THE CAPABILITY OF PEER MONITORING TO MANAGE MORAL HAZARD

An explorative study on the functioning of peer monitoring arrangements in the banking sector

Bert van Meeuwen
Master Thesis
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Bert van Meeuwen (1359991)
MSc SEPAM Thesis

Delft University of Technology
Faculty of Technology, Policy and Management
Department of Policy, Organization, Law and Gaming

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Graduation committee
Prof. mr. dr. E.F. ten Heuvelhof (chair)
Drs. H.G. van der Voort
Dr. A. F. Correljé
Preface

Engineers are typically associated with complex technical systems. So how can one become an engineer on the topic of moral hazard and regulation? Isn't moral hazard a problem for economists or public administrators? I argue that an engineer has the skills to analyse moral hazard, since moral hazard can be considered as an ill structured problem surrounded by a complex multi-actor environment. A core characteristic of a system engineer is its ability to analyse and improve such ill structured problems in complex environments. These complex environments entails system elements and actors involved. With this thesis, I prove to be able to take all of these elements into account in a very complex environment: the banking sector.

For those who are interested in reading this thesis, but have limited time available I recommend to read the executive summary and chapters 11 (starting on pg. 68) and 15 (starting on pg. 85). These chapters summarize the findings of the analyses and discuss what the capability of peer monitoring is to decrease moral hazard, which is the main topic of this research, as the title page suggests.

I want to express my gratitude to all of those who contributed to this thesis in any form. First of all, I would like to thanks all those who have volunteered to review my thesis and those who have supported me when I needed anything (a coffee, a compliment, just a talk, etc). Moreover, I want to thank my graduation committee for their time and support. Their advice during meetings was always useful and kept me motivated, especially during the phase of writing my thesis. Furthermore, I want to give special thanks to Haiko van der Voort, my first supervisor, who invested a lot of his time and enthusiasm in my project. His advice has substantially contributed to this thesis. And of course, Cornelis Eikelboom and Jessica van der Puil. Without you...

Bert van Meeuwen
Delft, 2013
EXECUTIVE SUMMARY

RESEARCH PROBLEM
In 2008, the default of Lehmann Brothers caused an earthquake in the financial sector. It became clear that banks had taken excessive risks with savings of deposit holders. Also in the Netherlands, banks went bankrupt due to excessive risk taking.

Banks were able to take these excessive risks as this behaviour could be hidden by banks. Both the deposit holders and the national regulator were not able to monitor the behaviour of the bank. This is known as information asymmetry. In addition, the negative consequences of these risks are shared amongst their peers, while the profits were for the risk-taking bank only. Literature argues that the combination of these two characteristics resulted in less risk adverse behaviour, also referred to as moral hazard. Moral hazard is therefore put forward as one of the causes of the crisis.

On the other hand, literature also argues that peers are less subject to this information asymmetry. Consequently, peer monitoring could be an effective form of regulation to deal with moral hazard. This resulted in the following main question: “What is the capability of peer monitoring to decrease the negative effects from moral hazard between the banks and can this be improved?”

AIM AND RESEARCH APPROACH
The aim of this research is to explore if and how peer monitoring can decrease moral hazard in the banking sector. This would contribute to a relatively unexplored part of the field of regulatory theory, namely peer monitoring. The explorative character of this research makes a case study suitable as approach, whereby the peer monitoring arrangements are the unit of analysis. In addition, an institutional analysis is conducted, since regulatory literature stresses the importance of contextual factors for effective regulation.

These two methods of analysis are structured by using propositions. These propositions are useful in translating the rather vague concepts of peer monitoring and moral hazard into practical questions. The construction of the propositions is based on two findings in literature. The first finding concerns two characteristics of successful peer monitoring. Peers need to be willing and able to regulate one another. The second finding is a distinction in four tasks that should be conducted in order to have efficacious regulation. These tasks are setting norms, gathering information, judging and sanctioning. Combining these two findings result in eight propositions that are needed for effective peer monitoring. Peers are assumed to be willing and are able to conduct each of the four tasks. In addition, effectiveness of regulation depends on the responsiveness of the regulatory arrangements. This responsiveness is included by adding an additional proposition, which makes a total of nine propositions that could be used to explore the capability of peer monitoring. Due to available time and manpower, from these nine propositions only five are considered in this research, namely:

- Peers have a sense of urgency to regulate one another (willingness, setting norms)
- Peers have information about each other’s behaviour (ability, gathering information)
- Peers have formal and informal means to act (ability, sanctioning)
- Peers may interfere with each other’s business (willingness, sanctioning)
- Peers have enough degrees of freedom to adjust regulation to the situation at hand (responsiveness)
FINDINGS AND DILEMMAS

The five propositions that structure the analysis resulted in the following aggregate findings regarding ability and willingness of peer monitoring: Peer monitoring is not able to conduct one of the analysed regulatory tasks themselves. Peers lack the ability to gather detailed information since banks are reluctant to share detailed information. This reluctance is based on the fact that detailed information is of strategic importance in the competitive market and sensitive information could transform the trust in a bank into distrust. Next to this lack of information, peers lack the ability to sanction due to the absence of any institutionalized sanctioning instrument. Despite of this limited ability to regulate one another, the analysis shows that peer monitoring could be a valuable addition to the regulation imposed by the government, which is referred to as vertical regulation. The valuable addition concerns the specific sector knowledge, which makes the sector able to interpret information of peers.

The willingness to regulate one another is more ambiguous. The analysis shows that willingness is not present or absent as dichotomous variable, but should be considered as a continuous scale. Several factors have been identified that influence the willingness to conduct one of the tasks of regulation. Sector stability appears to be one of the main incentives that creates willingness to regulate one another. Autonomy of the own organization is identified as one of the important contextual factors that decreases the willingness to regulate one another.

Some general contextual factors are identified to be underlying to the outcome of propositions for different tasks influencing willingness and ability. These contextual factors are tension between peer monitoring and vertical regulation, the disciplinary power of the market and the tension between stability and competition.

- Tension between peer monitoring and vertical regulation
DNB is the vertical regulator and responsible for the regulation on behalf of the government. This form of regulation is suboptimal because it suffers from information asymmetry. Peers also struggle with information asymmetry, though there are differences between the kinds of information asymmetry. Banks have the knowledge to interpret the information of peers, but are lacking the detailed information. DNB in turn, is struggling with the kind of information it should require and how to interpret it. Peers could decrease this information asymmetry of interpretation, though the interaction between vertical regulation and peer monitoring is currently unstructured. Many other complexities and barriers rose during the analysis of peer monitoring in the interaction with DNB.

- Competition vs. Stability
The banking sector is involved with two conflicting public interests. Competitiveness among banks makes them serve the interest of the customer, for example with high interest rates for savings. The flip side of this competition is that it can result in increases risk taking. Stability, on the other hand, safeguards the savings of the customer, but this requires risk adverse behaviour. Competition is safeguarded by the Competition Authority (NMa) and this agency prevents peers of setting norms. Consequently, competition is in tension with effective peer monitoring. It is striking that there is no coordination between NMAs and DNB regarding this tension.

- Disciplinary power of the market
The ability to function as a bank in the market is based on trust. The analysis shows that even the smallest piece of negative information about a bank could transform trust into distrust. This means that, caution is required with sensitive information and banks should try to behave conform the expectations of the market. This decreases the willingness to share information. In addition, all acts
of regulation can be used by the market to create an opinion about a bank. For example, a sanction or a judgement by peers could create presumptions about the healthiness of a bank.

Furthermore, the analysis shows that peer monitoring focusses on the results of risks, rather than decisions concerning risk. However, moral hazard relates to the risk decision. A risk is an investment that turns into a loss or a profit. Currently, peer monitoring only monitors the healthiness of peers based on the outcome of risks. Therefore, peer monitoring currently only observes behaviour when moral hazard already created the loss and damage control is the only perspective of action.

This study proves that the capability of peer monitoring in the banking sector highly depends on the contextual factors as discussed above, since there are limited institutionalized peer monitoring arrangements. The banking sector is a highly complex environment where many systems are interacting and influencing each other. This creates unintended side effects that decrease the capability of peer monitoring.

RECOMMENDATIONS FOR IMPROVING PEER MONITORING
Based on barriers defined in the analyses this report makes some suggestions about improvements of peer monitoring, combined with vertical regulation, to decreases moral hazard. The first suggestion uses the specific knowledge of peers in assessing risk decisions rather than risk outcome. The specific knowledge of peers is used to improve the environment of risk decisions and risk management within a bank. Due to the focus on the risk environment, this suggestion is less subject to the complexities that strategic information entails. Secondly, peer monitoring can be improved by creating more interdependencies. These interdependencies improve the ability to discuss risk between peers, since there are multiple issues on the agenda and an exchange of these issues could take place. Lastly, a suggestion is made to develop a game. This game could be useful to communicate why it is important to decrease moral hazard, have the participants experience the opportunities of early intervention and create support for other solutions. It is recommended to conduct further research to these suggestions on improvements, before implementation should be considered.

CONCLUSION AND FURTHER RESEARCH
Peer monitoring is very limited capable to conduct regulatory tasks and therefore, limited capable to decrease moral hazard in the banking sector. This limited capability could be improved, though, peer monitoring on its own will not be able to decrease moral hazard. The information asymmetry among peers exist due to the fact that the sector is a competitive market. Evidence from the case study suggests that information asymmetry is more present between peers than between the bank and the vertical regulator. That been said, peers are better at interpreting even the smallest pieces of information. This shows a specific strength of peer monitoring in the interpretation of information and could be combined with the tasks conducted by vertical regulation. Combining peer monitoring and vertical regulation into one regulatory task can be promising concept that uses the strengths of both types’ of regulation. More specifically, this research recommends further research to the ability of combining peer monitoring and vertical regulation in order to improve effectiveness of overall regulation. In addition, this study shows that the effectiveness of peer monitoring is context dependent. This conclusion was to be expected considering the theoretical study underlying this study, however, this theory was not applied to peer monitoring studies before.
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ABBREVIATIONS

The following abbreviations will often reappear:

NVB - Dutch Banking Association
DNB - Dutch Central Bank
NMa - Competition Authority
DGS - Deposit Guarantee Scheme
CEO - Chief Executive Officer
CFO - Chief Financial Officer
The capability of peer monitoring to manage moral hazard.
Introduction
1. **INTRODUCTION**

In the mid-1990s the system of securitized credit instruments became more complex and faced an explosive growth in value (FSA, 2009). These securitized products were initiated by the investment banks in the USA and traded on the European market as well. These packages created high profits for the banks and were for that reason very interesting (FSA, 2009). It became painfully clear, though, that these packages also contain high risks (FSA, 2009).

The fall of the Lehmann Brothers appears to be the drop that spilled the glass (Commissie de Wit, 2009). A metaphorical earthquake in the financial sector was created. Consequently, mutual trust, a key value in the sector, disappeared (Larosière, Masera, & Nyberg, 2009). The risks taken by banks caused unparalleled losses. European bank losses $1.6 trillion due to toxic assets and bad loans and they lost 40% of the value of their assets (Reuters, 2009). A crisis was born and the banking sector did not know how to respond.

Zooming in on the Netherlands, this country has seen three banks default since the crisis, namely Indover Bank, Landsbanki/Icesave and DSB (Commissie Scheltema, 2010). Furthermore, two banks were nationalized, namely Fortis/ABN Amro (Commissie de Wit, 2012) and SNS Reaal (Ministerie van Financiën, 2013) and finally ING was in need of financial support to prevent a default (Commissie de Wit, 2012).

The financial crisis is a public concern. The subject has been discussed by everyone in the kitchen and at birthday parties leaving no one without an opinion. One common argument is that bankers take too much risk (in their own interest) without considering the interests of their customers. Although risk considerations are slightly more complex and an intrinsic element of the bank (Risk Management consultant and former employee ING, 2013), the argument of “too much risk taking” is supported by researches (Centraal Plan Bureau, 2013). The aspect of lacking attention to the customer is even recognized by the sector itself (Commissie Maas, 2009).

Banks are in the business of taking risks with the savings of the deposit holders. These deposit holders receive a fixed interest rate and are lacking the knowledge whether this interest rate matches the risks of their savings. This difference of information between the bank and the deposit holder is referred to in literature as *information asymmetry* (Akerlof, 1970; Eisenhardt, 1989). When the risk turns into a loss, eventually the deposit holder could lose its savings. The fact that the consequences are shared by the bank and the deposit holder and not by the risk taker alone, i.e. the bank, could stimulate banks to be less risk adverse. When this incentive is involved in risk taking, the literature calls it moral hazard (Dembe & Boden, 2000; Rowell & Connelly, 2012). That this incentive is present is inherent to the design of the financial system (Dowd, 2009) and therefore not only a problem of the crisis but an ongoing issue.

The banking sector is designed in such a way that the negative consequences of risky behaviour were internalized in the sector, with the deposit holders being insured in case a bank goes bankrupt. The other banks have to bear the costs instead of the deposit holder(DNB, NVB, & Ministry of Finance, 2009). In the Netherlands, this is regulated by the Deposit Guarantee Scheme (DGS) (Rijksoverheid, n.d.-a). Resulting, banks could be punished for risk decisions of peers.

This system of internalization presumes peers will monitor each other’s behaviour, in order to prevent bankruptcies. These potential costs by peers are an incentive to keep the sector stable. This raises the question how it could occur that the crisis was caused by excessive risk taking of bankers. *Why was excessive risk taking, i.e. moral hazard, in the banking sector not prevented by peers?* This question is the provocation of this research to peer monitoring in the banking sector.

Next chapter, chapter 2, discusses the research design in more detail.
Introduction
2. RESEARCH DESIGN

This chapter elaborates on the problem and structures the research. It starts with discussing the research problem in section 2.1. This section also defines the relation between the core concepts and discusses the relevance of this research. Section 2.2 contains the research questions and focuses on the type of research that is conducted. Section 2.3 discusses the delineation of the problem and this chapter concludes with the structure for the rest of the report in section 2.4.

2.1. RESEARCH PROBLEM

The introduction finishes with the question: Why was excessive risk taking, i.e. moral hazard, in the banking sector not prevented by peers? This section discusses the relevance of this question by discussing the concepts of moral hazard and peer monitoring. In addition, this section will argue why also the context, next to these two concepts, needs to be included in the research.

The essence of moral hazard is that two parties share a risk (Dembe & Boden, 2000; Hölstrom, 1979), one of which has a position to influence the outcome of that risk (Arrow, 1970; Pauly, 1974). This ability to influence the outcome becomes a problem because it is unobservable (Hölstrom, 1979), as a result of information asymmetry between the two parties (Akerlof, 1970; Eisenhardt, 1989). These characteristics could result in strategic behaviour (Ten Heuvelhof, De Jong, Kars, & Stout, 2009).

A rather abstract description that becomes clearer in the following example: A deposit holder puts its savings at the bank and receives a fixed interest rate. This interest rate is remuneration for allowing the bank to make investments with the savings of the deposit holder. Crucially, these investments entail risks. Both the bank and the deposit holder could gain profits from these investments, but on the other hand, when the bank is bankrupt based on its losses of the investments, the deposit holder loses its savings as well. Two parties share a risk.

However, the bank is able to influence the outcome of the risk. There are high risk investments and investments entailing lower risks. Obviously, the high risk investment entails a higher change on investment losses. By its decision for the investment the bank could influence the outcome.

On top of that, this decision is unobservable for the deposit holder. The deposit holder is unable to monitor all the decisions of a bank. Consequently, the bank could take high risks and make profits, without sharing these profits. This incentivizes a more careless attitude towards risk taking. And in the unfortunate case this higher risks creates unbearable losses, the bank goes bankrupt. The deposit holder loses its savings and the losses are for both while the profits of the high risks were for the bank.

The information asymmetry makes it almost impossible to prove moral hazard. However, the DSB case makes its existence more than clear.. An extensive evaluation (Commissie Scheltema, 2010) shows that the bank took extensive risks to make profits and was too careless in regard to the consequences for the stability of the bank. Eventually, the bank went bankrupt and without the Deposit Guarantee Scheme, the deposit holders lost their savings. Notice that the DGS does not solve the problem of moral hazard, in only shifts the consequences of a bankruptcy from the deposit holders to the peers.
Research design

The second important concept here consists of the peers who should prevent moral hazard. Next to the consequences that are shifted to them, they appear to be more able to decrease moral hazard. Scholarly literature suggest that peers have similar information (Stiglitz, 1990), rather than the information asymmetry that typically exists between the bank and the deposit holder. In addition, Stiglitz (1990) and Glachant and Brousseau (2011) argue that the negative consequence for the peers will result in peers that control each other. Stiglitz refers to this as peer monitoring.

Based on scholarly literature, the assumption is that peer monitoring could decrease moral hazard. However, practice shows that moral hazard occurs, despite of the presence of peers. This makes that the coherence between moral hazard and peer monitoring is unknown. The problem statement for this study is therefore the following, specific to the banking sector: It is unknown whether peer monitoring in the banking sector could decrease moral hazard, while moral hazard could result in an instable financial sector.

Until now, the role of the government is not taken into account. Moral hazard can be considered as market failure which is an argument for the government to intervene (Arrow, 1963). To protect the deposit holder the government imposes vertical regulation, i.e. legislation and a regulator that advocates the interests of the deposit holder. This vertical regulator is responsible for the financial stability on behalf of the government who want to protect their citizens (Algemene Rekenkamer, 2009). The vertical regulator is The Dutch Central Bank, who is closely monitoring the banks. Vertical regulation should not be neglected in a research to peer monitoring, since the aims are equal to peer monitoring and therefore is assumed that these different types of regulation could interact.

Therefore, although the main unit of analysis is peer monitoring between banks, this research includes vertical regulation in the research analysis. This vertical regulation is just one contextual factor that could influence peer monitoring in its capability to influence moral hazard. However, literature shows more contextual factors that influence the effectiveness of regulation (Baldwin & Black, 2008). Therefore the context of the relation between peer monitoring and moral hazard is included in the research system. Figure 1 shows a schematic overview of the concepts and there relations that are of importance for this research. The question mark in the arrow shows the unknown.

The aim of this research is to explore if and how peer monitoring can be capable of decreasing moral hazard in the banking sector. The gained knowledge contributes to a relatively unexplored part of
The capability of peer monitoring to manage moral hazard

the field of regulatory theory, since there is still little known about peer monitoring. Moreover, this knowledge could improve the effectiveness of regulation regarding moral hazard. The theoretical conclusions will be used to create some prescriptive knowledge regarding the effectiveness of peer monitoring. However, the scope of this research is restricted by a time period of five months, which requires some delineation. This delineation will be discussed in section 2.5

Relevance of the research

This research is valuable from a scientific perspective, since there is little known about the influence of peer monitoring on strategic behaviour, e.g. moral hazard. This research could support knowledge to this current gap in literature. In addition, this research is conducted at the intersection of multiple fields of research. There are economic incentives, applicable legislation and strategic behaviour involved in this research. The combination of these perspectives in one research could enrich the theory of peer monitoring.

Next to the scientific relevance, this research contains a social relevance. The obtained knowledge could contribute to the improvement of the regulation framework in the banking sector. Consequently, this research contributes to decreasing the chance of financial distress.

2.2. Research Questions

Based on the problem statement the following main question is formulated for this research:

“What is the capability of peer monitoring to decrease the negative effects from moral hazard between the banks and can this be improved?”

This question is answered by the following sub questions, in associated parts:

Part I - Literature
1. How may peer monitoring contribute to managing moral hazard?

Part II - Analysis
2. What is the ability of peers to regulate one another?
3. What is the willingness of peers to regulate one another?
4. How does peer monitoring interact with the institutional context?
5. What barriers can be identified to regulate one another?

Part III - Prescription
6. What strategies and solution directions could improve managing moral hazard by means of peer monitoring?

2.3. Explorative Research Approach

In order to answer these questions, an explorative research is conducted. It is an explorative research since it explores a relation that is currently unknown and tries to provide explanations on how peer monitoring is currently functioning. More specifically, it is a qualitative explorative research, since the sources of information are qualitative. These sources of information are policy documents, scholarly literature and interviews in the sector. These sources of information are used in the three central elements of this study: a scholarly literature review, a case study and an institutional analysis.
2.3.1. Scholarly literature review
The scholarly literature review reflects on the knowledge currently available in scholarly literature. Four fields of research are identified as relevant. First of all, the concept of moral hazard will be discussed, to understand how peer monitoring could engage. Subsequently, peer monitoring will be reviewed as a regulatory arrangement. The literature review furthermore contains the relevant context of peer monitoring which entail the regulatory field of research and the institutional theory. This scholarly literature review will eventually result in propositions, as a basis for the analysis in part II.

2.3.2. Case study
A case studies is a suitable approach to explorative research (Baxter & Jack, 2008). According to Yin (2002) a case study should be considered in case the research concerns contextual factors, the boundaries of the phenomenon are unclear and the phenomenon is within a real-life context and therefore there is little control over the events. The unit of analysis for the present study, i.e. the relation amongst peers in order to monitor one another, is in line with all these notions.

The case studies uses propositions derived from literature and three cases will be analyzed. More detailed information regarding the case study is discussed in chapter 4.

2.3.3. Institutional analysis
Another appropriate approach is an institutional analysis. The appropriateness of this approach becomes clear by the definition of institutions according to Koppenjan & Groenewegen (2005): “Institutions concern different levels of analysis like laws and regulations as well as contracts and organisations which regulate and coordinate the behaviour of actors in complex networks.” This definition fits as well to the arrangements of peer monitoring as to the contextual factors influencing peer monitoring.

