rating agencies, which turn the rating market into a almost monopoly. This has serious repercussions regarding the limitation of competition as a disciplining mechanism. Obstacles for new entrants in the rating market limit the offer available and therefore give the existing rating agencies a sure client base that ensures also their existence. This situation could also provide disincentives for rating agencies to ensure the quality of their rating services, because even if their rating assessments are faulty, the reputational loss will be temporary¹⁵⁴⁶ and the borrowers will return to the rating agencies since the supply in the market is limited.¹⁵⁴⁷

The rating quality by rating agencies could suffer also due to the “issuer pays” ratings¹⁵⁴⁸ principle, where the subject being rated pays also the costs for the rating, rather than those who

1545 Gneuss Handelsblatt vom 30.3.2009, reporting that enterprises maintaining a close relationship with a housebank face less problems in securing liquidity in financially distressed times, due to the level of trust existing between the two parties.

1546 Investors have a short-term memory.

1547 This situation creates “lock-in” effects in the rating sector. But see the study by Becker/Milbourn, Harvard Business School Working Papers, 2010, 1, who state that strong competition in the rating market would not solve the problem of rating accuracy. The reason for this rest with the assumption that since quality in the rating industry relies on rents that are to be extracted by the rating agencies, strong competition among rating agencies will lower the extracted rents and therefore also the incentive to provide accurate rating.

1548 “User-paid” ratings models of compensation have also been used by rating agencies, but these models suffered from their strong dependency on the enforcement of contractual limits to how customers can share ratings information they receive. The spread of the low-cost photocopying in the 1970s might

will use the information from the rating result, namely the investors. More specifically, investors who consider entering into a business relation with the rated subject demand accurate ratings, whereas the rated subject prefers favourable ratings and not necessarily accurate ratings, since a favourable rating could lower the cost of capital,¹⁵⁴⁹ at least in the short term. Thus, there is a “tension” between the two parties, which the rating agency is supposed to address, but the task becomes difficult when taking into consideration the “issuer pays” ratings principle.¹⁵⁵⁰

The signalling function of a relationship lender is supposedly more qualitative and stronger when the bank rates the potential borrower herself. The relationship lender will possess more information about the quality of the borrower as well of her projects, and therefore is able to make more accurate lending decisions. Rating by the bank instead of by the rating agency could reduce problems arising from the “issuer-paid” ratings since the bank is not only the rating agent but also the party that wishes to enter into a business relation with the potential borrower. Therefore, the incentive of a bank acting as a rating agent to prepare accurate ratings is assumed to be higher when she has chosen the IRB Approach for the measurement of credit risk. Thus, the bank would want to issue accurate ratings for risk measurement purposes as well as for reputation purposes. For risk measurement purposes because on that measurement depends also the regulatory capital a bank will hold. For reputation purposes, because although bank ratings are normally not published, it is assumed that they put their reputation at risk when their ratings, and therefore also their lending decisions are faulty.

Additionally, also the problem with the assumed suboptimal rating results due to the lack of competition among rating agents should be smaller, since there is a functioning competition among banks. As a matter of fact, recent proposals by a number of international standard-setters on the field of financial regulation, such as the Financial Stability Board, the BCBS as well as the new rules on credit rating agencies adopted by the European Parliament purport to reduce the heavy and mechanistic reliance of credit institutions on ratings by the credit rating agencies. This is to be done using a two phases approach, which includes in the first phase the removal of references to credit rating agencies ratings in standards, laws and regulations and replace with suitable alternative standards of creditworthiness. The second phase would include a

have contributed to the discontinuation of this compensation model by rating agencies. See Becker/Milbourn, Harvard Business School Working Papers, 2010, 1, p. 12.

1549 Becker/Milbourn, Harvard Business School Working Papers, 2010, 1, p. 1.

1550 Credit rating agencies claim that the assumed conflict of interest ensuing from the “issuer pays” model of rating is not responsible for the resulting faulty rating during the 2008 financial crisis. They state that should the assumption have been true, faulty rating would have affected all type of products rated. Instead inflated ratings were observed only for mortgage securities. See Foley FT vom 14.1.2013.

strengthening of the internal credit risk assessment practices of the credit institutions.¹⁵⁵¹ The proposals recognise the role of credit rating agencies in exacerbating the 2008 financial crisis by inflating the rating of certain structured financial products. They recognise also the potential conflicts of interests from the “issuer pays” rating model and the lack of competition in the rating market as problems that need to be addressed to mitigate negative situations experienced in the past. Therefore, it is suggested that legislation should be adopted to reduce over-reliance on ratings by the credit rating agencies. This is not to say that the ratings will no longer play a role in the credit risk assessment process. The purpose is instead to see ratings by credit rating agencies as one of the elements, instead of the only element for ascertaining borrower’s creditworthiness. Moreover, credit institutions should be encouraged to adequately develop own credit risk assessment capacities of instruments in which they invest.¹⁵⁵² The recent rules adopted by the European Parliament on credit rating agencies attempt additionally to make credit rating agencies more accountable for their actions acknowledging that ratings are not simply opinions. In this sense, the new rules foresee a credit rating agency may be hold liable for violating intentionally or with gross negligence the regulation on credit rating agencies. This, however, does not imply liability for wrong ratings, but rather liability when, for example, credit rating agencies do not observe the requirements for the avoidance of conflicts of interest in the rating business.¹⁵⁵³ Last but not least, with the view to encourage competition among credit rating agencies, the new rules will encourage the entrance of more players in the rating market and the use by issuers of smaller credit rating agencies which do not have more than 10 per cent of the total rating market share and which are considered by the issuer as capable to rate the relevant issuance or entity. In this case, the new rules require the application of the “comply or explain” principle.¹⁵⁵⁴

III. Borrower inside information not always useful for rating purposes

Basel II does not specify how banks should use borrower information and how this information should be factored in in bank decision-making during the lending process. When the bank has to rely on external credit rating agencies for the risk weight of the borrower, the usefulness of

1551 See e.g. Basel Committee on Banking Supervision, *Stocktaking on the Use of Credit Ratings*, 2009; Financial Stability Board (former Financial Stability Forum), *Principles for Reducing Reliance on CRA Ratings*, 2010 (hereinafter “Financial Stability Board, *CRA Ratings*”); Financial Stability Board (former Financial Stability Forum), *Roadmap and Workshop for Reducing Reliance on CRA Ratings*, 2012. See also European Commission, *Memo: New Rules on Credit Rating Agencies*, 2013 (hereinafter “European Commission, *Credit Rating Agencies*”).

1552 See e.g. Principles II and III in Financial Stability Board, *CRA Ratings*, p. 2.

1553 European Commission, *Credit Rating Agencies*.

1554 *Ibid.*, p. 6.

borrower information reduces and the informational advantages enjoyed by banks loses value, since the risk weight assigned by the credit rating agency is relevant for the determination of the credit terms. This affects especially relationship lenders who cannot make use of the IRB Approach. In the case of relationship lenders who can make use of internal rating models the situation is somewhat different. These lenders could make use of the borrower information they have gathered over the years, quantitative as well as qualitative data, and include this information in the calculation of the borrower's credit risk. However, the goal of Basel II to design a risk-sensitive approach to bank capital and the responsibility of the supervisory authorities¹⁵⁵⁵ pursuant to the requirements of Pillar Two¹⁵⁵⁶ to ensure that the risk systems and methodologies used by banks are consistent and give an accurate picture of the risk faced by banks require that borrower information be well documented. In this sense, information, which is not documented, but gives an indication about the quality of the borrower will not be considered during the internal rating process.¹⁵⁵⁷ It was earlier explained that in such cases, banks tend to assess the borrower negatively rather than neutral. However, this could be problematic for borrowers in a relationship lending, since especially important soft information is not always documented and thus also difficult to be transmitted.¹⁵⁵⁸ As a result, also for relationship lenders who are eligible to use internal rating systems, the usefulness of borrower proprietary information, which is rather of a "soft" type is reduced. The informational advantage that relationship lenders usually enjoy will decrease in value. Under these circumstances, it is not clear why should a bank invest resources to gather and process borrower-specific "soft" information¹⁵⁵⁹ if that information will not yield benefits for the bank in the short or longer term. To maintain the value of relationship lending, the borrower and the lender would need to find ways to document "soft" information, and that in turn might imply more costs for both parties, and especially for the borrower. Thus, when relationship lending becomes less attractive, this will affect also the screening efforts performed by the lender. Under the pressure to lower screening costs, which a lender would have to cover herself in the first place,¹⁵⁶⁰ the lender will rather standardise the information gathered

1555 See e.g. arguments by Berger/Udell, *The Economic Journal*, 2002, F32–F53, p. F44.

1556 Wittig, *Zeitschrift für das gesamte Handels- und Wirtschaftsrecht*, 2005, 212, p. 224.

1557 Basel II Accord, paras. 411, 448 and 449.

1558 See discussion in Berger/Udell, *The Economic Journal*, 2002, F32–F53, on the transferability of soft borrower information. Berger/Udell also draw attention to the fact that relationship lending is made possible also due to the experience of the loan officer with borrower, an experience which cannot always be documented in such a way as to be considered in the rating process.

1559 Brackschulze, *Hausbanken unter Basel II*, p. 268.

1560 Since it is not sure whether the lending relationship will materialize, the screening costs must be covered by the lender. Only if the lending relationship is established, the lender will transfer at least some of the costs for the rating to the borrower.

to fit the rating requirements,¹⁵⁶¹ but this will not necessarily lead to a more accurate assessment of the borrower.¹⁵⁶² If that were to be the result, then Basel II has not only defeated its own purpose, of a more risk-sensitive measurement approach, but also has distorted lenders' incentives to engage in relationship lending.