Besides, this approach is a valuable addition to the case studies, where the case study focuses on individual cases; the institutional analysis includes the dynamics at a sector level.

2.4. Research framework and report structure
The research framework and the structure of the report are in line with each other. The sub questions were already structured in the three parts of the report structure. The structure of the report is visualized in figure 2.
2.5. REFLECTION ON RESEARCH SYSTEM

A distinction is made between the real banking system, including all its complexities, and the research system. This delineation is necessary to make the research feasible given the available time frame and manpower. Of course, the decisions are substantiated to show that the research is still meaningful.

First of all, only the Dutch banking sector will be taken into account. Taking a single country to delineate is in line with the conclusions of Busch (2012) regarding regulation in the banking sector. Busch did research to four cases in the banking sector in four different countries and he concludes that these four countries have more differences than similarities. These differences result from different histories and entail for example different regulation and regulatory structures. The decision for the Dutch banking sector is based on the availability of experts and documentation.

The Dutch banking sector still entails 84 banks (DNB, n.d.), and consequently needs further delineation. Therefore it is decided to only include the systemically important banks. Systemically important banks are banks that brings along system risks in case of defaults. This system risk contains a potential problem for the entire (national) financial system (Rijksoverheid, n.d.-b). This delineation decision is based on research of Dam and Koetter (2012), who conclude based on...
research in Germany that systemically important banks are more sensitive for moral hazard than other banks.

The systemically important banks in the Netherlands are at the moment of this research SNS, ING, ABN Amro and Rabobank. These four banks owns 80% of the banking assets and 95% of the Dutch savings (Financieel Dagblad, 2012). Therefore, with these four banks a substantial part of the banking sector is covered in the research.

Moral hazard affects the financial stability in the banking sector. This has implications for the delineation of including the vertical regulation. The Dutch government is using a ‘Twin Peak’ model in the vertical regulation. The Dutch Central Bank (DNB) is responsible for the prudent regulation in the banking sector and the Authority Financial Markets (AFM) is responsible for the behavioural regulation in the banking sector (Ministerie van Financiën, n.d.). Moral hazard affects the prudency of the sector and consequently DNB is the vertical regulator that is taken into account in this research. DNB consist of two parts, the central bank part and a regulatory part (Algemene Rekenkamer, 2009). This research only takes into account the regulatory part of DNB.

Regulation in the banking sector is divided into macro prudential regulation and micro prudential regulation. Micro prudential regulation regards the regulation of a single financial institute, while macro prudential regulation regards the regulation at a sector level. Although moral hazard affects the prudency of the complete sector, it is originated in the individual institutes. For that reason, this report only focuses micro prudential regulation. This is depicted in Figure 3, a figure adapted from (Algemene Rekenkamer, 2009).

![Figure 3 Difference between micro and macro prudential regulation](image-url)
The capability of peer monitoring to manage moral hazard

I

II

SCHOLARLY LITERATURE

PART II

SCHOLARLY LITERATURE
I Literature: Theoretical founding
3. **THEORETICAL FOUNDING**

The main question of this research concerns the capability of peer monitoring to decrease moral hazard. So, moral hazard is the dependent concept and peer monitoring the independent concept, as visualized in figure 4. This theoretical founding provides a literature review of these two main concepts in section 3.1 and section 3.2.

![Figure 4 Schematic overview of the relation between peer monitoring and moral hazard](image)

Furthermore, peer monitoring concerns a regulatory relationship between peers. Consequently, regulatory theory is relevant and will be discussed in section 3.3. Regulatory theory is commonly approach as vertical relation between a regulator and a regulated institute. This approach is contested in the multi actor approach, discussed in section 3.4. This chapter finalizes discussing the institutional theory in section 3.5.

3.1. **MORAL HAZARD**

Moral hazard is an ambiguous term that even changed of meaning overtime. As dependent concept and causing problems it is necessary to discuss this concept in order to understand the problem. This section elaborates on the history of moral hazard, different views on moral hazard and understands the relation between moral hazard and the banking sector.

3.1.1. **History of moral hazard and different fields of research**

Moral hazard originated in insurance literature (Rowell & Connelly, 2012). It appears as term around the late nineteenth century (Baker, 1996) when insurance companies realize that the existence of insurance could influence the behaviour of the insured. An insured person could be less careful because of its insurance or even could abuse the insurance. Moral hazard was referred to by insurance companies as more careless behaviour because of the insurance (Dembe & Boden, 2000). A distinction is made here between intended or unintended less careful behaviour. For that reason literature makes a distinction between ‘moral hazard’ and ‘morale hazard’. Morale hazard relates to the unintended carelessness, moral hazard relates to immoral or criminal actions to gain from insurance (Baker, 1996; Dembe & Boden, 2000; Vaughan, 1996).

Although, moral hazard as term is invented by insurance companies, the research field of probability theories provided a first setup to moral hazard by make a distinction between mathematical and moral expectation. Famous scientist like Pascal, Fermat, Huygens and La Place discusses risk theories, between the years 1600 and 1800. One of the outcomes of these discussions was a notion that expectation could differ per individual (Rowell & Connelly, 2012). Eventually, Daniel Bernoulli defines a difference between mathematical expectation and moral expectation. The
mathematical expectation ignores that the outcome of a risk could have different utilities for different people. For example, someone with a high level of welfare would less concern about 100 euro than someone with a low level of welfare. Bernoulli therefore defined moral expectation as the utility of the mathematical expectation (Rowell & Connelly, 2012). In this line of reasoning, moral hazard has nothing to do with morality but refers to an individual’s subjective expectation (Dembe & Boden, 2000).

The thoughts of these two fields of research were introduced in the fields of economics by Arrow, Drèze and Pauly (Dembe & Boden, 2000). Arrow (1963) uses the term moral hazard in the field of economics to discuss decision making under uncertainty. Arrow (1970) and Pauly (1974) relates moral hazard to information asymmetry. That information asymmetry is one of the core conditions of moral hazard is endorsed by other authors (Arnott & Stiglitz, 1988; Hölmstrom, 1979; Hurwicz & Reiter, 2006; Moe, 1987). Consequently, due to the information asymmetry moral hazard is unobservable (Hölmstrom, 1979), therefore also discussed as hidden action (Pratt, Zeckhauser, & Arrow, 1985). This field of research uses an incentive perspective to analyze behaviour. The information asymmetry is one of the incentives to behave in a certain way. In the end, moral hazard is a consequence of incentives according to this perspective (Rowell & Connelly, 2012).

3.1.2. Adverse selection and Moral Hazard distinction

The incentives from information asymmetry can be present before and after an agreement is closed. Early literature refers to this as ex ante and ex post moral hazard (Rowell & Connelly, 2012). Ex-ante moral hazard is the incentive based on the information asymmetry in advance of designing a contract. This ex ante moral hazard is nowadays referred to as adverse selection. Ex-post moral hazard is referred to when moral hazard takes place after two parties agreed upon a contract, i.e. the incentives to the agent to behave more careless regarding the risk. This could be for the case of sloppyness or for the case of strategic behaviour, as intended behaviour to gain from the situation. Strategic behaviour after a contract is settled is how there is referred to moral hazard in the field of public administration (Ten Heuvelhof et al., 2009).

3.1.3. Inefficiencies and efficiencies

The field of economics did not make a distinction between morale hazed and moral hazard. Moral hazard is framed as an inefficiency that occurs when people are insured, intentionally or not. As argued by Arrow (1963) moral hazard is a market failure. However, what is ignored in this perspective and not should be ignore in understanding moral hazard, is that moral hazard is a negative side effect of insurance. Insurance itself has a positive influence on the welfare. Therefore, it is too simplistic to conclude that the presence of moral hazard is negative. Moral hazard only exists due to its providing opportunities of insurance, i.e. sharing risk. Nyman (1999) goes to the extent that moral hazard is in fact an economic efficiency rather than an inefficiency. It is important to notice that there are different views on moral hazard and it is too easy to conclude moral hazard is always related to negative views.

3.1.4. Moral hazard in principal-agent relations

Principal agent theory describes a vertical relation between a principal and an agent. It is one of the theories in the neo institutional economics that aims at explaining economics rather than predict economics. This relation exists because the agent performs a service or provide a product the principal requires of this agent (Sappington, 1993). This entail a vertical relation and is characterized by information asymmetry and conflicting goals (Eisenhardt, 1989; Waterman & Meier, 1998). Since
The capability of peer monitoring to manage moral hazard

The characteristics of a principal agent relation and the core conditions of moral fit together, principal agent theory is often used to describe moral hazard problems.

Akerlof (1970) describes the core conditions of principal agent by the example of the lemons: There are good cars and bad cars. The seller of a car knows what type of car it is, the buyer does not. In addition, the seller wants a good for price the car, while the buyer want to spend as less as possible. Concluding, there are conflicting goals regarding the price of the car and there is only one party who knows the real value. The information asymmetry could cause the price does not fit the value of the car.

The principal agent theory describes a contractual relation between a buyer (principal) and a seller (agent) (Rai & Kim, 2002; Waterman & Meier, 1998). Principal agent theory is not only commonly used in the field of economics. Lots of other fields use agency theory to explain behaviour (Eisenhardt, 1989). Waterman & Meier (1998) state that principal agent relations are present next to the discipline of economics in the disciplines of law, finance and accounting. Unavoidable, also moral hazard is wide spread term amongst lots of fields of research. Note, that these other fields of research not necessarily include sharing of risk as core condition of moral hazard. Act in own interest outside the arrangements based on information asymmetry is also used as description of moral hazard.

Mitnick’s (1975;1973) describes the regulatory relationship between a regulator and inspectee as a principal agent relation. The regulator has the ability to design the contract, though it is difficult to see whether it is kept by the inspectee. The inspectee has more information about its own behaviour and the goals between the regulator and the inspectee are conflicting. Consequently, this relation could be subject to moral hazard to the definitions that not take risk sharing into account.

3.1.5. Presence of moral hazard in the banking sector

In the banking sector there is moral hazard (Boyd, Chang, & Smith, 1998; T. F. Hellmann, Murdock, & Stiglitz, 2000). The most common form is that the small depositors do not know what happens with their money. The bank (agent) could invest the money of the small depositors (principal) in risky projects and if the bank eventually defaults, the depositors lose their money. The government prevents the losses of small depositors by paying bail outs in case a bank defaults (Dowd, 2009; T. F. Hellmann et al., 2000). Besides the bank and the small depositor, also other principal agent relations exist in the banking sector where moral hazard could occur, e.g. Board of Executives (agent) vs. Supervisory Board / shareholders (principal) (Crawford, Ezzell, & Miles, 1995) traders (agent) vs. management (principal). Hence, the banking sector is a complex system where many agents could opt for themselves.

3.1.6. Findings on moral hazard

Moral hazard is the dependent concept of this research. The core conditions are information asymmetry, conflicting goals and risk sharing. These core conditions could result in inefficiencies, whether it is intentional or sloppiness. In the field of economics, the inefficiencies are related to excessive risk taking. More specifically, banks could take excessive risks for own profit, with the negative consequences shared. This confirms the necessity to influence moral hazard.

In addition, there exists some broader concept of moral hazard, whereby risk sharing is not part of the core conditions. In this broader concept, all the principal agent relationships can be faced with moral hazard. Since principal agent relations are almost everywhere, moral hazard can be almost everywhere.
This research concerns the principal agent relation between a bank and the deposit holder. The deposit holder should be protected against the negative effects of moral hazard by banks. However, also the regulatory relation between the bank and the governmental regulator is considered as potentially subject to moral hazard, despite of the lack of risk sharing. Therefore, this research will use a rather broad definition of moral hazard, namely: ‘strategic behaviour of an actor, from which the positive effects are for the actor itself, while the negative effects are (partly) for others’.

3.2. **Peer monitoring**

Moral hazard could negatively influence the relationship between a principal and an agent. The information asymmetry in this vertical relationship is one of the core conditions. It is argued by Stiglitz (1990) that other agents, referred to as peers, are less subject to this information asymmetry. Consequently, these peers are better able to monitor the behaviour of one another. Peer monitoring, therefore seems a potential effective regulatory arrangement. In addition, literature argues that other market parties could decrease the problems in an principal agent relation (Fama, 1980; Nier & Baumann, 2006). Though, these kind of regulatory arrangements are not extensively discussed in literature. This section provides an overview of the discussions regarding this concept in literature.

3.2.1. **Peers regulate one another**

Stiglitz (1990) referred to peer monitoring as system that was used by a bank in Bangladesh. This Grameen Bank distributed loans to group of people instead of a single borrower. This group was depending on each other’s payback. When one member of the group defaults, the whole group experiences the consequences. This shared risk in the group incentivizes the group to monitor each other. The group determines the composition of the members themselves. This lead to groups those were able to monitor each other. The advantage of the bank was that the bank did not need specific knowledge to monitor the behaviour of the borrowers. The problem of information asymmetry for the bank was decreased, since there were peers in place that were less subject to this information asymmetry. These peers were incentivized by the interdependency and therefore willing to conduct the regulation. Consequently, this example of peer monitoring was successful.

Another example of peer monitoring is discussed by Brousseau and Glachant (2011). They apply the concept of peer monitoring in a physical network in theory. One of the characteristics of the network is that the default of one actor, influence all the others. Peer monitoring was used as an addition to governmental regulation to get all the actors of the network in the same direction. Their combined knowledge of the system could result in the best outcome for long term investments. Better than forced by a vertical regulator. Though, the governmental regulator acts as facilitator to bring the involved actors together. Although, this is only theory, the principles are the same as in Stiglitz’s example. Mutual dependencies, shared consequences of failure and the argument that peers are less subject to information asymmetry.

3.2.2. **Market discipline vs. Peer monitoring**

Market discipline implies that the market regulates the risk-taking activities (Nier & Baumann, 2006). Within the market the knowledge is available to monitor and control the behaviour of the agent. Because the risk that are taken at the bank influences the wealth of the market participants, the market participants will control the bank activities and if necessary take disciplining measures (De Ceuster & Masschelein, 2003). A difference with peer monitoring is that market discipline share
The capability of peer monitoring to manage moral hazard

both, the profits of risk and the losses of a risk. An example in the banking sector is provided by Chen & Hasan (2011).

Chen & Hasan discusses subordinated debt as an instrument of the market to regulate the risk taking of the banking sector. Subordinated debt is a debt that investors only get back, in case of bankruptcy, after all other debts are paid. Such debts carry more risk and investors will demand a higher return on their supply of money. A closer monitoring of the bank by the investors of subordinated debt should be an efficient construction to reduce bank risks and improve social welfare (Chen & Hasan, 2011)

3.2.3. Findings on peer monitoring

Peer monitoring is a field of research quite unexploited. The examples of Stiglitz and Brousseau and Glachant are in theory able to mitigate the core problem of moral hazard. Peers are less subject to information asymmetry and therefore assumed to be able to act as effective regulatory arrangement. In addition, both examples discuss the creating of a sense of urgency to regulate one another. The combination of mutual dependencies, less information asymmetry and a shared consequence substantiate the assumption that peer monitoring is capable of decreasing moral hazard.

Peer monitoring should not be confused with market discipline. Peers could be subject to a conflict of interest, since only the negative effects of excessive risk taking are shared, while market discipline does share both sides of the consequences of risk, as well the losses as the profit.
3.3. **Regulatory theory**

Peer monitoring describes a regulatory arrangement. In order to understand whether this arrangement is effective, regulatory theory should be discussed. This discussion of regulatory theory consist of a description of regulation in paragraph 3.3.1, the tasks of the regulator in paragraph 3.3.2 and the importance of the context within regulation in section 3.3.3.

3.3.1. **Description of regulation**

Baldwin (et al., 1998) identified three different definitions on how literature refers to ‘regulation’. The first is a specific set of commands or rules that must be applied by a body devoted to this purposes accompanied together with mechanisms of monitoring and enforcement. Secondly, regulation is referred to in a broader sense whereby all government interventions in the economy are regulation. The third definition includes all incentives that influence aspects of behaviour in the market, intentional or not. This third definition is the only definition which is not strictly related to governmental influences (Baldwin, Cave, & Lodge, 2011; Black, 2002).

Peer monitoring fits the third definition, though this is not the most common definition to refer to. Literature mostly relates regulation to government, as a means in case of market imperfections or market failures e.g. monopolies, externalities, information adequacies, moral hazard (Baldwin et al., 1998). The governments’ objective is the welfare of the consumer or citizen of the country and intervention is their measure to protecting them of market failures. Also Arrow (1963) put the responsibilities by the government to intervene in the case of market failure.

The governmental regulator inspectee relation concerns a principal agent relations, as is argued by Mitnick (1975). Therefore, there is referred to the governmental regulator as vertical regulator.

3.3.2. **Regulatory tasks**

According to van der Voort (2013), regulate consist of monitor compliance to the norms and in case of failure to comply intervene. He (Van der Voort, 2013) mentions three needs for good regulation: a director, a detector and a effector. If these are translated into tasks are: Setting a norm, gathering information and sanction if necessary. A fourth task is implicit here, namely judge whether the gathered information fits the norms set. There could be doubt whether the setting of norms is a task of the regulator, since this power is commonly by the legislator. Though, English authors argued that the regulator is necessary for norm setting, based on their knowledge (Hood, Rothstein, & Baldwin, 2001; Hutter, 2006). In addition there is always room for discussion about interpretation of laws. Therefore the regulator should be able to set the interpretation to their hand (Mertens, 2006). This makes the tasks of a regulator the following:

- Set norms
- Gather information
- Make a judgement
- Sanction

Yet, executing these tasks is complicated. The main discussion in the discipline of regulation was how to sanction; Deterrence or compliance? Ayres and Braithwaite (1992) contribute with their book ‘responsive regulation’ to this discussion. They argue that responsive regulation does not choose between deterrence and compliance, but is a balanced combination of both. Start with compliance strategies and scale up if necessary to deterrence strategies. The potential use of deterrence strategies could motivate actors to cooperate without actually using deterrence strategies. This
principle is known as the benign big guns. In addition, the scaling go gradually, in order to legitimize the used sanctions.

Ayres and Braithwaite also recognize that inspectees could differ amongst each other. Different inspectees will be deterrent or comply by different means. Therefore, they argue in favor of a wide range of different regulatory sanctions and sector specific regulatory strategies. This provides some space to the regulator in order to make regulatory differences between inspectees, who not all have the same intention (Ayres & Braithwaite, 1992).

In line with these arguments of making available as well compliance as deterrence means and a wide range of different means results in two pyramids regarding sanctioning and strategies. These regulatory pyramids are depicted in figures 5 and 6. The pyramids of Ayres and Braithwaite are only concerning with the interaction between government and business (Baldwin et al., 2011). This means that they concern the principal agent relation.

In more detail regard the pyramids. Figure 5 shows a broad fundament, which stands for the different gentle sanction opportunities the regulators have when the regulated body does not comply. The aim of these gentle sanctions is to create compliance in a cooperative way. When these sanctions do not reach their goal, the regulator could move a layer up in the pyramid, off course moving down belongs also to the opportunities if the regulated party shows compliance to the rules. These sanctions become more deterrent. When the regulated body still not complies to the rules, it is more accepted to use extreme sanctions if more gentle sanctions have been applied before (Ayres & Braithwaite, 1992).

Concluding, Ayres and Braithwaite show that in addition to the four tasks, these tasks also need to be responsive. This means as much as being able to adjust to the situation at hand.

3.3.3. Context of regulation

Responsive regulation, as discussed by Ayres and Braithwaite was an improvement in the discussion of regulatory theory. However, Baldwin and Black (2008) argues that, to be really responsive, also the broader institutional context should be taken into account. Not only the relation of the regulator with the regulated party, but also other incentives for the regulated party and the embeddedness of the regulated firm. They discuss the following five contextual elements should be included in discussing regulation (Baldwin & Black, 2008): 1) The attitude and behaviour of the firm, 2) the broader institutional context of the regulation, 3) interactions between different regulations, 4) sensitivity to performance of the used regulatory strategies and 5) changes within these systems.
3.4. **MULTI ACTOR APPROACH**

The regulatory theory discusses effective regulation from a principal agent perspective. This section argues that regulation takes place in a multi actor environment, rather than in a principal agent relation. This section argues that the actor environment is part of the institutional context and therefore need to be included in order to be really responsive.

De Bruijn & ten Heuvelhof (2005) discuss law enforcement as a game between the inspector and the inspectee that takes place in a network of actors. They show that regulation takes place with multiple actors’ at all kind of governance levels and with all kind of interconnections between these governance levels. This is visualized in figure 7.

![Figure 7 Multi actor environment of regulation](image)

The network approach of de Bruijn en ten Heuvelhof shows the presence of many principal agent relations, that together form a network. In other words, between all these actors at different levels, information asymmetry could be part of the relationship. In addition, the actors can have conflicting goals.

The implication of this environment is that the inspector inspectee relation can be influenced by actors outside this relation. Third parties could gather information or even sanction as regulatory tasks. On the other hand, the inspectee could have relations with the politics and influence the norm setting. All these relations should be included in analyzing the regulation framework.

Agency networks and their effect on principal agent relations are also recognized by Muykerji (et al., 2007). They describe that network structures could constrain social behaviour and social change, but could also provide opportunities. Muykerji (et al., 2007) identify network cohesiveness as critical factor on how network behaves. A high level of cohesiveness within a network creates more cooperation within that network. This stresses the importance of strong relations within the network.