There is another aspect to how Basel II could be eliminating the information advantage of relationship lenders. It was previously mentioned that the benefits of informational advantage following a screening process are eliminated when the rating process is conducted externally by a rating agency. This could be a reason strong enough for banks to migrate from the Standardised Approach to the IRB Approach, thus being able to conduct rating internally. However, this migration is costly for banks of a smaller size, whereas for bigger banks such migration is beneficial since it could lead to lower levels of regulatory capital. If this is the case, then smaller banks, which are also relationship lenders, would be the lenders who will be most affected by the loss of informational advantage since they will have to rely on external rating agencies for the measurement of the risk weight. It is suggested that smaller banks are typically the lenders that engage in relationship lending. Therefore, following the arguments above, it results that Basel II eliminates some benefits of relationship lending, and that affects mostly smaller banks, possibly creating in this way also a competitive disadvantage for smaller banks.

A last but not least important aspect, with regard to the value of screening is the signalling effect that ensues from screening. It was explained earlier in chapter 8 that the screening by banks and the resulting action, namely the establishment of a lending relationship with the borrower, is considered by the markets as a positive signal concerning the creditworthiness of the borrower. The reason for that is that banks are considered as better informed creditors, with the expertise to gather and assess with quality inside information pertaining to borrowers. However, if the value of screening reduces for reasons already explained above, then the quality of the signals sent by the lender concerning the creditworthiness of the borrower will be reduced as well. Hence, a useful instrument, such as signalling, that allows to creditors to self-protect loses its effectiveness. This in turn increases monitoring costs for other third party creditors who may not be able to rely anymore on the signalling functions as performed by banks.

1561 Pursuant to Basel II, bank loans are more often made based on quantitative than qualitative factors. See e.g. Hummel et al., *Mittelstands- und Innovationsfinanzierung*, p. 49.

1562 Probably, a case in point to illustrate this problem is the approach chosen by the investment banks when rating structured financial products. Thus, the financial product was structured in such a way that they could receive triple A rating, but that did not make the product riskless. The flaw in this approach was shown when the financial crisis broke out, causing these products within a short time to be rated as junk.

VI. The problem with the measurability of credit risks

The whole Basel II framework and especially the requirements of Pillar One on the use of external ratings or internally developed models by banks for the quantification of risk are based on the assumption that one can objectively measure credit risk through the use of sophisticated models. Thus the measurement of risk is based primarily on statistical models. Based on these models, banks and rating agencies assume to capture the probability that the borrower would default and would be unable to repay her loan, either due to her opportunistic behaviour or due to negative market developments that impair borrower's financial situation. There would be nothing wrong with this approach, so long as the data that is fed into these models would be objectively verified or verifiable. However, a borrower's behaviour or negative market developments cannot be externally objectively verified ex-ante. How a borrower behaves depends on a combination of different factors and incentives a borrower faces over the course of the lending relationship, and these cannot be statistically measured. Too, negative market developments that could lead to impaired economic and financial conditions may be caused also by events, which are not economic or financial in nature, and these events are not statistically measurable.¹⁵⁶³ Even if these unfortunate events were economic or financial in nature, they cannot be predicted with certainty, or also when they are or could be predicted, due to perverse incentives other short-term interests may prevail and these events may be allowed to run their course.¹⁵⁶⁴ Notwithstanding, the capital adequacy ratio approach of Basel II is based on the assumption that credit risks are measurable and quantifiable, and therefore adequately to be covered with capital. *Hellwig* indicates that this approach, encouraged also through strong lobbying efforts by large financial institutions, shows the high interest by these institutions to make credit risk and risk correlations appear objectively and reliably measurable, since in this way these risks could be shifted further to other parties, for example, through securitization.¹⁵⁶⁵ However, the assumption of risk measurability raises questions of incentives for banks to monitor risk adequately, both ex-ante and ex-post.¹⁵⁶⁶

1563 Hellwig, in: *Verhandlungen des 68. DJT*, p. E46 makes a strong statement saying that the assumption of supervisory authorities and of banks that one can objectively and reliably measure risks and risk correlations is an illusion.

1564 As a case in point could serve the recent 2008 financial crises, where despite the fact that it was possible to foresee that subprime borrowers would not be able to repay their mortgage loans, banks continued to lend to these borrowers because the profit margins were quite high.

1565 Hellwig, in: *Verhandlungen des 68. DJT*, p. E46 states also that prior to the introduction of the approach of the risk calibration for regulatory capital purposes, the assumption was that the measurement of credit risk had little to do with statistical measures, but rather with the assessment of borrower's creditworthiness by the responsible persons at the bank, although this assessment was partially a very subjective one.

1566 See e.g. Hellwig, *Systemic Risk in the Financial Sector*, Hellwig, Max Planck Institute for Research on

From the perspective of ex-ante monitoring, banks are exposed to disincentives to carefully screen the borrower and sort out the “bad” ones. First, if risk can be objectively measured and quantified, than that risk can be passed on further, e.g. by insuring the risk or by selling it. Banks therefore are faced with disincentives to serve ex-ante as gatekeepers to sort out “bad” borrowers at the initiation phase of a credit relationship. If one knows that he or she can sell further a product for a profit, why should he or she care much about the quality of that product?¹⁵⁶⁷ Second, banks can use the rating process employed for determining the creditworthiness of the borrower in the credit risk measurement exercise for self-serving purposes, instead of being used as an instrument to neutrally measure the creditworthiness of a potential borrower. More specifically, banks could use internal rating as a tool to bind the potential customer for further business besides lending. By granting favourable ratings, banks may gain access to additional, potentially more profitable, business with the borrower, than simply lending. This could be profitable for the bank in the short term. As an analogy for this kind of behaviour one could mention here the behaviour of auditing firms that culminated with corporate scandals of 2001 that brought down Enron, WorldCom or Parmalat. In the well-known case of Enron, the auditing firm, Arthur Andersen, was found to have given Enron a cleaner bill of health than what the real figures in the accounting books warranted. In exchange for their “positive” view of the firm’s books, the acquiescent auditing firm was rewarded with additional counselling business with the firm, which was more profitable than the auditing business.¹⁵⁶⁸

This behaviour has the downside effect that it hides the real risk profile of the borrower. An inherent problem with the nature of gatekeepers is that, despite the fact that reputation is their most precious asset, they face a strong incentive to sacrifice their reputation in the short term if the benefits justify it. Banks as gatekeepers are not immune from this incentive. They probably face an even stronger incentive to “risk” their reputation in the short term for higher profits if they are too important, or too large, or too significant to fail. Hence, one could dare to suggest that the insistence of banks to be allowed to employ internal rating based models was not related simply with the desire to obtain a more accurate assessment of the borrower’s credit risk.¹⁵⁶⁹ If auditors can “cook the books”, then also banks can “cook the ratings” if that is worth it.

Collective Goods, Preprint No.2010/31, 2010, 1, and Hellwig, in: *Verhandlungen des 68. DJT*, for the perverse incentives created through securitization with regard to the proper assessment of borrower’s creditworthiness.

1567 Another negative consequence from this situation is that the signalling function of bank’s actions loses further in value.

1568 See Coffee, *Business Lawyer*, 2002, 1403; Coffee, in: Ferrarini et al. *Reforming company law*, and Coffee, *Gatekeepers*, for a thorough account of the failures that led to the demise of Enron and the acquiescent role of the auditing firm in this collapse.

1569 If rating was conducted externally, banks would not be able to influence the outcomes. This is not the

From the perspective of ex-post monitoring, the incentives faced by banks are not necessarily supportive of adequate borrower monitoring. Thus, if credit risk can be objectively measured and quantified, and further, if by holding regulatory capital according to the levels prescribed by Basel II such risk would be adequately¹⁵⁷⁰ covered, then the incentives of banks to seriously engage in ex-post borrower monitoring could be negatively affected. Additional monitoring would often involve a closer engagement with a borrower, intensive exchange of information and more relationship and less statistics.¹⁵⁷¹ Since every additional monitoring would imply additional costs, in the presence of strong bank competition, banks would like to avoid these costs in order to retain their market share and profitability.

In the end, the consequences from the regulatory capital approach of Basel II might not seem that encouraging for the relationship lending approach and for the gatekeeping role of banks. As it was previously mentioned, Basel II was not designed as an instrument that would contribute also to the protection of third party creditors through the gatekeeping and monitoring role of banks. Rather, Basel II was designed to protect bank depositors and ensure the stability of the financial system through ensuring the stability of the individual banks. However, it is doubtful whether even these primary goals of the Basel Accord can be achieved. Some authors claim that Basel II played a substantial role in destabilising the financial system during the 2008 crisis.¹⁵⁷²

B. Ex-post and interim monitoring: Effects of Basel II on lender's incentives to monitor adequately

Once the lending relationship has materialised, the lender faces the need to monitor the borrower to ensure the repayment of the loan. The level of ex-post monitoring, i.e. the monitoring after the materialisation of the lending agreement, as well as the interim monitoring, i.e. the monitoring during the whole time the lending relationship continues will depend on a number of various factors. These factors include the adequacy of borrower ex-ante screening, the reputation of the borrower (which includes the credit risk of the borrower), the usefulness of borrower's information for monitoring purposes, and the possibility of lender to mitigate risk.

It was explained above, that Basel II negatively impacts the value of borrower's inside information. Due to the standardisation of the rating process, a process encouraged through the

case if rating is done internally.

1570 Basel II calls it the "capital adequacy ratio" although from the recent financial crisis of 2008, it was clearly seen that this ratio was very far from being adequate.

1571 Although banks will nevertheless monitor, since they would need to adapt the rating of the borrower to her risk profile, and thus adapt also the level of regulatory capital they must hold, the monitoring for this adaptation must not be intensive or based on relationship lending.

1572 Hellwig, in: *Verhandlungen des 68. DJT*, p. E46.

requirements of Basel II, relationship lenders lose their informational advantages vis-à-vis non-relationship lenders. This has implications regarding the length of lending relationships as well as on the credit mitigation techniques that banks use, which in turn affect also bank's incentive to monitor the borrower after the materialisation of the lending relationship. These effects are described below.

I. Effect of Basel II on the long-term nature of relationship lending

Through the long-term and the close nature of relationship lending, both lender and borrower commit to each other. The lender will commit itself to provide the needed debt financing to the borrower, in good time to provide investment capital, and in bad time to ensure liquidity to avoid borrower insolvency when it faces financial distress.¹⁵⁷³ The borrower will commit itself to doing business in the longer term with the bank, thus providing the lender with a continuous source of income. The long-term nature of the relationship, on the one side allows the bank to obtain a deeper insight into the workings of the borrower, and thus also to be able to judge more accurately the financial health of the borrower. On the other side, the borrower can benefit from better loan terms since the bank can better assess her creditworthiness. Without this feature of relationship lending, the intertemporal smoothing of interest rates and credit terms would not be possible.