Concluding, peer monitoring is not only influenced by other regulatory arrangements. There are more actors that should be taken into account to understand the behaviour of actors.
3.5. Institutional Theory

Institutions are stable, create a form of consistency in actions and constrain and shape behaviour (Goodin, 1996; Koppenjan & Groenewegen, 2005; March & Olsen, 1989). This shaping behaviour and consistency in actions are both fitting to the aim of this research, i.e. finding the capability of peer monitoring to influence moral hazard. Moral hazard is shaped behaviour from the perspective that it is created by incentives and could therefore be analyzed with this institutional perspective. In addition, peer monitoring is about regulating one another and executing monitoring tasks. This behaviour is also shaped by mutual dependencies. In addition, an isolated action of peer monitoring is less valuable in this research since the research discuss peer monitoring at a sector level and should therefore rely on stability in actions.

Besides that, the sections of regulatory theory and multi actor approach argue for including a broader context in the regulatory framework. According to Koppenjan & Groenewegen (2005): “Institutions concern different levels of analysis like laws and regulations as well as contracts and organisations which regulate and coordinate the behaviour of actors in complex networks.” This descriptions show that an institutional analysis is able to include as well the multiple actors as the complexities at different levels into the system analysis.

One of the models in the institutional economics is the four layer model of Williamson (1979, 1998). This model explains transactions between two businesses. However, this model could also be used to analyze and explain behaviour of actors in a complex system, as discussed by Koppenjan & Groenewegen (2005). This four layer model of Williamson is depicted in Figure 8.

The first layer discusses the embeddedness of the system. This entails the culture and traditions and is in common difficult to change. In addition, this layer most times implicitly present and therefore difficult to prove or substantiate. The second layer contains the formal rules in the system, e.g. laws. The third layer is about the governance of the system. Who is responsible, which agreements are made, which structures are used etc. Those kinds of questions are the concern of this layer. The last layer is about the play of the game, e.g. the daily decisions, relations between actors.

These four layers of Williamson are taken into account in the institutional analysis.
I Literature: Theoretical founding

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency (years)</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1: Embeddedness: informal institutions, customs, traditions, norm religion</td>
<td>$10^3$ to $10^5$</td>
<td>Often noncalculative, spontaneous (caveat: see discussion in text)</td>
</tr>
<tr>
<td>L2: Institutional environment: formal rules of the game—esp. property (polity, judiciary, bureaucracy)</td>
<td>$10$ to $10^2$</td>
<td>Get the institutional environment right. 1st order economizing</td>
</tr>
<tr>
<td>L3: Governance: play of the game—esp. contract (aligning governance structures with transactions)</td>
<td>1 to 10</td>
<td>Get the governance structures right. 2nd order economizing</td>
</tr>
<tr>
<td>L4: Resource allocation and employment (prices and quantities, incentive alignment)</td>
<td>continuous</td>
<td>Get the marginal conditions right. 3rd order economizing</td>
</tr>
</tbody>
</table>

L1: social theory
L2: economics of property rights/positive political theory
L3: transaction cost economics
L4: neoclassical economics/agency theory

Figure 8 Institutional layers of Williamson
4. CASE STUDY DESIGN

“The essence of a case study, the central tendency among all types of case studies, is that it tries to illuminate a decision or set of decisions: why they were taken, how they were implemented, and with what result” (Yin, 2002, p. 12). This study is about illuminating decisions of peer monitoring, so, explore why peer monitoring decisions are taken and describe the effect of these decisions. Consequently this research touches the essence of when a case study can be conducted. In addition, a case study should be used when the aim is to understand a larger class of units by an intensive study to a selection of this class (Gerring, 2004). Also that is the case in this research. The aim is to explore general peer monitoring arrangements by analyzing a few of these peer monitoring arrangements. Furthermore, Flyvbjerg (2006) describes that the knowledge of case studies is context-dependent. As concluded in the theoretical founding peer monitoring is context-dependent. Consequently, a case study is suitable as methodology for this research.

In order to discuss the case study design this chapter contains the following sections: In section 4.1, the design choices are discussed, entailing the type of case study and the decisions of the main concepts. Subsequently, the propositions are discussed in section 4.2. Section 4.3 covers the selected cases for the case study. Section 4.4 addresses successively the data collection and the data analysis. This chapter finalizes with a discussion of the data validity in section 4.5.

4.1. DESIGN CHOICES

Designing a case study starts with the question: what should be studied? Based on this answer the suitable type of case study can be determined.

What should be studied? This question concerns two aspects. The first aspect is the unit of analysis. The second aspect covers whether the unit of analysis is a comparison between different cases or concerns a same case at different times. First of all, the unit of analysis refers to the subject of the research. As defined by Miles and Huberman the unit of analysis is: “a phenomenon of some sort occurring in a bounded context” (Miles & Huberman, 1994, p. 25). In this research the unit of analysis is the peer monitoring arrangement in the banking sector. This unit of analysis is about relationship between peers. Different relationships will be compared in this case study, hence the case study is one with a comparative character.

According to Yin, there are three types of case studies. These are explanatory, exploratory and descriptive (Yin, 2002). The explanatory case study is used to explain presumed causal relations, the exploratory case study explores a situation with no clear outcome and a descriptive case study describes an intervention or phenomenon (Baxter & Jack, 2008). Complete in line with the nature of this research the case study conducted in this research is of the exploratory type. In addition, a distinction between types could be made in a single unit of analysis or multiple unit of analysis. This case study only uses peer monitoring arrangements as unit of analysis. More specific, this is a single unit of analysis and holistic instead of an embedded case study that concerns multiple units of analysis.

Summarizing, an explorative, holistic, comparative case study will be conducted to the peer monitoring arrangement in the banking sector.
4.2. PROPOSITIONS

Propositions are useful in guiding the case study into the right direction in order to answer the main question (Yin, 2002). Therefore, propositions will be used in this case study. Moreover, since propositions are grounded in literature they tell where to look for relevant information. This section will develop propositions based on the discussion of literature in the theoretical founding of chapter 3, in paragraph 4.2.1. Subsequently, the propositions will be summarized in paragraph 4.2.2 and the independent and combined value of the propositions is discussed in paragraph 4.2.3.

4.2.1. Developing propositions

The theoretical founding argues that peer monitoring could be more effective than other regulation, because there is less information asymmetry between peers than there is between the vertical regulator and the regulated institute. From this follows the assumption that peers are able to conduct effective regulation. This assumption is substantiated by the successful examples of peer monitoring by Stiglitz (1990) and Brousseau and Glachant (2011). These examples are discussed in paragraph 3.2.1.

The second assumption regarding peer monitoring is that peers are willing to regulate one another. This assumption is, again, based on the successful examples of peer monitoring of Stiglitz (1990) and Brousseau and Glachant (2011). In both examples there was a willingness to regulate one another. In the example of Stiglitz this willingness was a created incentive by the bank that makes peers depending on each other. Brousseau and Glachant discuss a willingness based on physical system elements that without each other are useless. So, whether the willingness is created or inherent to the system does not matter, however, willingness is necessary to result in effective peer monitoring.

In the result is that a combination of a willingness and ability by peers make peer monitoring an effective kind of regulation, if peers actually act by this willingness. These two assumptions result in the two main propositions:

1. Peers have the ability to influence effective the behaviour of other peers.
2. Peers are willing and have a sense of urgency to influence the behaviour of other peers.

The main question of this research concerns the capability of peer monitoring. Capability is now defined as the combination of ability and willingness. However, peer monitoring relates to regulation and this aspect is not included in these two main propositions. According to van der Voort (2013) good regulation needs: a director, a detector and an effector. Leading to the following tasks for an effective regulator:

- Set norms
- Gather information
- Make a judgement
- Sanction

Next to this, regulatory theory argues that the responsiveness of a regulator is essential for the effectiveness. This responsiveness will be added as a separate proposition.

Consequently, effective peer monitoring needs the willingness and ability to execute these regulatory tasks. When the tasks of the regulator and the willingness and ability are put on axes it results in a table 1. All the intersections could result into a relevant proposition for this case study. However, due to time constraints a selection of four propositions is made. None of these four
The capability of peer monitoring to manage moral hazard propositions relate to the regulatory task of judgement since judgement is not a director, detector or an effector. In addition, the judgement task is hard to observe.

Table 1 Eight possible propositions

<table>
<thead>
<tr>
<th>Ability</th>
<th>Willingness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting norms</td>
<td>X</td>
</tr>
<tr>
<td>gather data</td>
<td>X</td>
</tr>
<tr>
<td>Judgement</td>
<td>X</td>
</tr>
<tr>
<td>Sanctions</td>
<td>X</td>
</tr>
</tbody>
</table>

The selection of propositions is as follows:

- **Peers have a sense of urgency to regulate one another.** This proposition is a result of the intersection settings norms and willingness. Moral hazard is about risk sharing (chapter 3.1). Setting norms makes explicit that these risks are shared, otherwise the norms were useless. Consequently, the willingness to set norms among peers shows the willingness of peers to prevent excessive risk taking. More specific, it shows the need among peers to regulate one another.

- **Peers have information about each other’s behaviour.** This proposition is a result of the intersection gather data and ability. The main argument for peer monitoring to be an effective form of regulation is based on the assumption that it decreases the information asymmetry. The horizontal relation would have the specific knowhow to interpret data and less information asymmetry suggest that peers have more information.

- **Peers have formal and informal means to act.** This proposition is a result of the intersection sanctions and ability. Enforcing compliance is in need of sanctioning instruments. This propositions relates to the presence of these instruments in peer to peer relations.

- **Peers may interfere with each other’s business.** This proposition is a result of the intersection sanctions and willingness. Even when instruments are available to enforce compliance, peers should be willing to interfere in each other’s business. Such an intervention could influence the relation among peers. In addition, concepts from network theory as reciprocity could influence the willingness of peers to use sanction instruments. As literature suggest that peer monitoring is an effective form of regulation, peers are willing to interfere in each other’s business.

- **Peers have enough degrees of freedom to adjust regulation to the situation at hand.** This proposition relates to the responsiveness of peers. Responsiveness is in need of flexibility to change the regulation to the situation at hand. This is necessary, since the regulated institutes could differ among each other. In order to be effective flexibility is a necessity.
4.2.2. Overview of propositions
The propositions are summarized in table 2.

<table>
<thead>
<tr>
<th>Ability</th>
<th>Willingness/sense of urgency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting norms</td>
<td>Peers have a sense of urgency to regulate one another</td>
</tr>
<tr>
<td>Collection of data</td>
<td>Peers have information about each other’s behaviour</td>
</tr>
<tr>
<td>Judgement</td>
<td>Peers have formal &amp; informal means to act</td>
</tr>
<tr>
<td>Sanctions</td>
<td>Peers may interfere with each other’s business</td>
</tr>
</tbody>
</table>

In addition to this table, there is a fifth proposition concerning the responsiveness of regulation:
5. Peers have enough degrees of freedom to adjust regulation to the situation at hand.

4.1.3. Value of the propositions
For effective regulation there is the need for willingness and ability to all the four regulatory tasks. In addition, the regulation should be responsive to be effective. So, if all the regulatory tasks are responsively well conducted it result in effective regulation. In other words, all the nine individual propositions are independently requirements for effective regulation and if all the positive formulated propositions are confirmed, it results in effective regulation.

Effective regulation does not necessarily rely on a single regulator. All the regulatory tasks should be effective conducted. So, exploring the capability of peer monitoring also benefits from the knowledge whether peers are willing and able to execute a single regulatory task. When the capability of peer monitoring is restricted to a single task, peer monitoring can still contribute to effective regulation. However, the effectiveness of the overall regulation depends in that case on the interactions and the willingness and ability of other regulators.

Note that this research only concerns five of the nine propositions and therefore never can conclude whether peer monitoring in its own could result in effective regulation.

4.2. Case selection
The case selection is based on the available resources of data. The cases are conducted by a secondary analysis of the interview reports of Commission de Wit. Consequently, the information available in these interviews determines the cases. In these interview reports, most information is available regarding the cases of Fortis/ABN Amro, ING and Rabobank. These three banks are also within the scope of four systematically important banks. In addition, since the SNS is nationalized recently, this bank is subject to lots of criticism without a research conducted yet. Therefore, it will be hard to get valid and relevant information about this bank.

The combination of these three cases entails two ‘bad cases’, namely ING and ABN Amro, who both received governmental bailouts to survive the crisis and one ‘good case’, namely Rabobank. The combination of one good case and two bad cases could provide insights in the motivations and incentives to peer monitoring from the perspectives of those who did take the risk and those who have the consequences. Also the differences between these two perspectives could be interesting in the explorative character of the research.
4.3. **DATA COLLECTION AND DATA ANALYSIS**

This case study will be based on interviews caused by the explorative character. Yet, it is hard to interview the persons of interest in this research, since almost all of them are busy people high ranked in banks. Therefore, the data used in the case study are the interview reports of Commission de Wit I and Commission de Wit II. This commission conducted a research of the House of Representatives regarding the crisis. The questions of this commission cannot be adapted and therefore the relevant answers are in need of reinterpretation. For this reason the conclusions of the case study should be reflected by a system analysis in order to strengthen and substantiate the conclusions.

The analysis of the data is structured by the propositions as defined in the previous section.

4.4. **DATA VALIDITY**

The validity of the case study determines the value of the research. There are according to Yin (2002) three kinds of validity that should be taken into account regarding an explorative case study, i.e.: construct validity, external validity and reliability

**Construct validity**

Construct validity relates to the data collection and the composition of the report. It is difficult to draw conclusions based on subjective information of interviews, especially when there is not a clear set of measurements available. Creating construct validity within the case study is restricted by the limited sources of data. There is tried to have multiple arguments for findings and thereby to have a chain of evidence, though this still creates limited validity. In order to create construct validity the findings of the case study will be used in combination with the findings of a system analysis. This system analysis will be structured by the same propositions.

**External validity**

External validity concerns the question whether the conclusions are generalizable. To create or see whether it is possible to generalizable conclusions, there are three cases selected. In addition, the propositions are based on scholarly literature which is a strong starting point.

**Reliability**

Finally, there is the repeatability of the research. This case study protocol is a start for good documentation and thereby making the research repeatable. In addition, all the sources of information are available to repeat the research. Furthermore, the reliability will be increased by good documentation and references of the arguments.
The capability of peer monitoring to manage moral hazard

Part III
Analysis
INTRODUCTION ANALYSIS

Literature shows the need for regulation to decrease moral hazard. Peer monitoring seems to be suitable to regulate moral hazard, though, this scholarly theory is not reflected into practice. Therefore the question remains what the ability and willingness is of banks to regulate one another. This part of the report is concerned with this question. To structure answering this question, four propositions were identified. These propositions are:

1. Peers have information about each other’s behaviour
2. Peers have formal and informal means to act
3. Peers have a sense of urgency to regulate one another
4. Peers may interfere with each other’s business

These four propositions regard to the regulatory arrangements that are a necessity to conduct peer monitoring. In addition, literature shows that the ability to response to contextual factors determines the effectiveness of regulation. This entails a fifth proposition, namely: Peers have enough degrees of freedom to adjust regulation to the situation at hand.

The reflection of these propositions into practice is conducted within the research system, as depicted in figure 7. The three banks, ABN Amro/Fortis, ING and Rabobank are subject for the case study. The institutional analysis will discuss the peer monitoring on a more common level.

![Figure 7 Research system](image)

To discuss this reflection of the theory of peer monitoring into practice, the following structure is used. Next chapter, chapter 5, discusses the complexity of risk taking in the banking sector and reflects on moral hazard. Subsequently, chapter six discusses the case study and provides preliminary answers to the propositions. Based on these answers an institutional analysis is executed to the peer monitoring arrangements in chapter 7. In addition, the context of the peer monitoring arrangements is taken into account. This starts with emphasizing on the interactions between peer monitoring and vertical regulation in chapter 8. Subsequently, chapter 9 discusses the other contextual factors in peer monitoring. This analysis results in findings regarding the propositions in chapter 11, after the validity of these findings is discussed in chapter 10.
II Analysis: Introduction analysis
5. **INTRODUCTION IN THE BANKING SECTOR**

A bank is a company with its own interest which at the same time, as institute, executes essential activities in society. The societal importance is discussed in section 5.1. The own interest of the bank is served with profits entailing risk decisions. These decisions are matter of discussion in section 5.2. With these two sections a basic understanding is created of the risk decisions in the banking sector. This basic understanding is necessary to understand the case studies of next chapter and in addition, it allows putting peer monitoring in perspective of the sector. Where the risk decisions in section 5.2 are discussed, section 5.3 reflects on moral hazard in the sector. This section shows how the presence of moral hazard cannot be ruled out in the banking sector in order to show the necessity of peer monitoring. Finally, section 5.4 addresses the findings in this chapter, relevant to peer monitoring and moral hazard.

5.1. **THE SOCIETAL IMPORTANCE OF THE BANKING SECTOR**

There are three different types of banks, i.e. commercial banking, investment banking and universal banking.

Commercial banking is about the traditional tasks of a bank which are related to taking deposits and granting loans (Broos, Carlier, Kakes, & Klaaijisen, 2012; Pond, 2007). These tasks are of social importance as they bring supply and demand of assets together (Broos et al., 2012). These could be assets of consumers as well as assets of companies or governments. Bringing assets together could stimulate the economy in several ways. For example, the mortgages enable people to buy houses and the loan in the SME provides opportunities for employment and development. In addition, commercial banks provide the deposit holders with a safe place to store money and make some return on it.

Next to commercial banks, investment banks are present in the banking sector. Investment banks have, according to Pond (2007), two key activities: 1) underwrite bond and share issues and 2) purchase and sale of issued (second-hand) securities. Furthermore, this kind of banks could be involved in mergers and acquisitions (M&A) and trading activities. This type of banking is characterized by taking risk in own interests.

The third type of bank is the universal bank. Universal banks may offer both the financial services of the commercial bank and execute the activities of the investment banks (Benston, 1994; Koch & MacDonald, 2009). The Dutch banks in the scope of this research are universal banks.

5.2. **ENTREPRENEURSHIP ENTAILS RISK TAKING**

The banking sector is a competitive market (Former Chairman Dutch Banking Association, 2010). Most banks are owned by shareholders and have to compete with other banks to attract savings of deposit holders. In order to provide interesting rates and make profit for the shareholders banks should take risks, for the sake of entrepreneurship. Though, according to the risk specialist Mr. Peeperkorn (2013) entrepreneurship has two sides. These are the sides of stability and profitability; these two sides are depicted in the pyramid of Figure 10 on the next page.

Risk taking affects both of these sides and should therefore be balanced by the entrepreneurial interest of a bank (CFO Executive Board Rabobank, 2010). Risk is considered as the impact of an uncertain event multiplied by the chance that this uncertain event occurs. Now, when the uncertain event turns positive, the risk results into profit. On the other hand, when the uncertain event turns
II Analysis: Peer monitoring arrangements

negative the risk results into a loss and eventually could affect the stability. With strategic behaviour in our mind, it is important to notice that risk considerations are by definition based on estimations since risk is about uncertainty of events. The Executive Board is responsible for the decisions that are being made. Therefore, they are responsible for the trade-off between risk considerations in relation to their commercial efforts and the affection of stability.

The Executive Board determines a risk strategy (Former CEO Executive Board ABN Amro, 2010a), known as their risk appetite (Risk Management consultant and former employee ING, 2013). This strategy should balance the stability of the bank and the profitability of the bank. The strategy is translated by the risk management into a system of limits. Within these limits, the operations department tries to make as much as profit. To make these profits, investments decisions are made that entail risks. The amount of risk that is entailed in an investment is an estimation of the risk taker. The risks resulting from the investment decisions are monitored by the risk management who reports the risk profile of the different risks in the bank to the Executive Board. This risk profile is dynamic as is the market where the risks are taken. The combination of positive and negative resulting investments should be balanced to profits instead of losses.

![Diagram](image)

**Figure 10 Balance between stability and profitability within a bank**

Considering this process the conclusion can be drawn that risks are not static. First a risk decision is taken, successively the market of the risk develops, entailing the developing of the risk. Consequently, either the risk increases and eventually the negative impact is realized, or the risk decreases and the investment turns out in profit. These stages are depicted in figure 11.

![Diagram](image)

**Figure 11 Stages of risk development**

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1 Figure received from Mr. Peeperkorn (Risk Management consultant and former employee ING, 2013)
5.3. **Moral Hazard?**

Risk decisions are made on several levels in the bank, from Executive Board to operational level. Between these levels the information becomes more aggregated and consequently information asymmetry is created. This information asymmetry also consists when it is taken into consideration that risk decisions are based on perception and an estimation of uncertain events. Therefore, there is information asymmetry between the deposit holders, or on their behalf the regulator, and the operations within a bank. Moreover, there is risk sharing since the bank cannot return the deposits when it is bankrupt. In addition, there are conflicting goals between the bank, willing to maximize its profits, and the deposit holder, willing the highest interest rate and safe savings.

Literature discusses that moral hazard cannot be proven, because it refers to information asymmetry and motivations. Still, with the information discussed here one can conclude that moral hazard cannot be ruled out.