1. Procyclicality of bank behaviour

One of the main concerns of Basel II requirements was the procyclical nature of bank behaviour when assessing and dealing with credit risk. Banks are willing to provide more credit in good states of the world (so called "booms"), since they perceive that improved economic and financial conditions lower the risk they face from the lending activity. The perception of lower credit risk is reflected in lower credit requirements applied by banks. In such times, also debtors with a creditworthiness level lower than average could obtain a loan.¹⁵⁷⁴ A lower perception of risk by banks could also result in a lower vigilance on borrower's performance. As a result, banks are induced to monitor less. However, inadequate monitoring by banks in times of booms results for other reasons too. Thus, in times of economic expansion, banks face increased competition pressure from other lenders, who also compete for a share in the credit market. Under such a pressure, keeping crediting costs low is important in order not to lose clients to competitors. As

1573 See also the summarizing definition on the functions and benefits of relationship lending in Brackschulze, *Hausbanken unter Basel II*, p. 16.

1574 Due to the availability of free capital during economic booms, if a bank refuses to lend, another lender will jump instead, compelled also by the strong competition for a share of the market.

a result, banks tend to expend less in screening¹⁵⁷⁵ loan applicants to ensure an accurate measurement of credit risk and consequently an accurate pricing of the loan. Competitive pressures are likely to be exacerbated due to herding, in which banks find it rational to go with the crowd, than run the danger to “be sane in an insane world”.¹⁵⁷⁶ Not lending when the market is experiencing a lending euphoria could cost bank managers their bonuses for failing to achieve investment targets or even their job for missing investment opportunities for the bank. Hence, it seems more reasonable to go with the crowd, since in the event of failure, the burden of guilt can be shared among many.

The reverse is true in recession times. When banks perceive impairment in the economic and financial conditions and under the pressure to limit or mitigate losses, banks become more “careful” when lending. The economy enters a vicious circle. When credit risks materialise and banks experience increased losses, in the presence of information asymmetries, banks become overcautious. This is often translated into a tightening of credit requirements, which make it burdensome or too expensive¹⁵⁷⁷ for borrowers to obtain new loans or to roll over old ones. Borrowers, who during boom times would have qualified for a loan, are no longer eligible during recession times. Incumbent borrowers in need of debt capital are faced with three choices, none of which seems to be very helpful: face insolvency as a result of illiquidity, obtain an expensive loan and run the risk of default, which will most probably lead to insolvency, or sell her own assets at fire-sale prices to replace missing bank loans, and thus depress the value of her own assets.¹⁵⁷⁸ Compelled by losses, banks would have to raise capital not only to maintain regulatory capital ratios, but also to signal its stability to the market. In the presence of negative market conditions, banks will face difficulties to raise new capital¹⁵⁷⁹, and therefore they would have to reduce leverage by liquidating positions (reducing the size of the balance sheet) in a way similar

1575 Less screening for cost reasons could be also due to the fact that banks cannot immediately pass the cost of screening to the borrower, but can do this only after the lending relationship materialises.

1576 Coffee, in: Ferrarini et al. *Reforming company law*, p. 475. Incentives towards herding can be several. Thus e.g. being part of a group limits blame in case of collective failure if the hazard is realized, as opposed to individual failure. Additionally, for banks the incentive to herd is related to survival chances in case of a systemic failure. The authorities might be more willing to intervene and support banks in the event of widespread, systemic failure in order to limit the severity of the crisis. See Herring, Oxford Review of Economic Policy, 1999, 63, p. 73 and Borio et al., in: BIS, *Financial Stability*, p. 10.

1577 Higher spreads, fees and collateral requirements and shorter maturities to compensate for higher regulatory capital that banks would need to hold as a result of increased risk pursuant to Basel II requirements. See Herring, Oxford Review of Economic Policy, 1999, 63, p. 74.

1578 Indeed, not only the value of its own assets, but also that of e.g. banks holding similar assets, and thus exacerbating bank losses from collateral devaluation. One speaks in this case of a “multiplication effect”. See Hartmann-Wendels et al., *Bankenaufsicht*, p. 45.

1579 New capital is either not available due to investors’ insecurity or it is simply too expensive.

to an asset fire-sale, and risk incurring further losses.¹⁵⁸⁰ The cyclical effects could be further aggravated due to pressures from the over-reaction of supervisory authorities who force banks to hold more capital as a response to increased risk and/or losses, as well as the due to the effects following market discipline. Subject to these pressures, banks feel compelled to convey to the market as well as to the supervisory authorities a signal of financial strength by reporting high capital ratios, often at the cost of long-term banking relationships.¹⁵⁸¹

The outcome following from the arguments above is that banks will be less willing to exert adequate borrower monitoring¹⁵⁸² in good states of the world. The perception of positive economic and financial conditions induces banks to reduce their vigilance in ex-ante screening processes and ex-post monitoring processes, and as a consequence they provide more of a gateway than a gatekeeper. The public interest of financial stability has less priority than the personal interest of economic gains, despite the costs from the accumulation of excessive risk in the financial system, which banks are not adequately prepared to absorb. Furthermore, while it may seem rational in times of recession that banks react by tightening their crediting practices and by deleveraging to lower possible losses and improve their capital ratios, the consequences from such behaviour may lead to inefficient outcomes due to hasty decisions. In such times they might act often as a “gate-closer” than as a gatekeeper. “Good” borrowers with positive prospects to economic performance, but who experience short-term difficulties, might face insolvency due to bank decisions to reduce exposure following pressure from various sources. Also long-term banking relationships, which are a characteristic of relationship lending, could suffer in such a scenario. Banks may no longer be able to make efficient decisions regarding further financing or efficient liquidation. This failure is attributed also to a lowered value of borrower’s inside information, a problem, which was addressed in the previous section. The failure of banks to adequately screen borrowers and monitor their performance to ensure that they remain out of the system or are forced out when it is more efficient to do so, endangers not only the stability of the bank and of the financial system, but also the interests of third creditors related to these borrowers.

It seems therefore reasonable to conclude, in the light of the arguments above, that Basel II “induces” banks to take a procyclical approach to borrower monitoring. Indeed, the whole idea of increased risk sensitivity, as was the goal of Basel II, rests on the logic that banks should be more vigilant when risk increases, and the reverse is implied when risk decreases. Since

1580 Hartmann-Wendels et al., *Bankenaufsicht*, p. 36.

1581 Borio et al., in: BIS, *Financial Stability*, p. 35.

1582 Understand both phases of monitoring: ex-ante (screening) and ex-post monitoring.

borrower monitoring is also related to the borrower's risk, it results that monitoring is *per se* procyclical. Banks would expend more to monitor (including also screening) when the risk is higher, and the inverse, when the risk is lower. This approach is in itself not wrong, so long as the risk that banks should monitor is not only perceived low but is indeed low. The problems arise when banks' incentives to assess risk accurately are distorted by factors which are not outside the power of banks to control. Some of these factors are addressed in section 2 below.

2. Disadvantaged treatment of long-term exposures under the risk mitigation techniques of Basel II

One of the characteristics of relationship lending is that the relationship between lender and borrower is long-term. The longer duration of the relationship allows the lender to perform intertemporal smoothing of interest rates. This is possible only in a long-term lending relationship wherein a lender can charge lower interest rates than what the risk profile of the borrower would warrant, because it will compensate the missed profits with interest rates higher than market conditions suggest in the later period. The longevity of the lending relationship was ensured through the informational advantages enjoyed by the relationship lender. This created bonding between the lender and the borrower but also "hold up" effects in a relationship lending. However, Basel II effects on lender competition and on the treatment of long-term exposures seem to discourage the establishment or maintenance of long-term lending, thus harming also relationship lending as a lending technique.

Thus, as regards informational advantages enjoyed by a relationship lender, it was explained above that Basel II leads to a decrease of such advantages. Since such informational advantages were a necessary condition for creating bonding between lenders and borrowers and thus for ensuring a long-term lending relationship, loss of information advantages makes a lender re-examine her long-term commitment to the borrower. Further, through the standardisation of the rating process, the relationship lender loses some of the information advantages, because some of borrower's inside information cannot be used any longer for the rating process. In the same time, a non-relationship lender gains borrower inside information through the same rating process. Thus, the informational advantages of a relationship lender vis-à-vis a non-relationship lender are reduced. This reduction can lead to higher competition between the two types of lenders. This is so, because the relationship lender cannot rely any longer on the informational advantages as a factor to retain her customers over a longer period of time.¹⁵⁸³ Hence, the

1583 It was mentioned previously that informational advantages allows the lender to charge interest rates slightly higher than the market rates, but this is how this lenders compensates forfeited profit in the

relationship lender needs to become more competitive regarding the loan terms, as most importantly regarding the interest rates, she is offering to the borrower. Since also the non-relationship lender will attempt as well to become competitive in order to win new customers, the competition between the two types of lenders will increase. Certainly, on the one side increased lender competition reduces the “hold up” effects, typical in a relationship lending, and can provide borrowers with lower interest rates for the lent capital. On the other side, increased lender competition will shorten the maturities since the relationship lender cannot perform an intertemporal smoothing of interest rates, and thus needs to ensure that it will not only get the lent funds repaid, but will also get the desired profit within the agreed duration of the loan, on a period by period basis. According to *Berlin*, increased lender competition can have as an effect that banks become more risk-averse and avoid risky loans for fear of not getting a return within the shorter term of the lending period.¹⁵⁸⁴ The side effect of shorter maturities is that they could trigger for borrowers more risk appetite, since the lending relationship becomes less predictable and the interest rates are high at the beginning of the lending relationship,¹⁵⁸⁵ creating thus negative incentives, which increase a borrower’s risk of default.

The incentive to engage in long-term lending relationships is distorted additionally also from the unfavourable treatment of long-term exposures under Basel II. More specifically, under the IRB Approach, the maturity factor (M) of an exposure is included in the computation of the risk-weight for the particular exposure, and thus influences the level of regulatory capital. Thus, longer maturity exposures impose less flexibility on banks to react when credit conditions deteriorate. The reverse is true for shorter maturity exposures, where banks could respond to a sudden deterioration in the financial situation of a borrower by refusing to extend further credit or by increasing the rates to compensate for the increased risk. Following this logic, the requirements of Basel II demand banks to hold more regulatory capital for longer maturity exposures, thus treating maturity as a risk mitigation technique. Although Basel II tends to counterbalance the migration of banks from long-term to short-term maturity lending as a consequence from including the M factor in the risk calculation formula by setting the effective maturity at 2.5 years, this is valid only for banks that choose the F-IRB Approach, whereas for

short-term.

1584 Berlin, Business Review of the Federal Reserve Bank of Philadelphia, 1996, 1, p. 4. Berlin states also that one needs to weigh the benefits and costs of increased competition. This is not to say that competition in the financial markets is not good. Rather, in certain situations, more competition could produce benefits in the short-term, but even more costs in the long-term.

1585 In markets where lender competition is strong, the initial interest rates charged usually start high and decrease over the life of the lending relationship. Berlin, Business Review of the Federal Reserve Bank of Philadelphia, 1996, 1, p. 4.

banks adopting the A-IRB Approach, the calculation of the effective maturity is left to the bank itself.

One might say that shorter maturities for bank exposures lower the amount of risk faced by banks. However, this does not lower the default risk faced by the borrower, nor does it make the borrower safer. Since close monitoring of borrower's activities is a costly activity, adequate monitoring makes sense economically when the lending relationship lasts. The monitoring is costly at the earlier phase of the lending relationship, but becomes cheaper with the duration of the relationship because of the trust being built through an extensive flow of information from the borrower to the lender. When banks lend short-term, there is no incentive for them to invest in monitoring, due to cost reasons. Hence they face two choices: lend short-term and nevertheless do monitoring, and pass the increased costs to the borrower, or lend short-term and refrain from monitoring. In the first choice, the bank would risk becoming less competitive due to higher costs and thus will have to face the perspective of losing customers. In the second choice, the bank will offer credit at lower costs (monitoring costs are spared), but will probably require more collateral or use other mechanisms to mitigate risk. As a matter of fact, it seems that shorter maturities go hand in hand with more collateralization, since collateral too is treated under Basel II as a credit risk mitigation technique.¹⁵⁸⁶ Hence, in order to reduce the costs related to regulatory capital, banks are incentivized to lend short-term and collateralized. More on the effects of Basel II on the collateralization of bank exposures follows in the next section.

II. Credit risk mitigation techniques could reduce incentives to monitor

Basel II provides for various possibilities for banks to manage credit risk. As a matter of fact, the mechanisms for risk mitigation were not introduced for the first time through the Basel Accord. They existed already. The novelty is that banks may use these techniques to lower credit risk and to factor in this decrease of risk in the calculation of regulatory capital they are required to hold according to Basel II. Therefore these mechanisms are widely used by banks. Among the techniques used by banks is securitization and collateralized transactions. As already explained above, the securitization of loans is a technological innovation for selling loans and with them also the risk related to them. Through the collateralized transactions banks hedge the credit risk by holding rights over another asset pertaining to the borrower. Should the borrower fail to repay the loan, the bank is entitled to sell the assets used as collateral and retain the profit to compensate the losses from the unpaid loan. They reduce the risk that banks face from lending, but in the

1586 This is in line also with previous empirical studies on the relationship between short-term loans and the increased use of collateral. See e.g. Boot/Thakor, *International Economic Review*, 1994, 899; Rajan/Winton, *Journal of Finance*, 1995, 1113; Berger/Udell, *Journal of Business*, 1995, 351.

same time they could affect banks' incentive to engage in adequate borrower monitoring, since a substantial part or all of the risk is covered or transferred to third parties. The section below explains further the effects from securitization and collateralized transactions.

1. Securitization

Securitization is a transaction through which the original lender, a bank in our case, can transform highly illiquid assets into cash. The benefits for the lender are several, not to say substantial. Through this operation the loan originator can remove risky assets from its own balance sheet and thus reduce the regulatory capital it is required to hold pursuant to the requirements of Basel II. Moreover, as already mentioned, the bank can transform illiquid assets into high liquid assets, cash, and in this way free more capital to make it available to be used for lending. Through this transaction, the general borrower has the benefit of increased availability of credit.¹⁵⁸⁷

However, the question arises how does securitization affect bank's incentives to monitor the borrower? Through securitization, banks can sell both types of loans, relationship-based as well as transaction-based loans. It was previously explained that relationship-based loans grant the loan originator informational advantages based on "soft" borrower information, but this information is difficult to observe, verify or transmit.¹⁵⁸⁸ As a result, the securitization of relationship-based loans stands in direct contrast to the purpose of relationship loans, namely the collection and the use of "soft" borrower information for monitoring purposes. However, if this information is difficult to observe, verify or transmit, the outcome of securitization is that the purchaser of the loan will acquire no informational advantages when purchasing securitized relationship loans.¹⁵⁸⁹ The benefits of information are thus lost.¹⁵⁹⁰ However, if the loan originator does not benefit from the acquired "soft" information when securitizing relationship loans, then it is difficult to see why a loan originating bank should invest in collecting "soft" information in the first place. The absence of sufficient incentives to produce "soft" information over the course of a relationship with a borrower will likely result in reduced incentives for the lending bank to accurately screen the borrower ex-ante. It was explained previously that the production of "soft" information is costly, the benefits are reaped in a long-term context and producing the information requires sector specialisation for the lending bank.¹⁵⁹¹ However, if the

1587 Tison and Wymeersch, *Perspectives in company law and financial regulation. Essays in honour of Eddy Wymeersch*, 2009 (hereinafter "Tison and Wymeersch, *Perspectives in company law*"), pp. 570-1.

1588 Berger/Udell, *The Economic Journal*, 2002, F32-F53, pp. F43-F44.

1589 Since the purchaser of the securitized loan cannot assess himself the creditworthiness of the original borrower, he will have to rely on the evaluation by the originator of the borrower's credit risk.

1590 Berger/Udell, *The Economic Journal*, 2002, F32-F53, p. F44.

1591 Boot/Thakor, *Journal of Finance*, 2000, 679, p. 680.

bank would not reap additional benefits from “soft” information when securitizing the loan, then a bank would avoid getting engaged in costly relationship lending, and engage instead in transaction lending.

Thus, the answer to the question posed above is that securitization does not increase, but rather decreases bank’s incentives to engage in sufficient borrower screening because credit risk is shifted further through loan securitization techniques. Through the “originate to distribute” model, the originating bank will not retain the originated loans in her balance sheet and monitor them for their entire life, but it will offload these loans, and with them also the credit risk, from her own books and transfer them to other investors, who presumably are able to carry them. Risk is thus spread on many shoulders.¹⁵⁹² The difficulty with this credit risk mitigation technique is that it creates a disincentive for banks to ensure the viability of the loans they make, since they expect to transfer them to other investors.¹⁵⁹³ This moral hazard affects bank’s willingness to expend resources in pursuing relationship lending, since securitization will encourage short-term lending relationships, even if the bank retains a percentage of the risk of the securitized loans through the credit-enhancement mechanism.

2. Collateral

In contrast to securitization, collateral as a risk mitigation techniques functions differently. Through collateral, risk is not shifted to third parties, as it is done through the securitization process. Instead, risk is kept by the lender, but she takes assets of the borrower as a guarantee for the fulfilment of the loan. Risk is thus mitigated in that should the borrower default, the value of the asset held by the lender and sold when the borrower defaults would compensate the losses. When used, collateral overrides existing seniority structures in a borrower, since the borrower promises to the lender the liquidation value of certain assets should she not be able to fulfil her obligations to repay the loan.

In chapter 4 it was explained that collateral or secured credit encourages secured creditors to monitor the performance of the collateralized asset, rather than the overall performance of the borrower. Moreover, security reduces the costs of the secured creditor, but increased the costs of unsecured creditors since it reduces the pool of assets available to satisfy the claims of all

1592 Clerc, Banque de France Occasional Papers, 2008, 1, p. 2.

1593 *Ibid.*, p. 2 and Tison and Wymeersch, *Perspectives in company law*, p. 572. Furthermore, the securitization process relies on the rating of the securitized pool of assets by rating agencies for the calculation of the risk weight. This effects also the regulatory capital of banks doing the securitization. During the recent financial crisis of 2008, there was substantial evidence that rating agencies had made significant mistakes in the rating of structured finance products. Tison and Wymeersch, *Perspectives in company law*, p. 578.

creditors in insolvency. This in turn might induce unsecured creditors to monitor the borrower more intensively, since their risk has increased.

Although it has been suggested that collateral could serve as an instrument to signal to the interested parties about the creditworthiness of the borrower, since taking collateral in the first place, or increasing collateral in an incumbent lending relationship sends signals about possible distress being experienced by the borrower, such signals are not always useful for monitoring purposes. Thus, the signals sent by the lender are useful when it is assumed that the lender sending them is well informed. In a relationship lending scenario, the relationship lender is assumed to be well-informed due to the borrower inside information she has gathered at the screening phase and updated over the course of the relationship. However, when relationship lending does not occur, then the assumption about the well informed lender might not hold anymore. In these circumstances, the signalling function of lenders with respect to the taking of collateral may weaken. Additionally, collateralized lending transactions may fail to signalize other investors about the creditworthiness of the borrower also for other reasons. Thus, when the value of collateral does not depend on actions taken by the borrower, the collateralized lender has no incentive to screen the borrower *ex-ante* or monitor her *ex-post*.¹⁵⁹⁴ Hence, both monitoring of the collateral as well as monitoring the borrower does not occur. Additionally, if a lender is fully collateralized, it is difficult to see why this lender should expend resources on monitoring the debtor by collecting information about her performance. In both these cases, collateral may reduce the risk faced by lenders, without necessarily improving the performance of borrowers. Thus, collateral, as a means of risk mitigation¹⁵⁹⁵ reduces overall monitoring of borrowers.