The bankers themselves also reflect on these thoughts of moral hazard and their opinion is not unanimous. Here a selection of their thoughts is provided:

"**Thinking about what it does to people, when they could have extreme financial gain, from risk taking with the money of others and not of themselves Then it is more important to change the culture rather than an implement an oath.**" (Commissioner Supervisory Board ABN Amro, 2010, p. 266)

On the question ‘Does moral hazard play a part in the banking sector?’:

"**Yes, it is a part in every organization, also in banks**" (Former member of Executive Board ABN Amro, 2010, p. 411)

In the Dutch banking sector there are not such thoughts about "we will be saved" in contrast with what we learn from the United States in the book of Lehman Brothers. (Former CEO Executive Board ABN Amro, 2010b, p. 256)

"**I’m really wondering if there is a director of a financial institute who thought: I’ll take this risk, because when it fails I will be saved and I’m still at the right place. There are very few directors who are still in place, after nationalization of the bank. Directors experience the consequences of mistakes**“ (Former CFO Executive Board ABN Amro, 2010, p. 387)

"**Investors and traders are working with a limit system. It is in their nature to go the edge. Therefore the limits should be defined crystal clear.**" (CFO Executive Board Rabobank, 2010, p. 51)

Summarized, these statements claim that moral hazard probably plays a part in the banking sector, though not explicitly aiming at the risk of financial distress of a company. The thoughts of the presence of moral hazard in the banking sector are strengthened by an interview with a former employee of ING who states:

"**I can still hear them telling: We have it (eds. referring to risks with mortgages in the housing sector), but when these become a problem, in that case the taxpayer will pay. We just continue.**” (Risk Management consultant and former employee ING, 2013)
5.4. **FINDINGS ON RISK TAKING IN THE BANKING SECTOR**

This chapter shows the need for risk taking from the perspective of the bank. It is a necessity in order to remain competitive. In addition, it is of societal importance that banks keep taking risks and thereby provides rates on deposits and enable people to buy houses.

However, this chapter also shows that these risks decisions are characterised by information asymmetry, conflicting goals and sharing of negative consequences. Consequently the banking sector could be subject to moral hazard. This is claim is substantiated by statements from bankers. The assumed presence of moral hazard indicates the need for peer monitoring.

The societal importance of risk taking and the entailing moral hazard results in two conflicting public interests regarding risk taking. These two conflicting interests should be balanced.

In addition, it is found that risks are not static, but dynamic. Three stages are identified, from risk decisions to the entailing profit or loss. This founding is relevant for peer monitoring, since it raises the question in which stage peer monitoring engages risk, if peer monitoring is applicable.
6. CASE STUDIES

Moral hazard is assumed to be present in the banking sector. This creates the need for effective peer monitoring. It is unknown whether there is effective peer monitoring in the banking sector, since a reflection of peer monitoring in practice is lacking. This chapter is concerned with this reflection, based on a case study. The case study is a secondary analysis based on interpretation of interview reports of Commission de Wit. Commission de Wit is a research conducted by the House of Parliaments, who researched the causes of the crisis and the financial support provided.

The reflection of peer monitoring is structured by four propositions. These propositions contain the ability and the willingness, both necessary, for peer monitoring and are based on the regulatory tasks. For that reason, the observations in the cases are structured by these tasks i.e. setting norms, information gathering, judging and sanctioning. This enables reflecting the propositions on the observations of the cases.

Three cases will be used for this case study, ABN/Fortis, ING and Rabobank. Of these three cases, only Rabobank did not receive financial support, both other cases received financial support of the government. Although the government provides financial support instead of the peers, this was not known in advance. In theory, the peers should have paid for each other. Therefore, despite of the government intervention, these cases are still relevant for research to peer monitoring. The government intervened because it concerned a crisis on a sector level and it appeared that the peers were not able to share the burden without own financial distress. The societal importance of the sector made the government decide to intervene itself and prevent bankruptcies.

Note that these cases focus on the peer to peer relevant details and are not aiming at describing and explaining the crises of the individual cases.

6.1. ABN AMRO / FORTIS

6.1.1. Case in a nutshell

A consortium of three banks acquires ABN Amro. This consortium consists of Fortis holding, Royal Bank of Scotland and Satander. ABN Amro bank is divided into three parts, from which the Dutch branch network accrues to Fortis holding. Fortis holding is an international bank originated in Belgium and consists of a Dutch part, a Belgian part and a part in Luxembourg. With this acquisition of the Dutch branch network of ABN Amro, Fortis becomes one of the biggest Dutch banks. However, before this merger could start some requirements of DNB should be met.

In the meanwhile, Fortis holding start to need financial support, caused by the acquisition of ABN Amro. Fortis Holding counted on market funding, though, due to the crisis this did not succeed. In addition, some incorrect statements regarding the financial position of Fortis decrease the share value of Fortis(Former Executive Board member Fortis SA/NV, 2011; Former vice chairman Fortis SA/NV, 2011).

Eventually, the liquidity reached its bottom and Fortis is split up and bought by the three governments of Luxembourg, Belgium and the Netherlands. All the governments bought the parts active in their own country in 'the weekend of September'. The comment of the European Commission after evaluating the Fortis crisis was: nor the directors of the Dutch part of ABN Amro nor the directors of Fortis Bank NL due to any fault, regarding exorbitant risks.
6.1.2. Regulatory details

Five parties are actively involved in this case. Firstly, ING, Rabobank and ABN Amro were the peers. ABN Amro can be considered as a peer, since the merger was not realized. In addition, there was the Dutch Government, finally saving Fortis and DNB as a vertical regulator.

Setting norms

No information was found regarding the setting of norms in this case.

Information gathering:

For the Executive Board of Fortis NL, the crisis of their bank started as a complete surprise. It became clear at the Friday of ‘the weekend of September’ that they were purchased (Former vice chairman Fortis SA/NV, 2011). It is remarkable that all the peers recognized the troubles earlier than the executive board of Fortis NL. ABN claims to known at the moment they were purchased that Fortis did not have enough capital for the purchase (Former CEO Executive Board ABN Amro, 2010a). ING contacted DNB about Fortis in the weekend before the purchase. This is a week earlier than Fortis notices itself (Former chairman Supervisory Board ING, 2010). Rabobank was worried about the healthiness of Fortis, late summer 2008. They communicated these worries with DNB. They communicated intensively regarding this situation with DNB (CFO Executive Board Rabobank, 2011).

Rabobank saw the inflow of saving money from Fortis as a signal of the troubles. This inflow was several billions of Dutch saving money. “Based on (partial) public information the origin could be located to Fortis” (CFO Executive Board Rabobank, 2011, p. 3). ABN received a similar signal. The customers of Fortis withdrew their money. The cash machines needed to be filled twice a day, instead of once. It appears that these outflows were related to the customers of Fortis (Former Executive Board member ABN Amro, 2011).

In the weekend of purchasing ABN Amro/Fortis by the governments, the peer banks went to a dataroom to see whether Fortis could be saved by the help of peers. In this dataroom, the seriousness of the situation became clear for ING. In the dataroom, the size of the liquidity problem was shown (Former chairman Supervisory Board ING, 2010).

Rabobank blames the Executive Board of Fortis and the Regulators (especially Belgian regulators, since Fortis was a Belgian bank), as Rabobank argues that these troubles did not come out of the blue (CFO Executive Board Rabobank, 2011). However, according to the observation of Mr. Kloosterman (Former Executive Board member Fortis SA/NV, 2011), the level of information available at DNB was excellent the whole time.

Judgement

As observed in the information gathering, Fortis NL did not foresee the problems coming. A member of the audit committee of Fortis states that as long as the rules were kept, there was no alarm (Commissioner Supervisory Board ABN Amro, 2010). According to Fortis, they met all the requirements of DNB (Former CEO Executive Board Fortis NL, 2011). This statement points to an approach of ‘as long as the rules are kept, we are safe’. Next to these rules, Fortis even checked the status of subprime with a befriended expert in the USA and they were reassured that subprime was no problem for economy (Former vice chairman Fortis SA/NV, 2011). They saw themselves actively involved in judging their own financial situation.
ABN Amro, who before the acquisition was sure that the acquisition would result in financial distress completely trusted on the judgement of DNB. As they argue: “DNB extreme carefully analysed the positions of Fortis” (Former CEO Executive Board Rabobank, 2010, p. 428).

The judgement of Rabobank changed over time. During the acquisition, Rabobank trusted Fortis. Otherwise, they would never make 10 billion euro’s available to Fortis regarding the acquisition (CFO Executive Board Rabobank, 2011), in the start of autumn 2007. However, as shown in the information gathering paragraph, Rabobank alerted DNB about troubles at Fortis. In the judgement of Rabobank intervention was absolutely necessary. Mr. Bruggink and Mr. Heemskerk explicitly communicated this to DNB. This communication took place before ‘the weekend of September’ (CFO Executive Board Rabobank, 2011). Rabobank was afraid for a bank run, based on their information.

According to Mr. Bruggink, the interest of sharing doubts with DNB regarding the healthiness of Fortis was twofold. At the one hand it was self interest of Rabobank, served by a stable financial sector. At the other hand, the interest of the country in a stable financial sector was part of the motivation to ring a bell at DNB (CFO Executive Board Rabobank, 2011). A same motivation could be found by ING, were Mr. Hommen states: “If a peer is in trouble, it is good to think about how you could help him”(Former chairman Supervisory Board ING, 2010, p. 3). Providing support is motivated by an own interest in the stability of the system and the interest of the peer.

In ‘the weekend of September’, when the troubles already were recognized by Fortis, Rabobank and ING were requested by DNB to travel to Brussels. Their assignment was to see whether they could keep Fortis in the market (by acquisition or in combination with other banks) (CFO Executive Board Rabobank, 2011). ING, Rabobank and several others visited the dataroom of Fortis to see whether they had the opportunity to save anything (Former vice chairman Fortis SA/NV, 2011). During this weekend, several phone calls were made between ING and Rabobank to discuss whether they could acquire Fortis/ABN together (CFO Executive Board Rabobank, 2011). Returning from Brussels, the conclusion was that the troubles were too big for a single bank, or even for a combination of banks. Government intervention was the only possibility to their estimation (CFO Executive Board Rabobank, 2011).

Sanctions
The peer banks did not directly sanction Fortis for the risk taking, even though the peers communicated their views on the healthiness of Fortis to DNB. They asked DNB to intervene. Both Rabobank and ING (Former chairman Supervisory Board ING, 2010) communicated their worries to DNB.

In the end, the estimation of government intervention as only possible outcome becomes truth. Rabobank notes that if intervention would have happened earlier, the possibility that other banks were able to recover Fortis would have been much larger. After Lehman Brothers defaults, the market was tense. A bank with less liquidity was much less attractive to acquire, and ten days could make a world of a difference (CFO Executive Board Rabobank, 2011).

A sanction that becomes clear in the case of Fortis is market discipline. The market did not trust Fortis, partially because of the distribution of incorrect information by others. This decreased the degree of freedom of Fortis drastically. As Mr. Hessels stated: “The market does not want complexities in these tense times, ... The market rather have five others than you” (Former vice chairman Fortis SA/NV, 2011, p. 14).
6.1.3. Other relevant findings for the ABN Amro/Fortis case

From the case study of ABN Amro/Fortis, three general comments require attention regarding peer monitoring. First of all, it was the former CEO of ABN Amro who critically reflected on the strong disciplinary power of the market. He started ambitious and stated that ABN Amro should become one of the top five banks, while he knew the top ten was pretty good. When he did not reach his target of top five, the complete bank did not function according to the market (Former CEO Executive Board ABN Amro, 2010a). This statement shows that negative information directly reflects on the position of the bank in the market. In addition, the market proves itself sensitive for details. This strengthens the already existing presumption about the strong discipline of the market, based on the effects of the incorrect information in the case of Fortis.

Secondly, Mr. Van Rutte mentioned a guarantee scheme during his interview (Former CEO Executive Board Fortis NL, 2011). This was a scheme introduced by the national government to easily provide banks with liquidity, since the market was lacking liquidity. Van Rutte states that he does not know whether other banks were in crisis without this guarantee scheme, because he could not look into their books. Though, he has some presumptions, he does not find it appropriate to guess (Former CEO Executive Board Fortis NL, 2011). Two conclusions can be drawn based on this statement. First of all, Van Rutte states that there is information asymmetry amongst the banks. Secondly, Van Rutte makes guesses regarding the healthiness of other banks, despite of this information asymmetry.

Finally, the guarantee scheme was an instrument to help banks, but nobody wants to use it because of the signal to the market. Again, the disciplinary power of the market is reaffirmed.

6.1.4. Findings ABN Amro/ Fortis case

The observations in this case result in several findings regarding the ability and willingness of banks to regulate one another. First of all, peers do not have detailed information about the financial position of others. Nonetheless, they think they are able to judge about the financial position of others, based on signals. Fortis itself was the latest to recognize the trouble they were into, though the peers also only recognized the troubles in the latest stage, right before the financial distress.

Secondly, the functioning of the vertical regulator in the horizontal regulation is remarkable. First it is stated that, since all requirements of DNB are met, it was not known there was a problem. This indicates that the responsibility of DNB is used as a kind of protection. In addition, after judging the signals by Rabobank, again DNB was included in the horizontal regulation to enforce financial stability. Consequently, the conclusion is drawn that DNB is the regulator that should maintain the stability in the sector. The existence of this vertical regulator influences peer monitoring. More specifically, peer monitoring is depending on DNB.

The final finding in this case is the disciplinary power of the market. A false statement about the situation of Fortis influenced the share value and the statement became a self fulfilling prophecy. This market of trust can be influenced by small signals and consequently banks act in caution regarding any communication.

Summarizing the findings:

- Peers do not have detailed information about the financial position of others. The peers received signals in the latest stage, right before the financial distress was a fact.

- DNB is the regulator, the existence of this vertical regulator influences peer monitoring. More specifically, peer monitoring is depending on DNB.
The capability of peer monitoring to manage moral hazard

- The banking sector knows a strong market discipline. The financial sector is based on trust and the market is sensitive for all kind of information. Negative information could result in distrust and finally in financial distress.

6.2. ING

In the ING case study most information about their crisis is coming from ING itself. This makes it difficult to see how peers thought about and act on ING. This case study therefore elaborates on the perspective of ING after discussing the case in a nutshell and the regulatory details.

6.2.1. Case in a nutshell

ING group invested in the USA with ING Direct USA, a direct bank with a relative low cost profile. This low cost profile makes it possible to attract much savings using attractive interest rates. In addition, ING Direct USA invested in Alt-A mortgages. These mortgages were triple A rated by the rating agencies. ING had a lot of these mortgages and argued that, because there were multiple mortgages in a single product, the risk diversification was higher and consequently the total risk lower.

The rating of risks and the amount of issued capital determines the required capital position in order to control the risk. Since these Alt-A-mortgages were triple A rated, the required capital was only a small percentage. When, after the fall of Lehman Brothers, the ratings of risks drastically decreased ING was required to increase their capital position. ING was not able to attract that amount of capital and therefore was in need of financial support of the government, i.e. 10 billion euros were lent.

6.2.2. Regulatory details

In the case of ING there are no explicit claims or statements available of peer banks that argue the behaviour of ING. However, there are a few things that could be noticed.

Setting norms

No information was found regarding the setting of norms in this case.

Information gathering

Rabobank undertook some actions to the market signals in 2007. When, during the interviews, this is stated to ING, ING mentioned: "I cannot assess Rabobank well but we also take some actions regarding the signals of 2007" (CFO Executive Board ING, 2010, p. 153). This reveals something regarding the information gathering amongst peers. ING claims to not have an overview of actions of Rabobank. This makes clear that either there was no attention to Rabobank and ING was not willing to monitor the actions of Rabobank, or there was attention to Rabobank, though ING was not able to monitor the actions of Rabobank. Which of those two is true is not clear. However, one of the two should be and both are negatively influencing the effectiveness of peer monitoring.

Judgement

In their judgement of risks ING focused on the ratings of rating agencies (Former CEO ING Direct (USA), 2011). Rabobank claims that they use in parallel their own ratings, since rating agencies should not be overestimated (CFO Executive Board Rabobank, 2010, p. 48).

In addition, in the first report of commission de Wit (Commissie de Wit, 2009) it is stated that ABN Amro retreated from the housing market in the USA, based on the complexities of the
products and because “we saw strange things happening in this market” (Former member of Executive Board ABN Amro, 2010, p. 413). This could be interpreted as a different risk perception and consequently a different judgement about this market between ING and ABN Amro. However, there is no information available that ABN Amro discusses with ING what they were doing on that market.

Finally, the guarantee scheme as already discussed in the Fortis section. ING also mentions the fear for market interpretations as a reason to not use this scheme (CFO Executive Board ING, 2010). In the end, the specially developed guarantee arrangement was used by ING, after the ministry of Finance ’suggested’ they could use it (CFO Executive Board ING, 2010).

Sanctions
No information was found regarding sanctions in this case.

6.2.3. Perspective of ING
Next to these regulatory details, the perspective of ING shows that they see themselves as victim of the system. They argued to have a prudential investment strategy and that their crisis was a complete surprise.

Prudential strategy
Several board members and commissioners claimed that they agreed on a very prudent risk approach, and that they kept this agreement (Former CEO ING Direct (USA), 2011). In their opinion, their crisis had nothing to do with excessive risk taking. Mr. Timmermans stated: “We are not a spectacular investment bank gaining money by excessive trading. Even the modest trading we did, did not result in losses overtime” (CFO Executive Board ING, 2010, p. 154). Though, this statement is done in comparison to the investment banking in the USA, which could also say more about USA investment banking rather than about the level of excessive trading of ING. In the advantage of their claim of a prudential strategy is that ING had set internal in cooperation with the Supervisory Board norms in addition to the norms of DNB (CFO Executive Board ING, 2011).

One of the causes of the ING crisis was the Alt-A mortgage. According to their judgement, this was a prudent strategy because “The first 15% of the losses are for others. Consequently before ING achieves credit losses a decrease of 50% of the house prices is necessary and 1/3 of the house owners should stop paying their mortgages” (Former CEO ING Direct (USA), 2011, p. 22). Therefore, this Alt-A mortgages were assessed as prudent risks. In addition, these Alt A mortgages had a comprehensive potential (Former CEO ING Direct (USA), 2011; Former chairman Capital Management ING, 2011). ING could even explain why they could jump into this gap in the market, and others could not. They argued that there was a lack of liquidity in the market and ING was one of the few parties that had enough liquidity (CFO Executive Board ING, 2011). Therefore, they thought they were in luck with this gap in the market, instead of taking enormous risks in own interest. For ING, it was a solid story and a prudent strategy.

Surprise!
ING underestimated the risks they had taken and therefore did not expect they could end up in a situation of financial distress. According to them, the bank was healthy (Former chairman Capital Management ING, 2011). In the years 2006 and 2007, ING was overcapitalized (Former chairman Capital Management ING, 2011). Suddenly, this decreased in 2008. In addition, ING was trusting on
The capability of peer monitoring to manage moral hazard

the Credit Rating Agencies (Former CEO ING Direct (USA), 2011). These specialized parties rate their investments with triple A. Worries were unfounded. ING was not aware of their own financial position, which becomes clear in two examples. First, in the crisis of Fortis, ING made an offer to acquire Fortis. When they had known their own financial position, they would not have considered this offer. Second example is the buy-back of shares. ING did a buy-back of shares, an investment of 5 billion euros. This happened only a few weeks before ING was in need for financial support.

Victims of the system
The buy-back of shares was executed because they felt compelled. Buy-back of shares was a way to get the cash out of the company, under pressure of the market (CFO Executive Board ING, 2011). The market was afraid this cash would be used for an irresponsible acquisition. By this assumption, the trust in ING decreased which affected the market position of ING.

ING board members confirmed that this market assumption was realistic, “if we had the cash, we would have acquired more” (Former chairman Capital Management ING, 2011, p. 18). In the end, the buy-back was rather unfortunate, though, it shows the power of the market.

6.2.4. Findings ING case
The observations in this case result in several findings regarding peer monitoring. This case strengthens the finding of the Fortis case that peers do not have detailed information about each another. The case shows, in addition, two different behaviours amongst peers regarding judgements. ABN withdrew from the housing market in the USA, where ING saw an opportunity. ING trusted on rating agencies, were Rabobank was more cautious and reflected with its own ratings. Basically, this shows differences amongst banks on the value of information and different perceptions towards risks resulting in different risk judgements.

The perspective of ING on their financial distress also results in several findings, relevant to peer monitoring. First of all, the perspective of ING shows that risk control starts in the bank itself. It is difficult to monitor peers who do not know their own risk profile. Such a bank sends wrong signals, that do not lead in the direction of problems. Another finding, based on the perspective of ING, is the reinforcing of the disciplinary power of the market. However, the ING perspective shows that this power does not only create caution with information. The market was an incentive for ING to lower their liquidity, which decreases the stability of the bank. The market contributes to less stable financial institutes.

Summarizing the findings of this case:
- Risk information could result in different risk judgements, caused by different risk perception and different assessments of the value of information.
- Risk control starts in the bank itself. When the bank does not know its own risk profile, it could send signals that are not representative of the real risks of a bank
- The market does not only create caution with information, but could also encourage risk taking
6.3. **Rabobank**
Rabobank is the third case. Rabobank did pass the crisis intact; there was no need for financial support of others. Therefore Rabobank is qualified as a good example of how it could work. However, it is arguable whether this positive example is caused by effective peer monitoring, since this could not be proven.

6.3.1. **Case in a nutshell**
Despite of identifying the crisis in an early phase and having a moderate risk profile, Rabobank lost several billions of euros due to the crisis (Commissie de Wit, 2009). These losses were a result of the decreasing economy and 500 million regarding portfolios that included a part of subprime-mortgages. Rabobank recognizes that their risk models had shortcomings and were not able to predict this kind of scenarios. Despite of these losses, according to the two largest rating agencies, Rabobank was still the only triple A rated bank in the world (CFO Executive Board Rabobank, 2010). Government bailouts or other banks were not necessary to navigate Rabobank through the crisis.