The Basel Accord encourages the use of collateral, not only directly by treating it as a risk mitigation technique for the purposes of calculating the regulatory capital, but also indirectly through a number of factors. Thus, it was mentioned above, that Basel II requirement does not encourage the establishment of relationship lending between lenders and borrowers. The reduction of informational advantages and the disadvantaged treatment of long-term loans lead banks towards making short-term loans, as a means to reduce costs in the face of increased competition. Banks lending short-term have no incentives to screen *ex-ante* or monitor *ex-post* since these exercises imply gathering borrower inside information and updating it on a

1594 See analysis by Rajan/Winton, *Journal of Finance*, 1995, 1113.

1595 Some authors have observed the use of collateral not for securing credit, but for primarily allocating seniority. See e.g. Elsas/Krahn, *Center for Financial Studies Working Papers*, 2002, 1. This observation and the impact on lender's monitoring incentives are further discussed in section C below.

continuous basis. The short duration of the relationship does not justify the costs of gathering and assessing that information, and therefore the lender may not monitor even if that activity would be socially beneficial. Therefore, to compensate for the absence of monitoring as a way of ensuring the repayment of a loan, a lender may choose collateral. As a matter of fact, several empirical studies confirm the practice that short-term lending encourages collateralisation of loans,¹⁵⁹⁶ whereas stronger lending relationships, typical of relationship lending, are empirically associated with reduced collateral requirements¹⁵⁹⁷, since borrower's performance is monitored otherwise.

C. Efficient decisions in financially distressed times

It was mentioned that in the framework of relationship lending, the flexibility of the lender to adapt her lending terms to the financing needs and situations of the borrowers represents an added value for the parties. This added value is especially manifested during times of financial distress for the firms. It is in these times that the relationship lender assumes a special responsibility vis-à-vis the borrower. This special responsibility may take the form of the liquidity insurance, for example when the reasons for the distress are not related with the firm fundamentals, but is attributed for example to impairments in the market conditions. Being well informed about the borrower, assuming the existence of a relationship lending, the lender is best placed to make an efficient decision as regard further financing. Moreover, the special responsibility role of the relationship lender may be also observed when the borrower has defaulted and the question arises as to what would be the “right” decision: to let the borrower go bankrupt or to restructure the borrower and give her a second chance. It has been suggested that also in these situations, a relationship lender is better placed to make the “right” decision. This is so not only because these lenders usually negotiate ex-ante agreements that give them a preferable position during debt renegotiations, which in turn allow them to “call the shots” and benefit most during these processes, but also because the preferable position they hold allows them to gain knowledge of borrower inside information that makes them into better informed decision-makers.

However, the loss of informational advantages, a reduced value of reputation in a lending relationship, the preference for short-term lending and an increased use of collateral and of

1596 See e.g. Boot/Thakor, *International Economic Review*, 1994, 899; Rajan/Winton, *Journal of Finance*, 1995, 1113; Berger/Udell, *Journal of Business*, 1995, 351.

1597 See e.g. Berger/Udell, *Journal of Business*, 1995, 351, and Harhoff/Körting, *Journal of Banking and Finance*, 1998, 1317. These empirical studies suggest that collateral is less often pledged in a mature relationship, since the longer duration of the lending relationship allows the lender to recognize the quality of the borrower through monitoring over the course of the relationship.

securitization may have repercussions on lender's incentives during debt renegotiations in times of financial distress for the borrower. These repercussions might point to a higher preference for deleverage than for negotiations. This in turn might affect also bank's willingness to monitor the borrower also before the arrival of the 'moment of default'.

I. Reduced flexibility to smooth loan interest rates intertemporally

A relationship lender will use her flexibility in the interest rate setting to adapt the rates to the needs and situation of the borrower. In this respect, a relationship lender may also reduce the interest rates in times of distress below what is reasonable economically or from the risk coverage perspective for her, to increase these rates beyond the market rates when the borrower performs well, in order to compensate for the reduced profits in the earlier period. This would provide the borrower with an essential "grace" period to avoid insolvency. However, this is possible only when the lender and borrower maintain a close and trustful relation, which enables the lender to know the conditions of the borrower and her ability to meet her financial obligations.

Basel II represents a challenge regarding this flexibility. Unlike Basel I, which took quite a rough approach to credit risk by putting all borrowers of the same nature in one basket regardless of their individual risk profile, Basel II attempts an individualized approach to risk measurement. Risk is defined individually and therefore also the level of regulatory capital for that individual exposure. According to the requirements of Basel II, the individual determination of risk is directly related with the borrower information supplied in the risk assessment process. Lack of certain information regarding borrower's risk profile or the use of information which is not independently verifiable, can lead into a negative assessment for the borrower. Thus, considering the problem already identified above with respect to the loss of value of borrower's "soft" information, the assessment of borrowers following the requirements of Basel II can turn less favourable than when done in the framework of a relationship lending. Further, since Basel II mandates a regulatory capital minimum of 8 per cent of risk-weighted assets, and since certain borrower's information that could have positively influenced her risk assessment cannot be considered due to lack of verifiability, it results that a lender cannot set the interest rate lower than what the regulatory framework would permit, or else face charges. Hence, the bank's scope and thus also flexibility in setting the interest rates is reduced due to regulatory limits, which purport to ensure that banks are adequately covered (from the regulatory view) against risk. The consequences could be higher capital costs for borrowers who face financial distress, especially when they do not possess good and sufficient tangible assets to use as collateral as a means to lower their credit risk.

II. Influence of Basel II on banks' risk and capital costs

In the previous chapter it was explained that an impairment of a borrower's creditworthiness, has immediate repercussions on the bank's costs of regulatory capital. When these costs increase, a bank could either pass these costs further to the borrower in the form of higher interest rates or retain these costs and thus forfeit a part of the profit. In a relationship lending, the latter practice would enable a relationship lender to provide liquidity insurance for the borrower, without substantially changing the terms of the loan to reflect the increased risk. From a relationship lender perspective, this pattern of behaviour would be economically reasonable, since it forfeits profit in the short-term to recover it in the long-term. The bonding existing between the lender and borrower, allows the lender to know the financial situation of the borrower in a more thorough way. However, it was mentioned previously that this liquidity insurance is not unconditional, that is it will depend on how large the quality deterioration of the borrower is.¹⁵⁹⁸ Nevertheless, this allows bank flexibility, although a limited one, in structuring the terms and conditions of the loans they are making. Through the introduction of a risk-sensitive regulatory capital approach, Basel II removes this flexibility, since changes in the risk-weight of a particular claim would have to be reflected in the regulatory capital levels, and thus also in the interest rates charged to the borrower. Therefore the possibility of a bank to provide liquidity insurance to borrowers, who for a certain time manifest higher risk, is further limited.

This limitation of bank flexibility due to the risk-sensitive approach of regulatory capital has further repercussion for relationship lending. An impairment of the borrower's risk profile could imply for the bank risk that cannot be reconciled with the agreed risk strategy of the bank. In order to ensure the realization of profit targets, the risk management strategy of a bank could require banks to discontinue lending to a borrower who has turned riskier. Thus, the bonding between relationship lender and relationship borrower becomes looser and this will be reflected by both parties in how they approach each other at the start of lending relationship.¹⁵⁹⁹ Lower willingness by the bank to play the role of a relationship lender and to provide liquidity insurance when the borrower faces temporary difficulties could be translated also into a lower willingness by the borrower to commit to the lending relationship, and search instead for multiple lenders or alternative sources of financing. Thus, the strength of relationship lending and the benefits thereof for both lenders and borrowers are further weakened. Also from the creditor protection perspective, and more specifically from the perspective of banks making efficient decisions with

1598 Elsas/Krahnen, *Journal of Banking and Finance*, 1998, 1283, p. 1285. Large quality deteriorations in the borrower rating of the range of two rating classes or more would not trigger liquidity insurance.

1599 Brackschulze, *Hausbanken unter Basel II*, p. 274.

regard to borrowers in financial distress, the results might not be encouraging. Under the pressure to optimise its risk management and make it sensitive to the risk profile of the borrower, the bank might be lacking in time and adequate information to make an informed decision whether to continue financing or to liquidate a borrower in distress facing difficulties to meet her financial obligations. A bank having a financially distressed borrower in her books is mandated by the Basel II to adequately address the increased risk. Therefore, it would either charge higher interests rates or else it would have to lower her profit margins to cover the increased regulatory capital costs. Since the latter option would be difficult for bank managers to justify either in front of bank shareholders, who are interested in the maximisation of their profits, and even before banking supervisory authorities, who care for the stability of the bank, the most reasonable option remains to pass the increased costs to the borrower, whose situation could deteriorate further or terminate the lending relationship. Thus, as a result of this almost automation, there is a concern that bank decisions would be hasty and inefficient and therefore yield less than optimal results with “good” borrowers going insolvent or “good” investment projects going unfunded.

III. Deleveraging instead of renegotiations

1. The procyclical effects of the risk-sensitive regulatory capital

The concept of risk-sensitive regulatory capital according to Basel II is not compatible with the liquidity insurance function as observed in a relationship-lending scenario. More specifically, in a relationship lending scenario, in the presence of adequate borrower inside information, a lender will not match the increased risk of default of a good borrower facing liquidity shortages with higher interest rate loans or with a cut-off of further funding. In the contrary, the long-term horizon and the information-intensive nature of the relationship lending allows the lender to lower rates or at least keep them unchanged during the financially distressed time. The opposite occurs under the risk-sensitive regulatory capital concept. Should the rating of a borrower fall, and thus, the risk of default increase, Basel II rules require and the banking authorities expect that the interest rates for new loans will increase or that at least the borrower will post additional security to match up the added risk. In the worst case scenario, the bank will cut-off funding and withdraw from the lending relationship.

It seems reasonable in such a scenario for the banking authorities to prioritize the protection of the interests of the bank, the bank depositors and of the banking system over the interests of the borrower against inefficient liquidation. Basel II Accord was drafted having in mind the protection of bank depositors and of the stability of the banking system and not the interests of depositors, and even less, not the interests of third party creditors of the borrower. However, the

procyclical effects of the regulatory capital concept of Basel II forces banks to behave procyclically at times when a borrower faced increased default risk. These procyclical effects influence bank's incentives to renegotiate or deleverage.

Despite the counter-cyclical efforts of Basel III through the establishment of special counter-cyclical buffers to be built up in "good" time and consumed in "bad" time to avoid a credit crisis, it seems that these efforts will not alter bank's procyclical behaviour when borrowers face financial distress. The reason for that rests on the inherent problem of procyclicality, namely the asymmetry of information existing between the lender and the borrower about the creditworthiness of the latter and the quality of her investment projects. These information asymmetries cannot be mitigated through countercyclical buffers, but rather through adequate and qualitative information about the borrower's prospects to succeed. For reasons already explained, the incentives of lenders to invest in gathering and assessing this information are reduced and the consequence might be more deleverage than renegotiations.

2. The function of collateral and the decision to liquidate or renegotiate

In their empirical paper, *Elsas/Krahnen* support the view that collateral is a strategic instrument intended to strengthen the position of banks during negotiations with distressed borrowers.¹⁶⁰⁰ Thus, collateral is not used primarily as an instrument to secure the repayment of claims from the borrower, but rather an instrument to allocate seniority to the lender who is best suited to make an effective decision about liquidation or continuation when the borrower faces financial distress. This assumption is true when the borrower has multi-lending relationship and relationship lending is present. They conjecture further and provide evidence that since relationship lenders are better informed lenders, they are better placed to make the "right" decision during a financial distressed time, and therefore, they tend also to be the most collateralized lenders. The high degree of collateralization helps these lenders on the one side to avoid conflicts with other lenders, and on the other side to maximize profits from the decision to engage in borrower workout.¹⁶⁰¹ Within a relationship lending scenario, the relationship lender is better suited to make effective decision with regard to the distressed borrower due to a number of factors, which include among others the possession of adequate borrower inside information, the presence of the long-time horizon in the relationship, the specialization of the lender toward the borrower as well as reputational costs for the lender in case of faulty decisions. Thus, the taking of collateral should provide the relationship lender with increased motivation to do ex-

1600 Elsas/Krahnen, Center for Financial Studies Working Papers, 2002, 1.

1601 *Ibid.*, p. 5.

ante as well as ex-post monitoring. Since collateral is agreed ex-ante, being aware of her senior position compared to other creditors and of the leverage possessed in debt renegotiations, the relationship lender is motivated to engage in ex-ante and ex-post monitoring in order to maximize her profit from the lending relationship. This approach by the collateralized relationship lender would result in less ineffective liquidations, where the lender deleverages by selling the collateral when the borrower is not able to repay her loan due to financial distress. Avoiding ineffective liquidations maintains the value of the borrower, since that value is higher as a “going concern” than as “gone concern”. The lender in this way can exert her liquidity insurance function.

Therefore, in this context, the encouragement of Basel II for using collateral helps not to mitigate credit risk to encourage adequate borrower monitoring. However, this statement would be valid if it is assumed that Basel II encourages also relationship lending. From the analysis in the previous sections, it is shown that this is not the case. For a number of factors, which were already explained in detail, the incentive of lenders to engage in relationship lending is reduced and thus also the functions typically performed within a relationship lending context cannot be performed any longer or their performance is distorted and does not bring the benefits that it would otherwise bring to the parties engaged in the lending transactions. In such a situation, when the lender incentive to engage in an information-intensive and long-term lending relationship is lowered, the function of collateral serves then typically as an instrument to secure short-term lending from the risk of non-payment, rather than allocating seniority in the case of debt renegotiations. When the lender does not intend to engage ex-post in a workout should the borrower experience financial distress, then also her ex-ante incentives to carefully screen the borrower and monitor her performance are low. It is therefore expected that such a lender would prefer rather to deleverage than perform a workout, since the outcome would be very insecure due to fundamental information asymmetries regarding the quality of the borrower and of her investment projects.

From the perspective of the borrower, less willingness from the side of the lender to perform the liquidity insurance function when the quality of the borrower would reasonably allow that, may lead also to less willingness to engage in an information-intensive relationship lending. This approach may be facilitated also by the fact that strong competition among lenders allows lenders to engage in multiple lending and thus benefit from lower rates, since lenders would compete for market share.

D. In place of a summary on the performance of relationship lending under Basel II

The analysis above shows that the benefits from some of the functions of relationship lending cannot be fully reaped under the framework of Basel II. The requirements of Basel II, with their focus on banking system stability, might lead into lower incentives as well as less the possibilities for banks to maintain a fully-fledged relationship lending. However, this should not be taken to imply that under Basel II relationship lending does no longer take place. Relationship lending will continue to remain an option especially for firms that are informationally opaque and have difficulties to convince lenders regarding the quality of their projects.¹⁶⁰² Moreover, also firms with a high creditworthiness tend to choose relationship lending over other forms of lending.¹⁶⁰³ However, due to a number of factors elaborated above, banks may not be in a position to perform the full range of functions typical in a relationship lending, and therefore also the benefits from relationship lending for both parties are reduced.

1602 See e.g. the empirical evidence for Germany presented in the paper by Memmel/Schmieder/Stein, Bundesbank Banking and Financial Supervision Discussion Paper Series 2, 2007, 1.

1603 See e.g. Thadden, Finance Research Letters, 2004, 11, and Memmel/Schmieder/Stein, Bundesbank Banking and Financial Supervision Discussion Paper Series 2, 2007, 1.

PART V

CONCLUSIONS

§ 11 Summary and Outlook

The overarching question of the paper is whether banks as sophisticated creditors can efficiently monitor borrower's performance also on behalf of third party creditors when they, banks, perform their gatekeeping role carefully and adequately. Moreover, it was purported to find out how the requirements of the Basel II Accord influence a bank's performance of the gatekeeping function.

Basel II Accord as well as the proposed amendments known as "Basel III" affect the relationship between lenders and borrowers. With its requirements on borrowers' screening and interim monitoring, Basel II influences how banks perform their gatekeeping role in the financial system and the extent to which banks monitor borrower's performance also on behalf of third parties.

A. Most essential findings of the work

I. Banks as qualified creditors able to protect themselves

At the heart of the problem of creditor protection is the question how to address the principal-agent conflicts that arise from a situation where the agent has better and more information about his own quality and performance than the principal. Mitigating the chances for opportunistic behaviour from the agent by using information for his own advantages at the cost of principal is the old, but still relevant problem that needs to be solved. The doctrine of creditor protection distinguishes among strong and weak creditors. This distinction is based among others on the capacity of creditors to protect themselves. Self-protection is an option for qualified creditors who possess the strength to collect crucial borrower-related information and the expertise to adequately assess this information to gain an accurate understanding of the quality of the borrower and to monitor her behaviour ex-post. Moreover, creditors who are able to self-protect possess also the leverage to enforce a certain course of actions on the borrower if her behaviour does not comply with ex-ante agreements. Banks are considered to be this type of creditor. As principals, banks are in a position to take measures to protect themselves from agents whose quality is dubious or from non-compliant agents.

II. Banks as gatekeepers in the financial system

The doctrine of the gatekeeping strategy as a mechanism to prevent misconduct suggests that gatekeeper is someone on whom a duty has been imposed to prevent misconduct by withholding

support for the wrongdoer. The withholding of the support can take place ex-ante as well as ex-post. The duty may be imposed on the gatekeeper explicitly, for example by way of legislation, or implicitly, for example by virtue of the position that these gatekeepers have in relation to the would-be wrongdoer. Based on this definition, it was shown in the paper that banks are gatekeepers in the financial system. Since the stability of the financial system is a public good, the contribution of banks in ensuring the stability of the banking system makes banks into gatekeepers of public interest. One could also say that banks are gatekeepers because a duty to gatekeep is imposed on them explicitly as well as implicitly. Explicitly, because banks are granted a banking licence and since licenses grant public rights, banks are under an obligation to manage these public rights properly. Implicitly, because banks hold crucial positions in the financial system, which makes them into gatekeepers. Not only as gatekeepers, but also to their nature as financial intermediaries, banks serve as informational as well as reputational intermediaries.

III. Banks as “delegated monitors”

Further, the doctrine of “delegated monitoring” recognises banks as monitors of borrower on behalf of other third party capital givers. In the presence of multiple capital givers, banks are better placed to perform the main monitoring tasks to avoid duplication of efforts and of costs. Since banks are large, qualified and sophisticated creditors, holding a key position in the financial system and serving as informational and reputational intermediaries, they are better placed to perform qualitative borrower monitoring. Economies of scale, diversification of risk and freedom from free-riding problems were quoted as some of the reasons for better monitoring of borrowers by banks. By lowering monitoring costs, banks stand to reap the accrued benefits from lower risk. Moreover, banks may collect borrower information in a cost-effective way, which allows them to economize on monitoring costs. Monitoring in this sense include not only ex-post monitoring after the relationship to the borrower has materialized, but also ex-ante screening of potential borrowers for the sake of ascertaining the quality of borrower’s investment projects and the ability of borrowers to repay the loan.

An effort was also made to show that banks have an incentive to monitor borrowers, not only when they are single lenders, but also in the presence of multiple lenders. However, in the second case, strong coordination problems arise among lenders when the borrower faces financial distress and no seniority privileges have been previously allocated by the borrower. Therefore, in order to reduce insecurities ensuing from free-riding problems and the absence of clear benefits by negotiating with the borrower, stronger creditors, such as banks, prefer a situation where they are the prime lender. Being in such a position, motivates banks to engage with

borrower ex-ante, and especially ex-post through workouts when the borrower faces financial distress. In this way, banks can perform better their gatekeeping function and the role of the delegated monitor.