The structure of Rabobank is different compared to most other banks. The most important difference is the cooperative part, which entails that the deposit holders are at the same time the shareholders. In addition, Rabobank is a conservative bank regarding the liquidity position and capital requirements (CFO Executive Board Rabobank, 2010). They argue that these two factors helped them not getting in the need of financial support.

No further information is available regarding the regulatory tasks executed by peers to monitor Rabobank. This does not necessarily mean that Rabobank did not receive any signals of peers. However, it is concluded that Rabobank has a moderate risk profile compared to other banks. This provides the other banks with little arguments to correct Rabobank on their risk decision. This line of reasoning could argue that Rabobank did not receive peer monitoring signals, since peers were not in the position to regulate Rabobank.

6.3.2. **Regulatory details**

**Setting norms**
No information was found regarding the setting of norms in this case.

**Information gathering**
Rabobank identified the start of the financial crisis in August 2007, when there was a week of illiquidity occurred (Commissie de Wit, 2009). Based on this historical event, Rabobank decreased their exposure at several markets (CFO Executive Board Rabobank, 2010). It could be argued that the retreating movement of Rabobank is an implicit warning for the other players in the field. Mr. Bruggink (CFO Executive Board Rabobank, 2010) argues that he could not assess whether peers had taken too many risks. He claims with hindsight that it is clear that other banks had taken more risks. Otherwise the peer banks would not have been in need of financial support.

Based on the signals during August 2007, Rabobank was not surprised by the bankruptcy of the Lehman Brothers in 2008. In fact Mr. Bruggink stated: “Now it was Lehman Brothers, though, it could also be another bank. Seeing the preliminary process, a turnover was almost unavoidable” (CFO Executive Board Rabobank, 2010, p. 45).
Judgement
No information was found regarding judgements in this case.

Sanctions
After putting their worries about Fortis at DNB, Rabobank rest their case. They argued that it was the responsibility of DNB (CFO Executive Board Rabobank, 2011). Their job was done. Rabobank received no reactions from DNB on their request to intervene (CFO Executive Board Rabobank, 2011), more precisely Rabobank did not even know how their request was taken into account.

Somewhere in June or July, Rabobank sent a letter to DNB, where they state that a few international banks and a national bank active on the savings market had a high risk profile. They appointed that the DGS was in danger and banks like Rabobank and ABN had to pay when these high risk profile banks would defaults (Former CEO Executive Board Rabobank, 2010). Rabobank did not name specific banks in this letter. The letter claimed that it was the duty of care of DNB to protect the bigger banks. When was asked why Mr. Heemskerk did not name the banks with a high risk profile he answered with: “I would never name them in advance” (Former CEO Executive Board Rabobank, 2010, p. 221). This letter is answered by DNB with the notion that they will look into it. In the end, two of the banks that Rabobank kept in mind during writing this letter defaults, a national bank and Icesave (Former CEO Executive Board Rabobank, 2010). Mr. Wellink has tried to call Icesave to order, but this communication was difficult since the relationship between DNB and Icesave knew the Central Bank of Iceland as intermediary. This central bank was responsible for Icesave (Former CEO Executive Board Rabobank, 2010).

6.3.3. Findings Rabobank case
Although there are no specific findings on peer monitoring received by Rabobank, this case was useful in peer monitoring signals sent by Rabobank. The first finding, in line with the previous cases, shows that Rabobank also claims they are not able to gather detailed information of peers. Though again, Rabobank has presumptions about peers. In addition, Rabobank does not hesitate to communicate their judgement on other banks to DNB. Actually, they insist intervention of DNB. This finding is in line with the finding that peer monitoring depends on the vertical regulator. However, the case also shows that the vertical regulator is not always able to control the financial stability. The communication of Rabobank to DNB shows the willingness to regulate one another. However, Rabobank did not mention the names of the high risk banks in advance, because it is not done to intervene in each other’s business. This example shows a willingness to regulate but with restrictions. This willingness mainly relates to the financial consequence that is shared in case of financial distress.

Summarizing the findings of this case:
• Banks are not able to gather detailed information about peers.
• Peer monitoring relies on the vertical regulator.
• The vertical regulator is not always able to enforce the stability of the sector.
• There is willingness to regulate one another to create a stable financial system, though this willingness is restricted.
6.4. **Conclusion and Discussion Case Study**

This chapter was a first reflection of peer monitoring in practice. The observations were structured by the tasks of a regulator, which in line with the four propositions reflect the effective peer monitoring of literature.

The findings of the case study show that banks do not have detailed information about peers. In addition, peers go to DNB instead of enforcing compliance themselves. This raises the question, whether peers have formal or informal means to enforce peer monitoring. Regarding the propositions concerning the ability of gathering information and sanctioning, the findings of the case study suggest that peer monitoring is not able to conduct these regulatory tasks.

It appears that there is willingness to regulate one another in order to create a stable financial system, though this willingness is restricted. Banks are not willing to name and shame peers, since it is not done to interfere in each others’ business.

So, next to the absence of ability, the case study shows a limited willingness to regulate one another. Hence, the case study shows a limited capability of peer monitoring to decrease moral hazard, though, it does not provide insight in the peer monitoring arrangements and the contextual factors influencing peer monitoring. The case study mentions some factors that are related to peer monitoring, however, an institutional analysis is needed to understand the peer monitoring arrangements and its context. This institutional analysis is matter of subject in next chapters.

The following factors that (could) influence the effectiveness of peer monitoring are mentioned by the case study:

- Peer monitoring is mainly observed in the latest stage of risk development, when risk has already turned negative and had its impact on the stability of the bank. Risk is developing over time. Peer monitoring is not observed in influencing risk decisions that are taken at a bank. Peer monitoring is also not observed in the development of the market. Only when the risks negatively influence the stability of a peer, peer monitoring activities are observed. One could doubt whether this is the most promising stage of active peer monitoring, in order to maintain a stable sector.

- The interaction between peer monitoring and the vertical regulator affects the effectiveness of peer monitoring.

The vertical regulator, DNB, appears to be a key player in the regulation of the banking sector. There are many interactions between peer monitoring and vertical regulation. Case study evidence show that peers are pointing at DNB when regulation should be conducted. Vertical regulation will therefore be discussed in detail in the context of peer monitoring.

- The strong disciplinary power of the market determines behaviour within the market and precaution regarding sensitive information.

The sector seems to be restricted by the market discipline. In the next chapters, some attention is paid to how this affects the effectiveness of peer monitoring.

- Risk control starts in the bank itself

Without sufficient risk management within a bank, a bank does not know its own risk profile. Without this knowledge the bank sends signals into the market that are not representing the risks of the bank. Consequently, peers do not receive representative signals, resulting in the impossibility of peer monitoring to prevent financial distresses.
7. **PEER MONITORING ARRANGEMENTS**

The case study concluded that peer monitoring has only limited capabilities to decrease moral hazard. However, it provides little insight in the peer monitoring arrangements and the barriers for peer monitoring. This chapter explores the peer monitoring arrangements and barriers in the banking sector by means of an institutional analysis. More specifically, the aim of this explorative analysis is to provide an overview of all currently existing peer monitoring arrangements and argues whether peers are able and willing to use these arrangements.

That peer monitoring arrangements can be valuable to the opinion of some participants becomes clear in the statement of Mr. Loudon: *"You should not take away the opportunity of self regulation, because often thieves are best able to solve the problems"* (Former chairman Supervisory Board ABN Amro, 2010, p. 276). In the same line of reasoning, Mr. Blocks argues: *"Sometimes, compared to the legislator, more is possible with self regulation"* (Former Chairman Dutch Banking Association, 2010, p. 282).

The propositions are used to reflect literature into practice. However, contrary to the case study, this analysis is not done on a case basis but at a system level. Therefore, regulatory tasks are used as the outline to discuss these peer monitoring arrangements and barriers. In addition, this institutional analysis entails the fifth proposition concerning the responsiveness of peer monitoring. In the chapters 8 and 9, attention is paid to the context of peer monitoring arrangements. Section 7.1 of this chapter discusses the setting of the norms amongst peers. In section 7.2, the information gathering will be discussed and section 7.3 discusses the judgement of this information regarding the norms that are set. Sanctioning is the matter of subject in section 7.4. Finally, the conclusions will be discussed in section 7.5.

7.1. **SETTING NORMS**

Setting norms amongst peers is most effective if it is done by the peers themselves, according to Mr. Blocks (Former Chairman Dutch Banking Association, 2013). He argues that peers are able to set stricter norms than a vertical regulator could. In addition, the norms fit better to their structures than when officials set the norms. For this reason, most Dutch Banks are in favour of setting norms themselves rather than rules imposed by the government. The fear that the government will impose stricter rules is justified; Commission de Wit states that if this self-regulation does not function, more legislation needs to be considered by the legislator (Commissie de Wit, 2012). This creates willingness to set norms amongst each other.

Next to these arguments, there are three other main incentives for peers that create willingness to regulate one another. First, the Deposit Guarantee Scheme (DGS) could result in burden sharing (DNB, NVB, & Ministry of Finance, 2009). Second, the financial distress of an individual institute could lead to distrust in the financial sector. Lastly, banks are interdependent.

The DGS was originated as an instrument of the banks and DNB to protect the deposit holders for distress (DNB, NVB, & Ministry of Finance, 2009). This shows the willingness of the banks to serve the collective interest of the banking sector in 1966. Currently, the DGS is regulated by law and under the supervision of DNB. DNB will prevent that if a bank should make a donation to the DGS, this donation result in new financial distress of another institutes (DNB, NVB, & Ministry of Finance, 2009). The DGS can only be considered as incentive if banks are known that that burden
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sharing occurs in case of financial distress. According to an employee of DNB, banks are very well aware of this (Division director DNB, 2013). The interdependency amongst banks has decreased since the crisis, according to Mr. Blocks (Former Chairman Dutch Banking Association, 2013). There is less need for mutual loans, since the central bank offers a low rate that is less expensive than mutual loans. Though, interdependencies still exist amongst banks. These incentives strengthen the presumption that there is willingness to set norms amongst each other.

However, the willingness is not only faced by positive incentives. As discussed in chapter 5, the banking sector is a competitive market. When norms are set together, it becomes harder to outperform the competitor. In addition, the competitive character of the banking sector restricts the ability of setting norms amongst banks by means of the Dutch Competition Authority (NMa) which supervises closely the agreements amongst peers (Chairman NVB, 2011; Professor Corporate Finance at Nyenrode Business University, 2013). However, it is not sure to what extent the NMa should restrict norms. Mr. Staal (Chairman NVB, 2011) for example claims that such norms would be absolutely impossible. where Mr. De Wit doubts whether the NMa would restrict all forms of norms (Parliamentarian and chairman of Commission de Wit I and II, 2013).

Another struggle is the internationalization of the banking sector. Some banks operate in the Netherlands but are headquartered in another country. This makes it harder for mutual agreements to be made. Mutual trust in norms is difficult to create within a peer group when some banks are loyal to another country.

Whatever the willingness for peer regulation is, setting norms for risks will always be complicated. Peer monitoring is discussed as an independent variable to decrease the negative effects of moral hazard, i.e. strategic behaviour. However, this moral hazard cannot be ruled out simply by strict norms, but requires relationships and the sharing of interest. In addition, risks will be assessed differently by the different players. Nevertheless, the change that risks causes financial distress can be decreased by strict norms that internalize the effects of negative turned risks. This decreases the problem of moral hazard (Bolt, 1999). Thus, peer monitoring based on norms would be active in correcting peers rather than prevent peers of taking wrong risk decisions.

Recapping, there is willingness in the sector to regulate one another and thus for setting norms. However, this willingness and the ability to set norms are restricted by the competition in the sector. In addition, the ability is restricted by the international character of the sector and by the fundamental characteristics of risks. Because of these restrictions there are currently no norms set amongst peers regarding risk taking.

7.2. Information gathering

Information of a competitor is always interesting, from a strategic viewpoint. Therefore it is assumed that there is always a willingness to gather information about peers. However, whether there is willingness to share information with peers remains unclear. This makes information gathering as regulatory task an issue of willingness to share and ability to gather.

In the analysis, two different perspectives were identified on gathering information amongst peers. The first perspective is formulated by the chairman of the NVB who states: “Information of the banks is strategic information and therefore banks are not sharing their information” (Chairman
In addition, regarding the crisis he states: “If you are sharing your weaknesses, trust in your bank fades away. For that reason, you do not share that information” (Chairman NVB, 2011, p. 3). Mr. Blocks confirms that there is a certain fear to share weaknesses (Former Chairman Dutch Banking Association, 2013). This perspective treats information as strategically relevant in the competitive market. Consequently, there is a reluctance to share information, which of course decreases the ability to gather information.

The chairman of the NVB stated that the crisis and its consequences were not discussed during meetings of the branch organization. This could be explained from the perspective of strategic information. There was fear for distrust by sharing information, this distrust would then increase the distress of a bank rather than control them. This finding is also in line with the finding in the case study about the fear for the strong disciplinary power of the market.

Another perspective is shown by Mr. Hilgevoord. He claims (Division director DNB, 2013) that banks have ample information regarding their peers. Sharing of information is a necessity to function in the market. For example when a bank needs funding for investments. This funding is gathered by requesting investment of companies. These companies will only invest if they trust the investment and the bank. Therefore, the bank needs to be open in their financial situation to gather funding. The usually do this when informing rating agencies and bank analysts as well as the general public when reporting their quarterly figures and their annual report. These presentations are kept at so many places that this information becomes a public secret, also to peers (Division director DNB, 2013). Other sources of information among peers are reports of analysts, analyst conferences and market behaviour (e.g. at the savings market and the SME corporate rates). All these systems and reports provide information about the health of a bank. Banks are looking into this information of peers to see what they are doing.

The sources of information entails that the information is what the banks want to share and therefore contains superficial information. In addition, the information is not about risk decisions, but about currently health of a bank. Consequently, peers only have information about risks that already turned into a loss or a profit and therefore peer monitoring engages in the latest stage of risk development.

These two perspectives do not mutually exclude each other. However, it does not provide a crystal clear view on information gathering. It shows some reluctance to share information, however, at the same time it shows the necessity.

7.3. JUDGEMENT

The third task of the regulator is to judge whether the relevant gathered information agrees with the present norms. This directly entails the complexities of the previously discussed two tasks. The absence of norms and the superficiality of information make judging hard.

Another consideration is that risk is based on estimations and subject to perceptions. Consequently, judging is subject to perceptions. With two different perceptions to the uncertainty of an event, the same risk could be classified from very risky to moderately risky. It is hard to claim to know the truth and thereby it is hard to judge peers.
7.4. **Sanctioning**

When compliance is not obvious, as can be expected in a competitive environment, (the deterrence of) sanctioning is necessary to enforce compliance. Sanctioning will be considered as a rather broad concept, i.e. everything a bank could do to let peers comply. This paragraph discusses the availability of means and the willingness to use means when a peer affects the stability of the sector.

The means can be distinguished in direct and indirect means of a bank to peers. This distinction is depicted in Figure 12.

Formal peer sanctioning can only take place in an institute where the peers agreed in advance on the norms and sanctions. In the banking sector this institute is the Dutch Banking Association. According to Mr. Blocks the only sanctioning method the NVB has is the dismissal of a member of the association. He argues that this is an enormous hard sanction and therefore it is never used (Former Chairman Dutch Banking Association, 2013).

The opportunities for informal sanctioning are also restricted. A first thing that can be used is pressure amongst peers, but the effect can be doubted when no pressure of other sanctioning instruments is present. Furthermore, interdependencies amongst peers can result in the ability to negotiate, which could be used as a sanction. However, it is already argued in the setting of norms paragraph that the interdependencies are decreasing, due to influence of the Central Bank (Former Chairman Dutch Banking Association, 2013), so this sanction would become less and less effective.

Besides the direct means of a peer, there are the indirect means. This is referred to as including a third party with other means or powers in the relation between the peers. A bank could use DNB as third party by addressing the behaviour or decisions of a peer to DNB (Division director DNB, 2013). However, through this way of sanctioning, the peer depends on the judgements of this third party whether actual sanctions will follow. In all of these opportunities, market discipline can be seen as a sanctioning method that can also be addressed as a third party. The trust in a bank and the corresponding value of shares could create a pressure on the Executive Board. The value of the shares is important to the shareholders and to the continuity of the bank. Thus a shadow of hierarchy is created, making the market a powerful instrument in sanctioning. Naming and shaming is thereby a quite rough sanction.

It can be seen that there is a lack of means for sanctioning amongst peers. The sanctions that are present are either very gentle or very hard. The hard sanctions will not quickly be used, and the soft sanctions will not result in the desired compliance since it doesn’t hurts the sanctioned party enough. Consequently, there is almost no responsiveness in the peer monitoring to adjust means to the situation at hand. This is depicted Figure 13,
On top of the limited ability to sanction, the willingness to sanction is also limited. There are three reasons for this. First of all, despite their absence in meetings between peers, experts expect that it is inappropriate to interfere in each other’s business (Former Chairman Dutch Banking Association, 2013; Professor Corporate Finance at Nyenrode Business University, 2013). This expectation is in line with the letter of Rabobank to DNB, were Rabobank did not want to name the banks that took excessive risks (Former CEO Executive Board Rabobank, 2010).

Secondly, the willingness to sanction relates to the competitive relation amongst peers. As Mr. Hilgevoord stated: “If a competitor walks into the swamp, you usually do not warn him” (Division director DNB, 2013). The mistakes of competitors could create entrepreneurial opportunities for peers.

Finally, peers have to be very careful in sanctioning peers. The disciplinary market is already named as an important potential influence and it also affects sanctioning in peer monitoring. If it is known that a bank is sanctioned by peers, the trust in a bank could go down. The market discipline could transform the gentlest sanction of peers into a hard sanction. Consequently, the sanctioned bank will get into trouble and the problems only get worse. If a sanction aims at improving the financial stability of a peer, market discipline decreases the willingness to use a sanction.

7.5. FINDINGS AND DISCUSSION

Banks share the common interest in a stable financial sector and are interdependent. In addition, banks are sharing the financial consequences when risks result in financial distress. Hence, there is a willingness to regulate one another and take care for a stable financial sector. However, no norms are set, due to the limited ability. The limited ability is a consequence of the competitive market and the entailing Competition Authority.

Due to fear, banks are reluctant in information sharing, especially in sharing their weaknesses. However, the activities in the market force some information sharing. This explains the finding of the case study: there is no detailed information available, but peers receive some signals and presume to be able to judge each other’s financial position.

The ability and willingness to sanction is limited. There is a lack of instruments. Consequently, the responsiveness of peers to regulate one another is limited. The current instruments result in too gentle or too hard sanctioning. In addition, the market could turn every sanction into a hard sanction.

Resulting, there are limited peer monitoring arrangements, decreasing the ability for peers to regulate one another. Regarding the willingness can be state that there is some willingness to
regulate one another and set norms, though this willingness is disappeared when peers have to sanction one another.

The main findings of are thus:

- There is willingness to regulate one another, though there are no norms due to limited ability to set them.
- There is information asymmetry between peers, since banks are reluctant in sharing information.
- There are very few instruments to sanction. Peers relying for sanctioning on third parties.
- It is not done to intervene in each others’ business
8. **CONTEXT OF PEER MONITORING: VERTICAL REGULATION**

This chapter is a part of the institutional analysis regarding peer monitoring. This chapter is the first chapter discussing the context of peer monitoring, and here the interactions between peer monitoring and vertical regulation are discussed. These interactions are depicted in Figure 14. The next chapter, chapter 9, discusses the other contextual factors influencing peer monitoring.

The vertical regulator is the Dutch Central Bank (DNB). DNB is responsible for the prudential regulation of all the banks in the Netherlands (Algemene Rekenkamer, 2009; Commissie de Wit, 2009). DNB’s authority to regulate the financial sector is provided by law (Wet op het financieel toezicht, 2006). This includes identifying risks, discussing these risks and if necessary intervening in these risks (Commissie de Wit, 2009). Vertical regulation is empowered by the national government to maintain financial stability in the banking sector (Ministerie van Financiën, n.d.).

Several interactions between peer monitoring and the vertical regulator were observed in the case study. This shows that vertical regulator is influencing peer monitoring, therefore vertical regulation is an important contextual factor, when peer monitoring is analyzed.

This chapter uses the structure of the regulatory tasks, consequently the structure of discussion is settings norms (8.1), gathering information (8.2), judgement (8.3) and sanctioning (8.4). In all tasks, the relation to peer monitoring will be discussed.
8.1. Setting Norms

If norms are kept by every actor in the field, the banking sector should be financially stable. This is a fundamental characteristic of any effective norm. As became clear, tough, peer monitoring is lacking norms. Thus, the norms imposed by vertical regulation are the only applicable norms in the sector.

This paragraph addresses three issues regarding these norms. First, it is the legislator that set the norms, rather than DNB. Secondly, the changing importance of the norms is discussed. Finally, the applicable norms are discussed.