IV. Relationship lending as an effective strategy of borrower monitoring by banks

Among the lending technologies used by banks, relationship lending suits best to the scenario described above. Although there is no universal definition on relationship lending, various authors describe the nature of relationship lending by the elements that characterize it. Thus, relationship lending implies a relationship between the lender and the borrower, which goes beyond a single transaction and is characterized by a continuous and extensive flow of information from the borrower to the lender and the accumulation by the lender of proprietary information pertaining to the borrower. Essential characteristics of relationship lending include the long-term nature of the relationship which allows the lender to better understand the creditworthiness of the borrower by gather borrower proprietary information over longer period of times. This enables her, the lender, to perform intertemporal smoothing of interest credit terms and loan rates. The essential function provided by relationship lenders, known also as the “liquidity insurance” function, helps good quality borrowers to remain avoid inefficient liquidation that would damage also the interests of third party creditors. The performance of the intertemporal smoothing of interest rates and of the liquidity insurance functions is made possible due to the long-term perspective of the relationship where the lender forfeits profits in the short-term and regain it in the long-term. Additionally, relationship lenders are able to perform these functions because of the prime fact of being well-informed creditors. The bonding effects created between a relationship lender and a relationship borrower are strengthened by the mutual benefits and responsibilities of the parties to the relationship. It is often said that relationship lenders bead a “special responsibility” towards relationship borrower, which is especially manifested when the borrower faces financial distress. It is in these situations that relationship lenders are better equipped to make efficient decisions whether to liquidate or to reorganise.

However, the benefits from relationship lending do not accrue to the parties engaged in the lending relationship. These benefits are said to “spill over” also on third parties who are or intend to become creditors by entering into a business relationship with the borrower. Since relationship lenders are perceived as well as assessed to be well-informed creditors, their actions send important signals regarding the creditworthiness of the borrower. It was shown that the investing public perceives the renewal or extension of a loan by a relationship lender positively. Since banking is a credibility-laden activity and since banks are considered as reputational

intermediaries, signals sent by banks in the course of their lending relationship with a borrower are of considerable importance for third parties.

Due to the characteristics inherent in relationship lending, this form of lending technology is typically used for the financing of small to medium, informationally-opaque firms, which rely primarily on bank loans as a major source of debt capital. It was also shown that according to some empirical studies, firms that rely on relationship lending exhibit significantly higher equity ratios and significantly lower probability of default values compared to similar firms with a relationship lender. Thus, relationship lending does improve the ability of banks to monitor borrower's performance, and the benefits from such an improvement accrue also to third parties in the form of an able borrower to meet her obligations towards them. One could say that relationship lending turns banks into screening and monitoring intermediaries.

V. Banks under Basel II

However, the activity of banks does not occur in vacuum, but is conducted within a banking legislation framework. In this framework, the Basel II Accord,¹⁶⁰⁴ is an essential piece of banking regulation, which directly influences banks' lending relationship to borrowers. The paper discussed extensively some of the requirements of Basel II and how these requirements influence directly banks' lending relationships to borrowers. Banking legislation is usually aimed at ensuring the stability of the banking system and at protecting bank depositors. Since banks are prone to confidence effects and bank runs, deposits are typically insured to avoid panic and this removes depositors' motives to control banks. In the absence of such motives by depositors, the task of bank supervision is delegated to regulators. Bank supervisors are now supposed to gather information on growth, capital ratio, risk management, etc. The task of bank supervisors is to ensure that banks possess the necessary amount of capital to reflect the risk they contract as part of their banking activity. Basel II is such a bank regulation instrument, which imposes on banks capital adequacy ratios as a means to prevent them from taking over too much risk relative to the amount of capital they possess to counter that risk should it materialize. Basel II uses a risk-weighting procedure for determining the capital adequacy ratio. The novelty of Basel II was the requirement for the first to tie the risk-weight factor assigned to every exposure to the credit rating result for the said exposure. Such rating could be conducted by external rating agencies, in the case of banks choosing the Standardised Approach, or by banks internally, in the case of banks possessing the technology and infrastructure to conduct such credit ratings internally. This

¹⁶⁰⁴ With its amendments and additions widely known as "Basel III Accord" although the talk is not about an overhauled version of Basel II.

approach opened new perspectives for banks. Although the capital adequacy ratio remained unchanged at the level of eight per cent of risk-weighted assets, the methodology for assessing credit risk was said to have been improved substantially and that it would lead to a better assessment and management of risk by banks, and consequently to safer banks.

The requirement to screen potential and incumbent borrowers through the credit rating process was said to increase transparency in the lender – borrower relationship and introduce more objectivity in the credit-making process through the use of statistically validated mathematical formulas for the determination of credit risk.

Further, through the second pillar of the Basel II Accord, bank supervisors are assigned the responsibility and the power to look beyond the simple quantification of risk by banks for regulatory capital purposes, into the changing risk profile of the banks to ensure the stability of the credit institution. It is the task of bank supervisory authorities to ensure that not only quantitative, but also qualitative standards are observed by banks regarding processes that ensure their proper management.

The third pillar of Basel II stresses the importance of transparency and public disclosure as a means to discipline banks through market pressure. It foresees disclosure requirements that allow the investing public to assess the risk profile, the capital adequacy and the capital formation of banks. To ensure that market discipline occurs, the information disclosed by banks should be timely and periodic, as well as material to the financial and risk situation of a bank.

The 2008 financial crisis showed the first problems with Basel II. The requirements on the capital adequacy ratio manifested strong procyclical effects, which exacerbated the crisis further, and made banks very fragile. The capital, which banks were allowed to hold to meet regulatory capital requirements, lacked loss-absorption capacity, whereas capital qualified as Tier 1 capital was too little to absorb the losses faced by banks. This led to the paradox that although a bank would meet the eight per cent capital adequacy ratio as required by Basel II, it would still face illiquidity and thus run the risk of going insolvent. To address these problems, the so-called “Basel III” requirements were adopted. The essence of these requirements rested in increasing the proportion of highly-liquid high quality capital in the overall capital held by banks, creating counter-cyclical buffers and establishing liquidity ratios to be observed by banks. The changes introduced by Basel III were aimed at making banks more resilient and stable in times of financial distress. The effects of Basel III requirements on the stability of banks and of the banking system are still to be observed, since the majority of them has yet been entered into force.

VI. Basel II and its effects on relationship lending

The implementation of Basel II has implications for the lender – borrower relationship. Moreover, it was shown that Basel II requirements might have made relationship lending as a lending technology difficult to pursue and might have reduced the attractiveness of relationship lending for both lender and borrower.

The paper points out that although the role of banks as informational intermediaries is systematized and rationalized through the requirement for conducting credit rating either externally or internally, the informational advantages enjoyed by relationship lenders are reduced. The reduction of the value of borrower information possessed by relationship lenders could be as a result of the fact that certain “soft” borrower information cannot be considered any longer for credit rating purposes, and therefore it is excluded from the decision-making process in determining the loan terms and conditions. This might affect also bank’s incentive for adequate ex-ante screening and consequently also for ex-post borrower monitoring. Further, the favourable treatment of short-term exposures under Basel II discourages bank’s engagement in long-term lending relationships. This has repercussions on bank’s willingness to monitor the borrower as well as on bank’s strategies to deal with lending-related risk. If the lending perspective shortens, it is expected that the willingness to engage in active borrower monitoring will decrease, since the benefits from lending will not be enjoyed in the long-term, as it is the case with relationship lending. Shorter lending perspective could also lead to increased lending risk, since both lender and borrower have a shorter time at their disposal to reach their economic goals, i.e. make profit.

Too, the introduction by Basel II of an automated relationship between the debtor’s creditworthiness and the interest rate she is to pay for the loan has reduced substantially bank’s ability to perform an intertemporal smoothing of interest rates. The increased risk-sensitivity of the regulatory capital system of Basel II does not allow banks any longer the flexibility to provide needed funds to a financially distressed borrower to avoid liquidation. Should a bank still attempt to provide funding to a borrower with a rate that does not reflect the risk assessment from the rating process, it would have to consider the risk of facing regulatory action, which would be difficult to justify before bank shareholders.

All these factors have repercussions also on bank willingness to engage in workouts of firms facing financial distress. The paper holds the view that relationship lenders are better placed to make informed and effective decisions to liquidate or reorganise a borrower in distress. However, with less informational advantages, shorter lending terms, less flexibility in arranging

credit terms, and often more security to mitigate credit risk, it is difficult to see why should banks engage in efforts-intensive borrower workout, when the benefits for the lender are uncertain.

Thus, as a result of the Basel II requirements, the usefulness of a mechanism that provided better and more effective borrower monitoring, and that contributed in improving borrower performance is reduced considerably.

VII. Who appointed banks as gatekeepers and who delegated them the monitoring?

Further problems put into question the role of banks as gatekeepers in the financial system. Basel II was not conceptualized as a creditor protection mechanism, but rather as a banking regulation aiming at making the banking system more resilient and stable by ensuring that banks hold sufficient capital to cover unexpected losses. There is a lot of focus on risk management in Basel II. Although the Accord highlights the importance of better risk measurement methods and allocates to the rating process, externally or internally, a key role in measuring credit risk, and consequently also a key role in determining the level of regulatory capital, the doubts on the measurability of credit risk either by rating agencies or internally banks for reasons described in this paper, raise questions on the ability of banks to perform the gatekeeping role expected of them. Also the amendments under Basel III contained proposals aimed to increase banks' available amount of quality capital to manage risk from unexpected losses, but no proposals regarding better screening of borrowers to minimize risk in the first place. The 2008 financial crisis showed first deficiencies in banks' ability to accurately screen credit risk before showing deficiencies in quality capital to cover risk.

Further, although banks are expected to play the role of the gatekeepers in the financial system by sorting out "bad" potential borrowers or potential borrowers with low or bad quality investment projects, banks do not see themselves, nor do they wish to be seen as gatekeepers in the financial system. Accepting this responsibility could draw on them difficult issues of liability when failing to perform that role accurately and banks certainly do not wish that added responsibility. Therefore there are questions whether on banks there is an enforceable duty to disrupt or prevent misconduct.