The legislator set the norms. The legislator, i.e. the House of Parliament, has put all the relevant regulation in the Law on Financial Supervision (Wet op het financieel toezicht, 2006). These are in line with the advices of the Basel Framework. The Basel Framework is designed by the Basel committee (see appendix B), staffed by the national vertical regulators (Commissie de Wit, 2009). Although officially this committee does not have supranational powers, most of their advice is adopted by governments (Commissie de Wit, 2009). It is also the advice of the DNB to follow this Basel Framework. More specifically, the advice is to not set norms stricter than the Basel Committee advices. Stricter norms would decrease the competitiveness of the banking sector in an international perspective (Commissie de Wit, 2009).

The regulation is adjusted year by year. The branch organization and DNB have the ability to advice in these adjustments. The NVB has the specific market knowledge required for formulating the new regulation as they can oversee the consequences of new regulation. This provides the NVB with a powerful position to negotiate about new legislation. However, this power can only be used if the banks are able to reach consensus, since the NVB have to act on behalf of the whole sector (Former Chairman Dutch Banking Association, 2013). The DNB is advising the Council of State and the Ministry of Finance every year about improvements and changes in the legislation. These changes help DNB to execute their tasks in a dynamic system, since they are responsible for enforcing this regulation.

Whatever norms are being set, informal relations can always influence the importance of these norms. Mr. Blocks mentions that in former times DNB had relationships with the banks they monitor based on trust. Whenever DNB demanded something, even without a legal basis, banks would still grant their co-operation. Demands of DNB were law (Former Chairman Dutch Banking Association, 2013). However, in 2004, DNB merged with the pension- and insurance authority. From that time, DNB was also responsible for the financial stability of the pensions and insurance institutes. The pensions and insurance institutes could not know that DNB demands were law so they did not co-operate without a legal basis. This changed the way of working of DNB to a much more formal based approach, rather than an informal relationship based approach (Former Chairman Dutch Banking Association, 2013). Norms were getting more and more important.

Regarding the applicable norms, it is important to know that the Basel Framework knows three pillars (Algemene Rekenkamer, 2009), as depicted in Figure 155. The first pillar contains the capital requirements. These requirements aim at increasing the ability of a bank to deal with losses in their risk taking. More specifically, the focus is on mitigating risk by internalizing the consequences of losses, rather than prevent excessive risk taking. The second pillar discusses the regulator. The regulator should focus on four main issues: organization and control (internal risk management),
solvability and solvability management, liquidity and liquidity management and integrity of business (DNB, 2005). These four issues contain some strict norms and some soft norms (DNB, 2010a, 2012).

In the third pillar, the Basel Framework aims at including the discipline of the market in the regulation. The core of market discipline in the regulation framework is information disclosure (Algemene Rekenkamer, 2009). The regulator decides what information should at least be disclosed. It is assumed that the function of this disclosure is that it creates a natural pressure on the bank to perform. (Algemene Rekenkamer, 2009) An example of natural pressure is that subordinated deposit holders demand higher interest rates (Chen & Hasan, 2011; T. F. Hellmann et al., 2000)

![Figure 15 Basel II framework (adapted from (Algemene Rekenkamer, 2009))](image)

The first two parts of this section have shown the dependency of DNB on legislation. DNB was responsive before the merge with the pensions and insurance institutes, but the responsiveness decreased when DNB was restricted to stick with the formal norms. Peer monitoring is also affected by this restriction on DNB, since they rely on DNB in executing the tasks.

Two points of attention were found in the norms of the Basel Framework. First of all, the requirements focus on mitigating taken risks and not at preventing moral hazard. Secondly, market discipline is mentioned as an opportunity for regulation. For peer monitoring, however, market discipline has only been seen so far as a limitation. Here it becomes clear that the forced openness by DNB could also provide information amongst peers and thereby decreases the information asymmetry. Consequently, this aspect of market discipline enlarges the ability of peer monitoring.

8.2. INFORMATION GATHERING

It was found that peer monitoring arrangements struggles with the strategic sensitivity of information. This section describes the abilities of the vertical regulator in the field of information gathering and how this influences peer monitoring.

According to Mr. Zalm, former minister of Finance, DNB has unlimited access to any information they require from the banks necessary for regulating the sector. Because this also contains strategic information, DNB guarantees strict confidentiality (Former Minister of Finance, 2013). This is how the problem of strategic importance of information in peer monitoring is dealt with in the vertical regulation. The information requested by DNB entails policy meetings and periodical electronic
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reports. In addition, DNB researches business processes and performs theme-focused research (Algemene Rekenkamer, 2009).

Although, DNB has the ability to request information, this does not result in complete transparency between bank and regulator. All the information requested by DNB are provided by the regulated bank. Consequently, the received information by DNB is already biased with the perception of the risk taker. These risk takers, the banks, have the tendency to underestimate the risks. Therefore, in order to prevent these risks from being underestimated, the risks are monitored by an external auditor. The external auditor negotiates the total risk value of the bank. (Mr. Peeperkorn mentioned that this statement probably will be denied by external auditors). In this way, this information gathered by DNB is slightly more valid (Risk Management consultant and former employee ING, 2013).

In addition, the ability to monitor the behaviour of the bank is limited, because manpower is limited. DNB only has 15 men available for the systematically important banks. For comparison, the internal audit department of ING consists of 400 auditors (Risk Management consultant and former employee ING, 2013). Because of this, the regulation uses a risk based approach focused on major risks of the bank. The information gathered relates to these risks. It is impossible to monitor all risks of a bank, but this risk based approach enlarges the efficiency and thus the capacity of the regulators (Algemene Rekenkamer, 2009).

A last reason why no complete transparency is achieved is because DNB also needs to interpret data. This interpretation is difficult for DNB as a regulator, since they are not active in the market. This becomes clear, for example, by the fact that the central banking part of DNB informs the supervision part of DNB, when strange behaviour or prudential risks are noticed in the financial markets (Division director DNB, 2013).

The transparency between the risk taking activities of a bank and DNB appears to be less optimal than assumed, based on the statement of Mr. Zalm. This creates a necessity for peer monitoring to regulate one another, since case study shows that peers have the knowhow to interpret information. In addition, peers cannot fully rely on DNB regarding stability of the sector, since DNB also struggles with imperfections and information asymmetry. That peers are aware of this can be seen by how they behave. If a bank notices remarkable behaviour of a peer, the bank can inform DNB to take a closer look at it. Mr. Hilgevoord confirms that the Dutch Central Bank has meetings with the NVB. During these meetings banks sometimes discuss (most times absent) behaviour of peers (Division director DNB, 2013). Here, peer monitoring and DNB work together to keep the financial sector stable.

8.3. Judgement

DNB is restricted in its judgement. The set norms are their only basis to rely on. Whenever the norms are kept, DNB’s judgement should result positive. In fact, DNB can be sued for their behaviour if they unlawfully restrict banks in their entrepreneurship. This restricts the flexibility of DNB in regulating the sector (President Dutch Central Bank, 2010). If DNB was safeguarded for human mistakes they could more easily intervene according to Mr. De Swaan (Former CFO Executive Board ABN Amro, 2010).

DNB has more detailed information regarding banks than peers in order to give a correct judgement. This could create unexpected outcomes for peers. In fact, peer banks do not even see
the outcome of regulation conducted by DNB. For example, Rabobank encouraged DNB several times to sanction peers. However, because of the confidentiality between DNB and the bank in question, Rabobank did not receive feedback on their claims. When there is no feedback, it is hard to improve a system. In addition, it could discourage and thereby, decreasing the willingness of peers to regulate one another.

In addition, it could be argued that for determining the net risk of a bank one need specific sector knowhow for interpretation. There is assumed that peer banks have this ‘tacit knowledge’ and the external regulator, DNB, does not have it.

Summarizing the above, a judgement by DNB is made with the prospect of possible problems in case of mistakes. This judgement is, for that reason, restricted to just match the information to the norms set by the legislator. However, the net risk should be determined with tacit knowledge, which the vertical regulator probably lacks. In the end, because of confidentiality judgement, no one sees the outcome of the judgement.

This judgement is important for peer monitoring, since the peers rely on DNB. However, this section argues that peers are not involved in the judgement and they do not see the outcome of the judgement. Consequently, peers could only provide DNB with the best information and the concerns they have about peers. There are no other instruments for peer monitoring to influence vertical regulation. It basically comes down to: put information in a black box without seeing the outcome.

8.4. SANCTIONS

Peer monitoring is lacking instruments for sanctioning. This creates the demand for another actor with the ability to sanction. DNB appears to be able according to the Dutch Court of Audit, who describes in a report the following instruments for the DNB (Algemene Rekenkamer, 2009): Indication, Appoint Trustee, Emergency Scheme, and others like prohibition of activities and transactions, dismissal of the auditor, cease and desist, administrative penalties, public warnings, deletion of license. These sanctions are also named in the annual report of the DNB (2009), listed as allowed measured to use by law (DNB, 2010b).

In addition, from experience with DSB and SNS it is known that also the intervention law and a haircut provide possibilities to DNB to keep the financial system stable. A haircut adjusts the underlying value of a bank, directly influencing a bank's financial position.

From this enumeration it can be concluded that DNB has instruments at all levels, i.e. gentle instruments to show the necessity of adoption up to emergency regulation and deletion from the register. In addition, from DNB’s handbook regarding supervision it becomes clear that these sanctions can be a result of negotiation (DNB, 2005). This negotiation provides opportunities for responsive regulation and balance between deterrence and compliance. However, the crisis has shown that DNB was not responsive enough with their instruments at that time. Mr. Bruggink: “There is the feeling that the external regulator (DNB) does not have the means to intervene in an early stage. ... The regulator need more means to intervene in an early stage” (CFO Executive Board Rabobank, 2010) and in line with these thoughts, also Mr. Heemskerk of Rabobank concludes that the means of DNB were insufficient to call Icesave to order (Former CEO Executive Board Rabobank, 2010). The same conclusions regarding the measures of DNB during the crisis were drawn by de Wit (Parliamentarian and chairman of Commission de Wit I and II, 2013). In order to improve the means to intervene, the legislator provided the intervention law. This intervention law enlarges the
II Analysis: Context of peer monitoring: Vertical regulation

responsiveness of DNB by creating better tailored measures (Former Chairman Dutch Banking Association, 2013; Parliamentarian and chairman of Commission de Wit I and II, 2013).

Apart from sanctioning, there are more considerations DNB has to take care of. Mr. Zalm states: “DNB has to intervene or do nothing, but public action is unthinkable” (Former Minister of Finance, 2013). What he made clear with this statement is the importance of trust and the strength of the market. When DNB uses a public sanction against a bank, the trust in that bank can disappear. The effect of market discipline could transform the sanction into a harder sanction than intended. Therefore, everything happening between DNB and a regulated bank is, again, confidential.

Peer monitoring is lacking instruments for sanctioning, though, DNB has those instruments. The fact that there is an regulator with the ability to sanction, provides opportunities for peer monitoring to address this third party to sanction. However, one should keep in mind that sanctioning is a product of all the regulatory steps that all the regulators perform by themselves. Therefore, DNB’s ability of sanctioning is not regarded useful for peer monitoring.

8.5. FINDINGS AND DISCUSSION

This chapter shows that there are several interactions between peer monitoring and vertical regulation. Peer monitoring is lacking ability to regulate one another and therefore influences the vertical regulation where possible. Banks lobby to influence the norms, they provide information to DNB and they request sanctioning for peers. Moreover, the specific knowledge of the banking sector can be a valuable addition to vertical regulation, since peers are able to interpret information and DNB is less able to conduct this task.

However, although peers influence the vertical regulation where possible, how their input is treated depends on DNB. There are no guarantees that their input is used. Consequently, conducting regulatory tasks cost a bank some effort without knowing whether their input is used. In addition, DNB is kept responsible for the stability in the sector and not the peers. Combining the unknowing whether input is used and not being responsible for regulation resulted in a decrease of willingness among peers to regulate one another. This decreased willingness also substantiates the observed behavior in the case study, where in several occasions the peers kept DNB responsible and require protection against peers, rather than enforce compliance themselves.

Furthermore, the confidentiality between DNB and the banks decreases the ability of peers to monitor the treatment of their input. Furthermore, it became clear that DNB is restricted in its degrees of freedom, as it is tied to legislation. Hence, the responsiveness of this indirect peer regulation is limited.

Summarizing these findings:

- Peer tries to influence vertical regulation and thereby regulate one another. It is considered as a kind of indirect peer monitoring.
- The existence of the vertical regulator decreases the willingness to regulate one another, since there is someone else responsible for the stability of the sector.
- The weakness of vertical regulation is the interpretation of data, which is a strong aspect of peer monitoring. Here, regulation could be improved.
- DNB is bound to confidentiality and legislation. This decreases the responsiveness of this indirect peer monitoring.
9. **CONTEXT OF PEER MONITORING: INSTITUTIONAL ENVIRONMENT**

The context of peer monitoring is not restricted to vertical regulation. Next to this regulator, there is a context within a bank where risk taking is considered, referred to as internal context. In addition, there is an external context of the bank influencing peer monitoring. The external context includes lighthouses that could provide early warnings and culture amongst banks. This is depicted in Figure 16.

This context of the regulation provides insight in the functioning of sector and thereby to the effectiveness of regulation. Section 9.1 will discuss the governance structures around risk considerations in the banking sector and section 9.2 will discuss the external actors of the banking sector.

![Figure 16 Context of the research system next to the vertical regulation](image)

9.1. **GOVERNANCE STRUCTURE IN THE BANK**

According to the economic field of research, a decision is the result of the incentives the decision maker receives. According to Mr. Groenink, “an incentive is only perverse, if it is not imbedded in the right systems and controls” (Former CEO Executive Board ABN Amro, 2010a). For this reason, the embedding of the risk consideration is discussed in this section.

To control the risks in a bank there are four lines of defense, according to Mr. Maas (Chairman commission Maas and former Executive Board member ING, 2010). These four lines are 1) risk taker, 2) risk management, 3) internal audit 4) external audit, Supervisory Board and regulators. It is clear
that the first lines of defense are inside the bank. In addition, it is striking that there is no place for peer monitoring in these four lines.

The first line of defense is the responsibility of the risk taker, which comes down to follow the risk policies and stay within the limits. Whether these responsibilities are kept is doubtful. As argued by van Eden “some business units had too much power” (Former chairman Capital Management ING, 2011). The risk management, second defense line, monitors all the risks and aggregates the risks into a risk profile for each risk (Risk Management consultant and former employee ING, 2013). The internal audit is responsible whether all business units are using sustainable processes. In addition, the internal audit monitors whether all the delegated tasks are executed in the right way (Former chairman Supervisory Board ING, 2010). With this third line, the Executive Board assures itself they receive reliable risk profiles. The fourth line is supervision regarding the risks at the highest management level. The Supervisory Board is monitors whether the Executive Board manages to deal with all the stakeholders and not only in the interest of the company.

Next to these lines of defense, there are several other stakeholders influencing the risk appetite of the bank. Most important, as only stakeholder taken into account here, are the shareholders. The shareholders statement of SNS describes an ideal shareholder that thinks in de interest of long term return on investment and a profitable growth of the company (SNS Reaal, 2008). However, commission de Wit shows that the attitude of shareholders was changes the last decades. From shareholders that sees bank investments as defensive investments including small profits, the shareholders becomes more short term focused, with much higher expected return on investments till 15 – 20 % (Commissie de Wit, 2009). It is important to notice that the bank is an institute that is controlled by the shareholders. The shareholders have the ability to dismiss the Executive Board or lower their salary and are therefore very powerful in the organization.

These lines of defense and the interest of other stakeholders show some of the complexity of the risk consideration. First of all, there are all kinds of relations within the bank entailing information asymmetry. This makes it difficult were peer monitoring should engage. If the Executive Board is addressed, it is still doubtful how they translate the correction to lower levels in the bank. On the other hand, the operational business units are

In addition, the presence of the shareholders shows that the management receives different incentives. Peer monitoring, is without a legal base, just one of the incentives. The balancing of these incentives will influence the effectiveness of peer monitoring.

9.2. EXTERNAL EMBEDDEDNESS OF BANKING SECTOR

Next to the internal governance structures of the banks, there are other actors in the field influencing peer monitoring. These actors are matter of subject in this section.

9.2.1. Ministry of Finance

The Minister of Finance is responsible for the vertical regulation. More specific, the Minister of Finance is responsible for legislation, institutional structure of supervision and the decisions regarding spending of public resources (Commissie de Wit, 2012). Furthermore, the ministry supervises the regulators (Algemene Rekenkamer, 2011). Though, DNB stays responsible for its own acts. This makes the minister of Finance and DNB together responsible for the supervision on the financial institutes (Commissie de Wit, 2012).
In addition, there are the interests of the ministry. The ministry is not only responsible for a stable financial sector it manages also the finances of the government. Profits of the banking sector improve the financial possibilities of the government. These profits could be used to make the government more popular with the citizens. A competitive banking sector is in the interest of the government (Algemene Rekenkamer, 2011). However, as discussed, more profits imply more risk taking. This entails is a conflict of interest at the ministry.

The connection with peer monitoring is that the ministry of finance has the same interest regarding competitiveness as the banking sector. In addition, the ministry of finance is able to adjust the norms, where DNB is relying on. The banking sector could use the shared interest of competitiveness to influence the norms set by the ministry. As the ministry threatens stricter regulation, the banking sector could bounce that it would decrease of competitiveness. This provides opportunities to play games amongst the actors. An example of this threatening is the conclusion of Commission de Wit that without self regulatory arrangements the government should intervene with legislation. In line with the recommendation of Commission de Wit, the sector started a commission to suggest norms among peers (Commissie Maas, 2009).

9.2.2. Credit rating agencies
Credit rating agencies does exactly what their name tells, they rate credits. These ratings describe the worthiness of the debtor. In fact, these ratings support the risk considerations of a bank. The consideration whether to accept a loan is in need of information regarding its risk. Risk is defined as impact of an event times the change an event occurs. The credit rating agencies defines by their ratings their estimation of the change an event occurs. In these cases, the change of the debtor is not able to payback. For this reason, the ratings of a credit rating agency should provide a realistic and clear overview of the change risks occurs in portfolios of a bank.

Next to these task and function in the financial sector, the CRA have their own interest. They are a utility company. Therefore, CRA´s have continuity and profits as highest own interest. CRA´s gain lots of profits for their ratings, which could result in a conflict of interest (Former Chairman Dutch Banking Association, 2010). In addition, this market of CRA´s has a low occupancy of competitors. Actually, there are mainly three big CRA´s, namely Standards and Poor´s, Moody´s Investors Service, and Fitch Ratings. It is for that reason that Mr. De Swaan mentions that rating agencies should not be followed as the only truth (Former CFO Executive Board ABN Amro, 2010). In the same line of reasoning Mr. Kalff concludes, with benefit of hindsight, that traders relied too much on ratings of CRA´s (Former CEO Executive Board ABN Amro, 2010b).

In the perspective of peer monitoring, CRA´s were light houses. The CRA´s provides the sector with information about changes on financial distress. When a market party was less reliable, the CRA´s should mention it. Consequently, as long as all the banks are rated triple A (highest rating), there was less need for peers to regulate one another.

9.2.3. NVB and relations amongst banks
The Dutch Association of Banks (NVB) is the branch organization that defends the interests of the banks. There should be noted that these financial institutes could differ amongst each other (Chairman NVB, 2011), which makes it hard to defend the interest since these can be in conflict. The board of this organization consists of Executive Board members of the largest banks, with an independent chairman. These Executive Board members of different banks meet each other
sometimes, since they are in the board of the NVB. This provides the opportunity to build relations amongst each other. That these relations between Executive Boards exist is also confirmed by Mr. Koelewijn (Professor Corporate Finance at Nyenrode Business University, 2013). These relations could affect the effectiveness of peer monitoring, since they provide opportunities to play games. Note that there is not included a direction, i.e. positive or negative, in the previous sentence.

Next to the importance of these relations, the relations could change over time. In fact Mr. Blocks states that the relations between the Executive Boards changed over time (Former Chairman Dutch Banking Association, 2013). In 2005, Mr. Groenink (CEO ABN Amro) decided that he had more important things to do than joining NVB meetings. Before this decision the NVB meetings were even more heavily staffed, with the nine CEO's of the largest banks. They made decisions in collective interest knowing 1) that their bank would except because they are the CEO and 2) decisions made in their disadvantages will be settled with later decisions. A game of exchange was possible by the reciprocity and the powerful actors. After the decision of Mr. Groenink, the other banks decided also to send other Executive Board members to the NVB meetings. This decreases the impact of the NVB meetings. The Executive Board members must first consult their CEO, before they could make decisions.

In addition, Mr. Blocks (Former Chairman Dutch Banking Association, 2013) explains that in former times, the largest part of the NVB board members known each other from earlier times at the banks. Nowadays, Executive Board members are introduced from other sectors (Zalm-politician, Hommen – Philips).

Strong relations could create trust and the willingness to keep the sector stable together. This trust is also reflected in the importance of the collective interest of the banking sector. The changes as discussed decrease the trust amongst peers. This makes the peers more competitive and more focused on their own interest. This decreases the willingness to regulate one another.

Next to these relations and there influences, the NVB did rarely get in contact with financial distress. Until 2007, the banking sector was lacking the awareness that a big bank could default (Former Chairman Dutch Banking Association, 2013). Since the DGS legal basis in 1978, only three smaller banks (American Bank in 1981, Tilburgse Hypotheekbank in 1982 and Van der Hoop Bankiers in 2005) made use of the DGS. (DNB, NVB, & Ministry of Finance, 2009). Nowadays, the awareness that big banks could default is created by the crisis. The bankruptcy of Lehmann Brothers and closer to home DSB and SNS show that big banks could be subject to financial distress. This increases the sense of urgency amongst peers to regulate one another.

9.3. FINDINGS AND DISCUSSION

The vertical regulator already proved its influence in peer monitoring in previous chapter. Now, several contextual factors could be added that also influence peer monitoring.

First of all, the autonomy of a bank decreases the willingness to interfere in each other’s business. The governance structures do not provide peers with the ability to have formal influence. Peers could be considered as one of the many stakeholders that wants something. This decreases the willingness to regulate one another.

Secondly, it is shown that different stakeholders influence peer monitoring. The credit agencies did not create a sense of urgency for banks to regulate one another where they were expected to do so. The government has the shadow of hierarchy to enforce strict compliance to the rules. In
addition, the government has conflicting interest in the banking sector, which provides the banks with the opportunity to play games and influence the interest they favour.

Finally, the relationship among peers appeared to be of importance to the willingness of regulate one another. A strong relationship between peers increases the willingness to prioritize the collective interest above the own interest. This results in the following findings regarding the influence of the institutional context on peer monitoring:

- The autonomy of banks decreases the willingness to interfere in each other’s business
- The government and the rating agencies influence the willingness of peers to regulate one another.
- The relationship between peers determine willingness to think in importance of collective interest or own interest
II Analysis: Context of peer monitoring: institutional environment
10. **VALIDATION**

As discussed in the methodology chapter, validation is important since it determines the value of the research. Beautiful conclusions resulting from an invalid research are useless. This chapter discusses the validity of this analysis, from which eventually the conclusions will be drawn in next chapter. This chapter discusses three kinds of validity. The construct validity, external validity and reliability are successively discussed in the sections 10.1, 10.2, 10.3. This chapter results with a conclusion regarding the validity of the research in section 10.4.

10.1. **CONSTRUCT VALIDITY**

Construct validity relates to the data collection and the composition of the report. It is difficult to draw conclusions based on subjective information of interviews, especially when there is not a clear set of measurements available. To create construct validity anyway, multiple sources are used in the research that could be related to each other. In addition, there is tried to have multiple arguments for conclusions and thereby a chain of evidence is build up.

It is important to notice that most of this information is gathered from the parliamentary inquiry by commission de Wit. Therefore, the answers are in need of interpretation and conclusions are partially based on reading between the lines. Due to that reason, the comparison between cases is important for conclusions. This is conducted by continuously referring to previous findings.

10.2. **EXTERNAL VALIDITY**

External validity concerns with the question whether the conclusions could be generalized. The ability of generalizing is first of all based on three cases that are selected. However, these cases only concern the larger banks, which decrease the ability to generalize amongst all banks. Difference could occur in power of actors and the importance of reputation.

Secondly, all the cases are reflecting the propositions, which are based on scholarly literature. This basis is a strong starting point for generalizing. If the propositions are rejected it could be an argument to doubt whether the literature in general is complete. When the propositions are confirmed it strengthens the theory. Because of this literature basis, the conclusions affect a greater range rather than only banking sector.

Thirdly should be mentioned that the focus of this research was on micro prudential regulation. Though, the cases are analyzed in a macro prudential crisis. This could influence the outcome of the analyzed cases. Therefore, the conclusions are less able to be generalized then when there was not a crisis. Though, in this study not only the cases are used to argue the propositions, the substantiation is grounded in a system description. This is not depending on the crisis which makes the conclusions still valuable.

10.3. **RELIABILITY**

The reliability depends on the repeatability of the research. The case study protocol is based on literature, as well are the propositions. In addition, the questionnaires are added in the report, as well are the answers.

Difficulties in the repeatability of this research lie in two aspects: the availability to interview responds and the ‘reading between the lines’ in all the interview reports of commission de Wit. This last aspect could be topic whether it is cherry picking. However, the interview reports of commission...
the Wit are available and therefore this would not be considered as argument that decreases the repeatability of this research.

10.4. CONCLUSION

This chapter discusses the validity of this research. There is argued that this research is a valid research, since it is repeatable and solid grounded in literature. The ability to generalize conclusions is mainly based in the fact that the propositions are based on scholarly literature. In addition, the cases are substantiated with an institutional analysis to the research system, which confirms and substantiates the conclusions of the cases. This ‘double approach’ strengthen the validity of the conclusions.
11. PROPOSITION FINDINGS

This study of peer monitoring has the goal of studying reflect five propositions about peer monitoring in practice. These five propositions concern the willingness and ability of peers to conduct tasks of regulation. The results from this study about the propositions are discussed in section 11.1. Subsequently, section 11.2 summarizes the identified barriers for effective peer monitoring as identified in this study. This chapter finalizes with discussing the conclusion concerning the capacity of peer monitoring in section 11.3.

11.1. PROPOSITION RESULTS AND DISCUSSION

The propositions aim to explore the potential value of peer monitoring in regulation. The regulatory tasks are used to structure this exploration. In addition, a distinction is made between the ability and the willingness to execute each task. The findings regarding these propositions indicate the potential of peer monitoring. The following five propositions were established:

- Peers have a sense of urgency to regulate one another (11.1.1)
- Peers have information about each other’s behaviour (11.1.2)
- Peers have formal & informal means to act (11.1.3)
- Peers may interfere with each other’s business (11.1.4)
- Peers have enough degrees of freedom to adjust regulation to the situation at hand (11.1.5)

11.1.1. Peers have a limited willingness to regulate one another

This proposition relates to the willingness to perform the task of norm setting. Multiple factors are identified influencing this proposition. First of all, banks are aware that the DGS could result in sharing the consequences of risks. This creates willingness to regulate one another. In addition, the willingness to set norms among peers is increased by the fact that these self created norms could better fit the organizations of the banks than the legislation imposed by government.

The willingness is also influenced by contextual factors. The fact that never before a big Dutch bank has defaulted does not create a sense of urgency to set norms among peers. In addition, the existence of a vertical regulator can decrease the willingness to regulate one another. The context could also improve the willingness of peers. When the government threatens with stricter legislation, it is an incentive for peers to regulate themselves and thereby prevent this legislation. Furthermore, a strong relationship between banks could create the awareness of the importance and willingness to serve of collective interest. When, in 2005, the relationship between banks deteriorated, also the willingness decreased to set norms.

Based on these arrangements and contextual factors there cannot be concluded if there is a willingness to regulate one another. Although, due to the multiple factors influencing the willingness, the analysis shows that willingness to regulate one another is not dichotomous, but could better be described on a scale from not willing to very willing. Moreover, these factors influencing the willingness are dynamic rather than static. Consequently, the willingness could be dynamic. All in all, the analysis identified factors increasing the willingness and decreasing the willingness. The actually willingness could differ for each peer. On a sector level there is no extreme willingness or unwillingness observed.

Reflecting these findings on the literature where Stiglitz and Brousseau and Glachant discuss in favour of peer monitoring, shows a difference between literature and the banking sector in the
concept of willingness of peers to regulate one another. Although, peers share risk and are therefore depending on each other, the findings in the banking sector show that willingness is influenced by more factors, both positive and negative incentives. Therefore, there cannot be stated that a willingness exist, only based on interdependencies, since the concept is influenced by more contextual factors.

In addition, the banking sector shares risk through the DGS, which is controlled by DNB. DNB would never let the consequences of the DGS result in a financial distress of another bank, where this limitation on risk sharing was not included in the examples of Stiglitz and Brousseau and Glachant.

11.1.2. Peers lack information about each other’s behaviour

This proposition refers to the ability of peers to gather regulatory relevant information. The arrangements to provide peers with information are scarce. In contrary, peers do not share information for the sake of the strategic importance of this information. Consequently, there is a lack of information between peers, which disables the ability of peers to execute this regulatory task.

A nuance to this statement is that peers can derive information from market behaviour and signals from third parties about the healthiness of peers. Peers gather this information not for regulatory purposes but for the competition purpose. Although, this gathered information is superficial, based on this information peers are able to make presumptions about the healthiness of a bank. The case study even shows that in several occasions peers noticed financial distress of a bank earlier than the vertical regulator or even the bank in financial distress itself.

However, this superficial information concerns only ex post information, which means that it is information of the results of a risk, rather than before a risk decision is taken. Peers are not able to look into each others’ books to gather ex ante information about risk decisions.

This conclusion is opposite to the expectation derived from literature. From literature is assumed that peers are less subject to information asymmetry, while this study shows that peers are subject to information asymmetry. The main argument for this information asymmetry is the competition in the market where the information is a valuable source of the competitiveness of a bank.

11.1.3. Peers have very limited formal & informal means to act

The ability of peers to sanction each other is limited, due to none institutionalized means for peers to execute this regulatory task. Legislation provides the vertical regulator with sanctioning instruments, and the governance structure incentivizes banks to focus on their shareholders, employees and customers. There are no incentives to accept a sanction of peers. However, peers could exert pressure to enforce compliance. When one considers the instruments of the NVB as part of peer monitoring, the institutionalized means concerns only dismissal of membership. Nevertheless, the NVB does not act as a regulator. Therefore this potential instrument is of limited value. Hence, peers are restricted in their ability to sanction each other.

Next to the direct sanctioning means of peers, there are some indirect ways how peers try to sanction each other. In the context of peer monitoring arrangements, there is DNB that has the ability to sanction. This study shows that peers request DNB to use sanction instruments regarding peers. The effect of this indirect sanctioning is unknown, since information is lacking how DNB treats these requests.
11.1.4. It is not done for peers to interfere in each other’s business

The willingness to sanction among peers is limited. Especially, when this concerns direct sanctioning means, from one peer to another. It is the opinion of several experts who state that, although peers have informal meetings, they do not discuss risk decision with each other since it is not done. If such discussions about risk decisions take place it is about risk decisions of absent peers.

Two other arguments are found that could decrease the willingness of peers to sanction each other. The first relates to the autonomy of a bank. The Executive Board is only accountable to the shareholders and the Supervisory Board, as long as they comply with the norms of DNB. Consequently, peers do not have the ability to enforce their opinion. Without the ability to influence peers, pressure on peers has probably little effect. It could only result in deterioration of the relationship between banks. The expectation of limited effect in change of behaviour and the negative consequences of intervening results in decreasing of the willingness to interfere in each other’s business.

Secondly, peers are not willing to intervene in the business of others since peers with financial distress are still competitors. Financial distress of a peer provides entrepreneurial opportunities for the other banks that want to make profits.

The willingness to interfere in each other’s business increases when financial distress could result in a bankruptcy. Preventing a bankruptcy is in the interest of the complete sector and the country. Although, the threat of this event results in increased willingness, this interest applies only in the ultimate stage of financial distress. In this stage sanctioning is rather late.

The competitive and autonomous character of the sector decreases the willingness to interfere in each other’s business. This willingness increases in case of a potential bankruptcy, though, in that case intervention is related to problem solving, rather than preventing excessive risk taking by enforce compliance.

11.1.5. Peers cannot adjust regulation to the situation at hand

The restricted responsiveness of peers becomes clear in several observations. First of all, the limited means to sanction. To be responsive and adjust regulation to the situation at hand, a variety of means should be available with different degrees of penalties. However, instead there are almost none means available.

Moreover, the responsiveness is restricted by the disciplinary power of the market. All sanctions that become public known could transform trust in a bank into distrust. This distrust in a bank makes it more complex to perform in the market. Consequently, a bank that is already in distress will suffer even more by a sanction and sanctioning creates more a problem than it result in compliance. This transformation of trust could make every sanctioning instrument a big gun and thereby decreases the responsiveness of peers.

11.2. Barriers for peer monitoring

The findings regarding the propositions show that peer monitoring is non-effective in several tasks of regulation. This section provides an overview of the all the identified barriers for peer monitoring in table 3. Table 3 knows the regulatory tasks as one axis. The other axis constitutes the institutional layers according to the Williamson framework, as discussed in the theoretical founding. Together, these two axis provide an overview including most of the discussed matters. From the table it becomes clear that there are barriers for each task at all the levels of the institutional environment.
II Analysis: Proposition findings

The barriers mainly concern contextual factors of peer monitoring, due to the restricted availability of peer monitoring arrangements.

Table 3 Barriers of current peer monitoring arrangements

<table>
<thead>
<tr>
<th>Norm setting</th>
<th>Embedding</th>
<th>Formal rules</th>
<th>Actors and governance</th>
<th>Game play</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Collective interest of banking sector less important, Short term thinking</td>
<td>Competition law</td>
<td>Competition Authority</td>
<td>Level of competetiveness</td>
</tr>
<tr>
<td></td>
<td>(caused by shareholders)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information gathering</td>
<td>Strategic importance of information, Fear of market discipline</td>
<td>Confidentiality</td>
<td>Failures in internal</td>
<td>Lack of information, Mutual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>of DNB</td>
<td>risk management</td>
<td>distrust, only superficial information, late</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>detection of financial distress</td>
</tr>
<tr>
<td>Judgement</td>
<td>n.a.</td>
<td>n.a.</td>
<td>depending on DNB</td>
<td>Based on perception</td>
</tr>
<tr>
<td>Sanctioning</td>
<td>Too strong market discipline (shadow of hierarchy)</td>
<td>n.a.</td>
<td>too few interdependencies, depending on DNB (judgement), autonomy of bank</td>
<td>Lack of responsive sanctioning instruments</td>
</tr>
</tbody>
</table>

In the discussion of the propositions, the complexities of three important barriers were not fully enlightened. These barriers are depending on DNB, Competition Authority and detection in latest stage of risk development. There is elaborate on these barriers in the next sections.

11.2.1. Peer monitoring depends on DNB

Currently, vertical regulation is responsible for all the regulatory tasks. However, since this vertical regulation is subject to a principal agent relation, it is suboptimal caused by information asymmetry. Though, peer monitoring can increase the effectiveness of regulation, DNB does not use peer monitoring to decrease the information asymmetry. In addition, peer monitoring is not able to execute one of the regulatory tasks themselves. Therefore, they rely on the vertical regulation and their knowhow is not used in the regulation. So, why does DNB not better uses the knowhow of the sector to improve regulation is the question that remains. There is apparently a tension between peer monitoring and vertical regulation.

11.2.2. Competition Authority

The competition authority as barrier for peer monitoring shows clearly a tension of public interests in the banking sector. These public interests are competition and stability of the financial sector.

Competition serves the public interest in such a way that profits should be used in investments for the customer or in higher interest rate for the customer. Those who can serve the customer the best strengthens its position in the market. Consequently, competition stimulates risk taking. Without competition there is less incentive to serve the customer as well as possible and profits will go to the account of the company.

On the other hand there is the public interest of a stable financial sector. This public interest is in need of norms that should be kept. These norms, however, can only be set by the legislator, not within the sector. The banking sector argues that the NMa restrict peers to set norms among each other, since these norms decreases the competition. This restriction of norm setting, however, results in less ownership of the norms by peers. As a result it decreases the willingness of peers to enforce these norms and thereby influencing the effectiveness of peer monitoring.
11.2.3. Detection in latest stage of risk development

Risks develop over time, as depicted in figure 17. This analysis only found actions of peer monitoring when the investments are already turning into losses and financial distress is already occurring. In other words, peer monitoring only observes ex post information. Ex ante observation would concern the risk at the moment the decision is taken. Moral hazard influences the decision not the outcome. Therefore, the ex ante information is highly relevant to manage moral hazard.

Nowadays, there is tried to mitigate the effects of moral hazard within a bank by capital requirements, though when peer monitoring could observe an earlier stage of risk decision, it could result in a counter incentive and thereby decrease moral hazard.

![Figure 17 Stages of risk development](image)

11.3. Capability of peer monitoring

This analysis was an explorative study of the capability of peer monitoring to decrease the negative effects of moral hazard. The capability of peer monitoring not necessarily refers to replacing of vertical regulation, but some specific tasks could be subject to replacement or to combine forces with vertical regulation.

The analysis shows that peer monitoring is not able to execute one of the analyzed regulatory tasks themselves. Peers lack the ability to gather information, based on the strategic relevance of this information. In addition, peers lack the ability to sanction due to the absence of any institutionalized sanctioning instrument. However, the analysis also shows that peer monitoring could add value to vertical regulation. This is mainly related to the interpretation of information.

The willingness is more ambiguous. This analysis shows that willingness is not a dichotomous variable, but should be considered as a continuous scale. There are many different contextual factors that influence the willingness. All these factors increases and decreases the willingness to some extent. A continuous scale is better able in representing this complex combination of incentives than a dichotomous variable. Autonomy of the own organization is a main disincentive for willingness to regulate one another. On the other hand, sector stability is one of the main incentives that create willingness to regulate among peers.

Furthermore, this study proves that the capability of peer monitoring in the banking sector highly depends on the context of the regulation. The banking sector is a highly complex environment where many systems are interacting and influencing each other. Some of these contextual factors have proven themselves as barriers for effective peer monitoring.

This conclusion adds some knowledge about limitations that peer monitoring can face. Peer monitoring appears to be highly context dependent and therefore this research concludes that peer monitoring does not necessarily results in effective regulation. In addition, this analysis confirms the potential of peer monitoring to theoretical decrease information asymmetry, based on specific sector knowhow. However, due to the competitive character of the sector, information asymmetry is also relative high among peers in the banking sector.
Il Analysis: Proposition findings
The capability of peer monitoring to manage moral hazard

Part IV
Prescription
III Prescription: Introduction prescriptive part
The capability of peer monitoring to manage moral hazard

INTRODUCTION PRESCRIPTIVE PART

The barriers to effective peer monitoring in the current institutional environment of the banking sector are identified in the analysis part and summarized in table 4. These barriers limited the ability and willingness of peers to regulate one another. When one would improve the effectiveness of peer monitoring in the Dutch Banking sector, these barriers should be taken away. This part will elaborate on diminishing or removal of the barriers.

Table 4 Barriers of current peer monitoring arrangements (copy of Table 3)

<table>
<thead>
<tr>
<th></th>
<th>Embeddedness</th>
<th>formal rules</th>
<th>actors and governance</th>
<th>Game play</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Norm setting</strong></td>
<td>Collective interest of banking sector less important, Short term thinking (caused by shareholders)</td>
<td>Competition law</td>
<td>Competition Authority</td>
<td>Level of competitiveness</td>
</tr>
<tr>
<td><strong>Information gathering</strong></td>
<td>Strategic importance of information, Fear of market discipline</td>
<td>Confidentiality of DNB</td>
<td>fear of NVB for Competition Authority, Failures in internal risk management</td>
<td>Lack of information, Mutual distrust, only superficial information, late detection of financial distress</td>
</tr>
<tr>
<td><strong>Judgement</strong></td>
<td>n.a.</td>
<td>n.a.</td>
<td>depending on DNB</td>
<td>Based on perception</td>
</tr>
<tr>
<td><strong>Sanctioning</strong></td>
<td>Too strong market discipline (shadow of hierarchy)</td>
<td>n.a.</td>
<td>too few interdependencies, depending on DNB (judgement)</td>
<td>Lack of responsive sanctioning instruments</td>
</tr>
</tbody>
</table>

Diminish these barriers is quite impossible without influencing other system elements. The barriers for peer monitoring are related to other interest in the sector. For example, the competition among banks is a barrier for peer monitoring, though competition itself is a public interest. Consequently, one cannot just mitigate the barriers without taking the side effects of the barriers into account.

Not all the barriers will be discussed in this prescriptive part. For three groups of barriers improvements are identified. These three groups are established around the barriers: late detection of financial distress, mutual distrust and lack of responsive sanctioning instruments. The corresponding chapters are preventive regulation instead of problem solving (chapter 12), creation of norms based on mutual trust (chapter 13) and Secrecy and Sanctioning (chapter 14)
III Prescription: Introduction prescriptive part
12. PREVENTIVE REGULATION INSTEAD OF PROBLEM SOLVING

This chapter starts with introducing the main barrier in section 12.1. Subsequently, the other related barriers are introduced, still in section 12.1. Section 12.2 discusses mitigation methods to these barriers. This chapter finalizes with the recommendations regarding the mitigation methods in section 12.3.

12.1. BARRIERS RELATED TO: LATE DETECTION OF FINANCIAL DISTRESS

Risks are decisions taken under uncertainty. After the decision is taken, the investment turns out overtime to be a profit making or loss creating investment; this chain is visualized in figure 18. A combination of bad decisions can create financial distress. Analysis shows that peer monitoring observes only financial distress (figure 18), while early intervention would create opportunities to prevent financial distress. In other words, peer monitoring engages late in the risk development. Moreover, this barrier is closely related to the core of moral hazard. Moral hazard is located at the decision of the investment, while peer monitoring focuses on the outcome of the risks. Nowadays, peer monitoring is not aiming at prevent moral hazard, it only tries to mitigate the consequences of moral hazard. The aim of this chapter is to discuss mitigation methods to transform peer monitoring into a more preventive regulation framework instead of late detection and problem solving (depicted in figure 18).

![Figure 18 Transformation of peer monitoring in order to engages in earlier stage](image_url)

Other barriers related to the problem of late detection are failures in internal risk management and the fact that risk decisions are subject for perceptions.

When internal risk management fails in estimation of the risk a bank send wrong information into the system. This information is used by peers to monitor the healthiness of the bank. Wrong information results in wrong judgements of peers. Furthermore, internal risk management should balance the profitability with the stability within a bank. Resulting, when this internal risk management fails, the balance within a bank is not guaranteed.