Another relevant matter is the matter of delegated monitoring. Banking theory portrays banks as delegated monitors. However, the concept of "delegation" implies that the delegator wilfully and consciously conveys the right to debtor control to the delegated¹⁶⁰⁵ and thus relies on the delegated to perform the function, which the delegator would usually be personally responsible

1605 Brinkmann, *European Company and Financial Law Review*, 2008, 249, p. 259.

to conduct. This concept implies also that the delegator is aware of who the delegated is and what is the range of functions and competencies being transferred to him. This assumption would point to the existence of an agency relationship between the delegator and the delegated. However, this kind of relationship between the delegator and the delegated, where the former willingly conveys a right to debtor control to the delegated is not a formal one, since no bank would accept such a responsibility unless reasonably compensated and clearly defined in its range as well as rights and duties to minimize liability and increase benefits. Hence, the delegation that takes place is implicit but not factual, and therefore not enforceable. This does not mean that banks would not perform delegated screening or monitoring, but that screening or monitoring is conducted by banks for strictly personal reasons of economic interests, and not to the interest of the supposed delegators. That means also that bank's performance of screening and monitoring and the corresponding actions would be at a level and of a kind that ensure bank's own interests, and that might often not correspond with the interests of the delegators. Hence banks do not have a mandated role of protect third party creditors in the exercise of their activity.

B. Further research

In investigating the role of banks as gatekeepers in the financial system for the purposes of preventing borrower's misconduct through screening and monitoring, the paper discussed mainly the effects of Pillar 1 of the Basel II Accord, namely the minimum regulatory capital, on bank's incentives to perform adequately the gatekeeping function of banks. However, the Basel II Accord is a complex regulatory document that, as briefly explained in chapter 9, foresees two more pillars as essential mechanisms to ensure the stability of banks and of the banking system, namely the supervisory review process and the market discipline through transparency and disclosure requirements. Also these two mechanisms may influence bank's lending relations to potential or incumbent borrowers. The power of bank supervisory authorities to review banks' risk assessment models for consistency and adequacy could exert pressure of banks for better screening and monitoring of borrowers to identify risk adequately. Moreover, Basel II requirements under Pillar 3 for transparency and public disclosure of banks regarding their risk exposures as well as the processes that led to the particular risk assessment may exert additional pressure of banks to refine screening and monitoring processes in order to be able to present an accurate picture of risk exposure. Therefore future research could focus on a closer investigation of how these two additional pillars could affect bank's incentives to perform their gatekeeping functions adequately.

Further future research could address the issue of differences in the financing system where relationship lending takes place. More specifically, the paper addressed the effects of Basel II

on the performance of the gatekeeping function by banks in the context of relationship lending, without reference to the financing system in which relationship lending occurs. Literature on financing systems recognises bank-based financing system and market-based financing systems. The former kind of financing system is typical in Germany and Japan, where the second kind is typical in Anglo-Saxon countries, such as for example in the UK or US. Nevertheless, relationship lending takes place in both systems. However, not both systems provide the same mechanisms that may encourage or limit bank's willingness to perform relationship lending. Despite the common framework through Basel II Accord, country, and therefore also system differences remain. These differences could also influence the impact of Basel II requirements on the performance of relationship lending by banks, and thus also on the performance of gatekeeping functions. Therefore, it may be of interest to answer the question whether the effects of Basel II and relationship lending and on the gatekeeping role of banks are milder in a bank-based than in a market-based financing system?

Last but not least, Basel II was principally intended to apply to internationally active banks by levelling the regulatory playing field on regulatory capital rules. A stream of literature on relationship lending claims that domestic banks are more prone to enter into relationship lending than foreign banks. The reason for this claim rests on various factors, such as for example the proximity of domestic banks to the borrowers in the domestic banking market, tradition, better knowledge of market etc. Foreign banks tend to be larger than domestic banks, and therefore possess additional mechanisms to enforce their claims. This in return influences banks incentives in the form of lending they choose. However, this is not to say that foreign banks do not enter into relationship lending. Since Basel II attempts to level the playing field, especially through the mechanism of the Pillar 1, it could constitute an interest for research the question whether Basel II affects differently the incentives of domestic and foreign banks to enter or maintain relationship lending, and further how this impacts foreign banks' performance of the gatekeeping function.

C. Outlook

Banks play an essential role as intermediaries in the financial system. They intermediate not only regarding finances, but also regarding information and reputation. Simply by nature of their position in the financial system they are natural gatekeepers. However, in the course of their banking activity, banks are also creditors, since they lend own funds or funds deposited with them to borrowers. Moreover, banks are typically large creditors. This combination of creditor and gatekeeper however makes banks more susceptible to instability and fragility. The Basel II Accord recognises the essential need for stable banks as a way to ensure stability in the financial

system, and further stability in the funding for the real economy. Basel III proposal go in the same line to strengthen bank resiliency by requiring banks to hold more quality capital and more liquidity to deal with situations of severe financial crisis. The gatekeeping role of banks implies namely the role that allows and incentives banks to sort out “bad” potential borrowers or borrowers with “bad” investment projects. Sorting out or forcing these kind of borrowers out of the banking system not only improves the stability of the banking system, but also serves to protect incumbent or future investors from dealing with these borrowers. However, doubts remain with respect to banks’ ability as well as willingness to perform an adequate gatekeeping role in the financial system. The developments of the 2008 financial crisis confirmed in a way these doubts. The problems that ensued from the financial crisis shook the confidence on banks’ abilities to really understand the risks they contract, and strengthened the perception that banks might be willing to sacrifice reputation and even more than that if the short-term gains are high enough. Although the effects of the crisis are receding, it will take longer for banks to rebuild their reputational capital as able gatekeepers and skilful financial intermediaries.

Further, better information processing facilities and technologies, more sophisticated and complex rating models to measure risk and the growth of the securitization market¹⁶⁰⁶ should not turn banks into simple credit factories, since their function is more than just disbursing funds to borrowers. Banks are encouraged to look more into medium and long-term gains to be achieved by their relationships to the borrower, rather than just follow just short-term profits that might threaten their role as gatekeepers and thus also their viability as a credit institution. In this direction, despite the fact that Basel II might have reduced banks’ incentives to engage in relationship lending, there are signs that the existence of relationship lending still matters for both lender and borrower, especially in the presence of large uncertainties in the credit markets. For example, in Germany banks have reported¹⁶⁰⁷ that under the hardened conditions in the credit markets, due to the incumbent financial crisis, borrowers who maintain a “*hausbank*” relationship, often quoted as a synonym for relationship lending, have easier access to capital. However, it is difficult to foresee what forms relationship lending will take in light of the confidence problems that ensued from the 2008 financial crisis and following the full implementation of Basel II and Basel III requirements.

Additionally, the 2008 financial crisis shook the confidence not only on banks, but among others also on rating agencies that seen as being responsible for faulty ratings, due in part also to

1606 Memmel/Schmieder/Stein, Bundesbank Banking and Financial Supervision Discussion Paper Series 2, 2007, 1, p. 2.

1607 Gneuss, Handelsblatt vom 30.3.2009.

conflicts of interest between the agencies and the rated subjects. The faulty ratings by the rating agencies affected also bank's perception of credit risk, due to the requirement on banks using the Standardised Approach under Pillar 1 to obtain a rating from the rating agencies as part of their exercise to determine the risk weight factors. Basel II has been also criticised for creating too much of a reliance on credit rating by rating agencies and thus impeding banks' abilities and incentives to improve their risk measurement systems. As a matter of fact, Basel II gave rating agencies a critical role in the determination of the regulatory capital of banks. The 2008 financial crisis showed that rating agencies are subject to typical weaknesses for gatekeepers, such as for example conflicts of interests with respect to those they are supposed to gatekeep, sacrificing reputation if short-term gains are sufficiently high, etc.

In order to address overreliance on credit rating assessment for the calculation of bank regulatory capital, the BCBS and the FSB are already working on concrete steps how to reduce the mechanistic reliance on credit rating agencies assessment. The purpose of these efforts is to make credit rating agencies' assessment of risk no more than an input to risk assessment instead of the crucial element to it. In a publication of the FSB, standard-setters and regulatory authorities are encouraged to reduce reliance on credit rating agencies and address the challenges of incentivising and achieving a strengthening in firms' (banks') own credit risk assessment.¹⁶⁰⁸ The reliance should be reduced among other through a reduction of the references to credit rating agencies assessments in standards, laws and regulations. Additionally, regulatory and supervisory authorities would require financial institutions to strengthen and disclose information on their own credit risk assessment approaches as a replacement for mechanistic reliance to the rating by the credit rating agencies.¹⁶⁰⁹ In light of these developments, it remains to be seen how banks' abilities and incentives on measuring risk accurately, and thus also performing a useful gatekeeping role will develop.

Lastly, several developments in case law as well as legislation affecting rating agencies might pose new challenges to banks as well. More specifically, in a number of court cases, although as of yet rather limited, the courts have shown a willingness to consider holding rating agencies liable for faulty ratings or for ratings that involved negligent misrepresentations.¹⁶¹⁰ In Europe, additional legislation adopted recently by the European Parliament¹⁶¹¹ is aimed among others at

1608 See e.g. Financial Stability Board, *CRA Ratings*, p. 2.

1609 *Ibid.*, p. 2.

1610 See e.g. the report in Hume FT vom 05.11.2012. of the case heard before the Federal Court of Australia as well as the report in Dohms FTD vom 22.8.2012 of the case heard before the Federal Court of New York. See also Scannell FT vom 04.2.2013.

1611 See European Parliament legislative resolution of 16 January 2013 on the proposal for a regulation of

enabling investors who rely on a credit rating to sue the rating agency for damages if it breaches the rules set out in the legislation either intentionally or by gross negligence, regardless of the fact whether there is any contractual relationship between the parties. This change in the liability “climate” for rating agencies could spell challenges for banks too. If rating agencies could be held liable for faulty ratings or negligent misrepresentations during their rating activities, could this liability be extended to banks as well when they use internal rating models to determine credit risk for regulatory capital purposes as well as for determining lending terms for the borrowers? It remains thus to be seen whether the possible threat of liability coupled with the tendency to reduce overreliance on credit rating by rating agencies by encouraging a strengthening of banks’ risk measurement system will lead to more careful, and thus to more efficient gatekeepers.

the European Parliament and of the Council amending Regulation (EC) No 1060/2009 on credit rating agencies. Available at <http://www.europarl.europa.eu>.

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