The perception barrier is the third barrier in this chapter. A risk is an estimation of an uncertain event. Consequently, this estimation is biased with perception of the estimator and therefore not resulting in an objective estimation. The estimator has interest in itself, not necessarily aligned with the interest of risk management. In addition, peers could have different perceptions of events. These differences in perceptions could create distances in discussions about the healthiness of a bank.
12.2. Mitigation: Preventive regulation based on awareness and cooperation

This mitigation section discusses two different directions of mitigation. The first direction entails creating awareness of risks. The second direction concerns the use of knowledge in the system.

12.2.1. Game to create awareness

The importance of stability in internal risk management and the collective interest of the banking sector are not always predominant in a risk decision. The risk takers are more aware of their own interest in the short term, though the collective interests are also in their own interest on the long term. This absence of awareness of the importance of collective interest could be mitigated by a game.

A game is a relatively low budget solution to create awareness of the importance of risk. A game provides experiences in the target group. These experiences should be defined in the game developing. Two examples of experiences are: 1) experience about the opportunities to intervene and the consequences if excessive risks are identified earlier, 2) experience about the collective interest that are in the long term also own interest. These experiences create awareness to the importance of risk management. This awareness could make the negative impact of risk more dominant in the risk estimations. In addition, these experiences could result in support to take away other barriers of early intervention.

The costs of this game are negligible, though the game is not a mitigation method in itself. The game only increases the awareness of risk, willingness to create and willingness to join possible solutions.

12.2.2. Better use of knowledge in the system

This mitigation method concerns the embedding of the risks, rather than the risk decision itself. The method uses an improvement in the environment of risk taking to decrease the change on excessive risk taking.

All the banks have different perception regards risks and different risk management systems. However, there are no arrangements to share lessons within risk management or combine perceptions into less subjective perceptions. Such arrangements could improve internal risk management. In addition, process information is shared rather than strategic importance behaviour. When an arrangement concerns information that is of strategic importance, DNB could function as intermediary. The abstracted information from these arrangements could be used by a bank to improve internal estimations and management of risks. In addition, the shared information could be used by peers to monitor the importance of risks by peers. Two ways are identified to better use the knowledge in the system.

First of all, risk perceptions could be cross referenced. For example an anonymous questionnaire regarding risks and investments could be used. DNB gathers perceptions regarding risks. This concerns risks banks have themselves but also risk of other banks or risks that are present in the market. The survey could contain questions as: “Which risks did you repel or did you intentionally refuse because of their risk profile?” The effect of such a questionnaire is threefold. First of all, a more average risk perception could be defined. With these perceptions, DNB have the professional knowledge of the peers that they could include in the assessment of a bank. In addition, this provides a ground for DNB to intervene in an early stage, based on the perceptions of specialists. Secondly, the questionnaire creates attention for the risks that are not taken for some reason and provide food for thought, i.e. risk awareness is created. Finally, if you assess some risk as high risk
The capability of peer monitoring to manage moral hazard

profile and you recognize peers with these risks on their balance sheet, it could incentivize to monitor that risk.

This method also entails negative effects. First of all, cross referencing could be subject for strategic behaviour. If banks recognize which risk is from whom, they could be tended to responses strategically. This results in less value of the questionnaire and distrust among peers. A complexity with cross referencing is that banks differ in specialism regarding investments. This could make it hard to assess risk of peers. In addition, generalized risks of a market do not have to be the same as specific assets of this market. Finally, the method increases quality of regulation in the sector. It uses the information of peers, the specific sector knowhow, though, the information is gathered by DNB instead of by peers. Therefore, it does not create better peer monitoring in itself, since DNB is still the intermediary.

The second way of improving the environment of risk taking is by organizing risk management meetings between employees of different banks. The aim of these meetings is that the banks could share lessons learnt in the risk management. What are the pitfalls? These meetings could result in codes on risk management, exchange days to share processes and the emergence of quality labels. Note that these results are possibilities. It should be a process of motivated experts who together would improve the risk systems in the banking sector.

This arrangement relies heavily on the participants of the process. Therefore, it is advice to let the groups establish themselves. This provides the opportunity for banks to decide themselves in what kind of group they would participate.

The willingness to cooperate in one of these arrangements could be increased by using the government as a shadow of hierarchy. Without participating, stricter regulation is imposed.

12.3. Recommendations

Recapping the mitigation methods of this chapter

- Develop a game to create awareness of the importance of risk.
- Design a cross references arrangement to create less biased perceptions of risk
- Organize risk management meetings between banks, in order to improve the risk management systems and the relative importance of these systems.
The capability of peer monitoring to manage moral hazard
13. **Creation of norms based on mutual trust**

13.1. **Barriers: Distrust and competition**

Peer monitoring relies on cooperation of peers. Cooperation is a necessity to execute the first tasks of a regulator. Norm setting and information sharing in horizontal relations is in need of cooperation. Though, cooperation will only exist if there is mutual trust that the peers serve a same collective interest. Currently, this trust is lacking, as are the norms for peer monitoring. This refers to a lack of willingness in peer monitoring. Moreover, the ability of norm setting is limited by the Competition Authority (NMa). Norm setting results in less competition which could result in lower interest rate for the deposit holders.

13.2. **Mitigation: Interdependencies and network dynamics**

Mitigation will stress on the complexities of the barriers around norm setting, three solution directions are identified. These directions will be discussed in this section.

13.2.1. **More interdependencies**

Trust among peers can be created by more interdependencies. In that case, banks have to rely on each other. This forces the banks to cooperate, since they need each other. Consequently, the collective interest of the banking sector becomes relative more important to the individual institutes. Consequently, mutual trust will become in the interest of all banks. A precondition is the reciprocity in order to be able to play the game of giving and taking. A negative side effect of these games is that risk taking could be used as strategic behaviour for other issues. Furthermore, it is required that the NVB should be heavily staffed, in order to increase the ability of the NVB to act.

There are three ways identified to increase the interdependencies, namely: risk sharing on balance sheets, mutual shareholders and mutual loans. Mutual loans are the most straightforward way of interdependency. Mutual loans refer to the situation before the crisis. At the end of every day, banks make loans to each other. However, in the crisis the central bank takes this role since the banks did not make loans to each other caused by distrust. However, the central bank still fulfills this role in the market, with low interest rates. Therefore, there is less necessity for banks to borrow from each other. This interdependency could be returned by the central bank by requiring a higher interest rate. In that case, it becomes more interesting for the banks to expand mutual loans. The flip side of this coin is that, if the distrust sustain, the rates will increase. Consequently, these higher interest rates will reflect the functioning of the bank in society.

Secondly, the consequences of moral hazard in the banking sector results in sharing of risks. However, these risks are only reflected when they come true. If the change of defaults is reflected on each other’s balance sheet it makes banks more interdependent. Research is necessary to explore this option.

Last solution concerns the opportunity of mutual shareholders. In this solution The NVB, not a market party, will own a certain number of shares of all banks. As a result, all banks have a common shareholder, the NVB. The NVB could require at a shareholders meeting to set norms and discuss them. In this case, the other banks known which norms internally are set and know what they could expect. In addition, as shareholder DNB could employ pressure on the Executive Board of a bank.
13.2.2. Shadow of hierarchy
As seen in the analysis and in the description of the barriers, a shadow of hierarchy could create sense of urgency to cooperate. This cooperation could in its turn result in more trust if cooperation proved its effectiveness. Cost of this shadow of hierarchy is that a certain sanction is necessary in case of failure. This sanction does not have to improve the situation at hand.

13.2.3. Governmental balance between public interest and public interest
The NMa services the public interest with competition, on behalf of the Ministry of Economic Affairs. DNB services the public interest with a stable financial sector, on behalf of the Ministry of Finance. Setting norms for stability is related to both governmental agencies the DNB and NMa. It is in governments’ and the sectors interest to have a good balance between these two public interests. The trade-off between these two public interests is not adequate coped with by the government. Both agencies fight their own war. To create the opportunity of peer monitoring, a process should be set in motion to bring these agencies, the government and the banking sector together. This process should design norms that as well serve the competition as serve the stability of the sector. These norms should be acknowledged by the banking sector to be able to monitor each other. The role of the government is essential in this process, since they have both interest and have a hierarchical relation to the governmental agencies. Note that both agencies are related to different ministries with also their own interests.

This improvement is presented to Mr. de Wit in a personal interview (Parliamentarian and chairman of Commission de Wit I and II, 2013), with the question why the government does not intervene in this tension. The response was: We never thought about something like this...

13.2.4. Already in progress: Commission Maas
After the crisis, banks decide together to reflect on their behaviour (Chairman NVB, 2010). On behalf of the NVB, Commission Maas suggested several improvements in the sector (Commissie Maas, 2009). Most of these suggestions are adopted in a code, Code Banks (NVB, 2009). These suggestions aim at recovering the trust in the banking sector, a collective interest. However, the implementation shows that there was too much room for deviate the norms. Therefore this Code Banks did not work to gain trust again of the customers (Former Chairman Dutch Banking Association, 2013).

13.3. Recommendations
Recapping the mitigation methods of this chapter
- Create interdependencies by
  - Mutual loans
  - Mutual shareholders (research is necessary to explore this option)
  - Risk sharing on balance sheets (research is necessary to explore this option)
- Use imposing legislation by the government as a threat to create a shadow of hierarchy and consequently create support for cooperation.
- Set a process in motion to set norms. Participants in this process are:
  - NMa
  - DNB
  - Ministry of Finance
  - Ministry of Economic Affairs
  - NVB
14. **Secrecy and Sanctioning**

14.1. **Barrier: Lack of Responsive Sanctioning Instruments**

Peer monitoring lacks instruments to be responsive in enforcing compliance. In addition, all the possible instruments have the potential to become a big gun, by the disciplinary market. For these two reasons, peer monitoring rely on DNB concerning sanctioning. However, relying on DNB concerning sanctioning also means that peer monitoring relies on the judgement of DNB. Consequently, peer monitoring need to have sanctioning instruments secret to the market in order to enforce compliance themselves without the disciplinary functioning of the market.

14.2. **Mitigation: The Responsive Pyramid with Invisible Sanctions to the Market**

Sanctioning among peers should be institutionalized to gain support and in order to prevent arbitrariness. The only suitable institute is the NVB. It is an additional benefit that almost all banks are already member of this association.

Sanctioning by the NVB can only be possible when the sanction is a collective decision. Consequently, a negative side effect of sanctioning is that it can be used as strategic instrument for other goals rather than decrease moral hazard.

In addition, it is of absolute importance that the use of the sanctioning instruments remains within the walls of the NVB. This is difficult to maintain, since the NVB has many members and it is difficult to detect who leaked. Moreover, leaking is tempting, since competitors could profit from the sanctioning of the market. Therefore, some kind of system should be included that sanctions leaking. Secrecy is then enforced by deterrence. This sanctioning should be without hold. Making a sanction within the NVB public should be treated as treason. That is the only way to enforce secrecy. Although this sanctioning scheme could scare, it is difficult to detect who has leaked. Therefore it does not necessarily result in absolute secrecy. However, it is the best possible discourage.

With the NVB as sanctioning institute, there is still a lack of means. Within the institute some means must be added to enforce compliance and to become more responsive. To become more responsive the gap, existing between the gentle and the hard sanction should be filled. However, these added means should not result in signals into the market. One way to prevent these signals to the market is by sanctioning within the meetings of NVB, without consequences outside these meetings. There are two ways of sanctioning proposed. First of all, a formal warning can be given. This should include an official item on the agenda. Secondly, if this official warning not results into a change of behaviour, a more deterrent instrument should be available. This instrument is withdrawing the voting power of a bank at meetings of the NVB. This makes the bank less able to defend its own interest in collective issues. Eventually, the most deterrent instrument of the NVB is terminating the membership of a bank. This transformation of the sanctioning pyramid is depicted in Figure 19.
There are two other issues to mention regarding sanctioning. First of all, it is possible that a bank does not want to be part of a self-regulating system. In that case a shadow of hierarchy could be created by threatening exclusion of DGS. This shadow of hierarchy should be conducted by DNB, since they are responsible for the DGS. Exclusion of the DGS contains a major drawback. It is doubtful whether the government will accept this sanction, since DGS is a protection of the deposit holder.

Secondly, also positive sanctions could be used regarding risk taking. This refers to the quality labels of the preventive regulation chapter. If banks have a moderate risk profile, they could earn a quality label that could improve their competitiveness. Resulting, less risk taking and consequently fewer profits is compensated by the improved competitiveness of the bank.

14.3. **Recommendations**

Recapping the mitigation methods of this chapter

- Institutionalize sanctioning instruments in the NVB
  - Enforce secrecy of the use of these instruments in order to prevent the market of using their disciplinary power
- Include two extra sanctioning instruments to create a more responsive sanctioning pyramid
  - Include an official warning
  - Include withdrawing voting power of a bank
- Consider positive sanctioning methods
  - For example: quality labels when a moderate risk profile is hold
15. **Conclusions and Recommendations**

The banking sector suffers from financial distresses of individual banks. Moral hazard is assumed to be the cause of these financial distresses. Risk decisions were driven by making profits rather than concerning the stability of the banking sector and the collective interest. The consequences for the sector as a whole are of such an extent that moral hazard must be decreased. Moral hazard is related to information asymmetry. Literature argues that peer monitoring is less subject to this information asymmetry, what results in the following main question:

“What is the capability of peer monitoring to decrease the negative effects from moral hazard between the banks and can this be improved?”

A case study and institutional analysis concerning the peer monitoring arrangements discuss whether peer monitoring is able and whether peers are willing to execute the tasks of the regulator. This study resulted in the following conclusions: Peer monitoring is very limited capable to conduct regulatory tasks and therefore, limited capable to decrease moral hazard in the banking sector. This limited capability could be improved, though, peer monitoring on its own will not be able to decrease moral hazard. This conclusion is drawn due to the following findings:

**The ability and the willingness among peers**

The ability of peer monitoring to regulate one another is rather limited, due to the lack of peer monitoring arrangements. There are no institutionalized arrangements that could be used to conduct a regulatory task. More specific, information gathering is restricted by the strategic importance of information. In addition, sanctioning instruments are lacking. Peers can only exert some pressure informally. However, when this pressure is not accompanied by more deterrent instruments the pressure lacks power. Besides the lacking of peer arrangements, the ability is also restricted by some contextual factors. The disciplinary power of the market restricts the sharing of information and sanctioning of peers. Negative information regarding a peer could create distrust in the market, which has a huge impact on the functioning of a peer. Despite of this limited ability to regulate one another, the analysis shows that the specific sector knowledge, which makes the sector able to interpret information of peers, could be a valuable addition to the governmental regulation.

The willingness among peers to regulate one another is ambiguous. Whether there is a willingness to conduct peer monitoring depends on multiple factors, as well as peer monitoring arrangements and contextual factors. Consequently, there cannot be stated whether there is willingness or not. Willingness should be considered as a continuous scale, where the willingness is based on incentives. A continuous scale is better able in representing this complex combination of incentives than a dichotomous variable. Autonomy of the own organization is one of the factors that decreases willingness to regulate one another. On the other hand, sector stability is one of the main incentives that create willingness to regulate among peers. In addition, there appears to be more willingness to set norms than willingness to sanction if necessary. Hence, the willingness to conduct a task of the regulator depends also on the task.
Recurring Contextual Barriers and Improvements

Studying peer monitoring in the banking sector knows two recurring arguments that decreases the willingness and ability of peers to regulate each other. These barriers are: peers depend on DNB and the tension between competitive character of the market and the importance of financial stability. DNB is responsible for all the regulatory tasks and has all the arrangements to execute these tasks. Consequently, when peer monitoring is not able and vertical regulation is able to execute its task, vertical regulation decreases the willingness to execute peer monitoring.

The fact that peers are competitors provides lots of tensions when one also expects these peers to regulate each other. The importance of information in the competition creates reluctance to share, though, is necessary for regulation to make a judgement. In addition, sanctioning a peer can be used to enforce compliance, though, it can also be used as strategic behaviour in the competition. These are examples of the tensions caused by tension between the competitive character of the sector and peer monitoring.

Based on all the identified barriers in the analyses this report makes some suggestions about improvements of peer monitoring, combined with vertical regulation, to decreases moral hazard. The first suggestion uses the specific knowledge of peers in assessing risk decisions rather than risk outcome. The specific knowledge of peers is used to improve the environment of risk decisions and risk management within a bank. Due to the focus on the risk environment, this suggestion is less subject to the complexities that strategic information entails. Secondly, peer monitoring can be improved by creating more interdependencies. These interdependencies improve the ability to discuss risk between peers, since there are multiple issues on the agenda and an exchange of these issues could take place. Lastly, a suggestion is made to develop a game. This game could be useful to communicate why it is important to decrease moral hazard, have the participants experience the opportunities of early intervention and create support for other solutions. It is recommended to conduct further research to these suggestions on improvements, before implementation should be considered.

Literature Implications and Further Research

The argument of literature is that peers are less subject to information asymmetry and therefore better able to regulate one another. This study makes a distinction in types of information asymmetry, between the availability of information and the ability to interpret the information. Peers are less subject to information asymmetry regarding the interpretation of information. However, the availability of information is highly context dependent and therefore not necessarily decreased by peer monitoring. Further research should be conducted to the cooperation between peer monitoring and vertical regulation to decrease both types of information asymmetry.

In addition, the effectiveness of peer monitoring is, in line with regulatory theory, highly context dependent. This conclusion was to be expected considering the theoretical study underlying this study, however, this theory was not applied to peer monitoring studies before. Further research to the context of effective peer monitoring can be conducted to identify whether there are common key factors in the context that influence the effectiveness of peer monitoring.

Lastly, this study argues that the presence or absence of willingness is not based on a single incentive to regulate one another. The willingness is more complex and is influenced by many factors. It is recommended to conduct a research to the assumption that ‘willingness cannot be determined on a system level, since it is also actor dependent.’
16. **Discussion**

This chapter contains three separated discussions of issues related to the study. First of all, the scope of moral hazard is discussed. Subsequently, the results of commission de Wit are discussed from the moral hazard perspective which is used in this study. The third discussion addresses the connection between moral hazard and regulation.

**Broaden the scope of moral hazard**

This study was conducted with a certain scope. It uses moral hazard between the bank and the deposit holder as a starting point and progressively introduces moral hazard between the bank and the vertical regulation. The scope ignores the amount of principal agent relations within a bank, where employees and management could also be described as principal agent relation. This enlarges the complexity of how and where regulation should engage in a bank.

In addition, moral hazard is matter of subject between a bank and its customer; however, also the other way around. Banks are arguing that customers apply moral hazard as strategic behaviour, by taking excessive risks with their savings and being insured by the DGS. Yet another moral hazard relation is that between system relevant banks and smaller banks. System relevant banks could use moral hazard against smaller banks, since these banks are considered as "too big to fail". This too big to fail concept functions as insurance for the systematically important banks by the government. This insurance creates risk sharing and thereby added the last core condition of moral hazard in the relationship between system relevant banks and the government.

These different principal agent relations who are all tended to use moral hazard brings the system out of balance. This raises the question whether the system could become healthy by improving only a single principal agent relation as discussed in this report. Besides, it raises a normative question what behaviour could be expected from a bank, if all other actors are using strategic behaviour.

Another scope related aspect is the presence of moral hazard at multiple system levels and between those levels. This report discusses the presence of moral hazard in single banks. However, as the crisis show all the institutes together create moral hazard on a higher system level. The scope limits itself to a single system level, though in reality the aggregation levels have much more interactions than discussed in this report. It is, therefore, important to recognize the interfaces of these different levels.

**New perspective on results Commission de Wit**

Commission de Wit focuses its report on responsibilities and the failure of legislation and regulation. This source is one of the main sources used for this research. The moral hazard perspective as conducted in this research provides one main criticisms to the conclusions of Commission de Wit.

The responsibility perspective of Commission de Wit stops with the executive board and supervisory board of the bank. The complexities of the system in the bank are not taken into account. This has some complications for the conclusions. One of the complications is that the report can only recommend including legislation regard the output of risk decisions. Consequently, legislation cannot aim at preventing moral hazard, only on mitigating the effects of moral hazard. Another complication, ignored by the report is that the risk decisions are subject to perceptions. More specifically, the regulator gathers biased information. The value of this information is difficult to assess since it went through different principal agent relations inside the bank, which all could
have used strategic behaviour. In my opinion, Commission the Wit should have included some more internal risk elements of the banks, to understand the complexities of moral hazard.

**Connection between regulation and moral hazard**

Regulation is, currently, limited to a single counter incentive of moral hazard, namely internalize the negative effects by means of capital requirements. This raises the question whether current form of regulation is able to decrease moral hazard. Current regulation is rule based (as argued in section 8.3), while moral hazard is by definition in the ‘grey areas’ next to the norms, after norms are set (otherwise it refers to adverse selection). In addition, norms can be adjust to new situations at hand, though strategic behaviour is familiar with the law of diminishing effects and will change its form overtime.

Decreasing moral hazard can be reached by creating an environment where incentives are balanced. This not necessarily refers to the culture within a bank, it also concerns systems and structures that could be used to build this environment. For example: when risk decisions are group decisions or decisions of an individual could really make differences. This concept is also the starting point for the suggested improvement of chapter 12.2.2.
17. **REFLECTION**

The reflection and discussion will reflect on the scientific relevance, the methods used and the process of this research. These aspects will successively be discussed.

17.1. **SCIENTIFIC RELEVANCE**

In literature there is little attention for peer monitoring. A few authors mention it and mainly observe positive effects. Yet, Stiglitz already mentions some limitations regarding peer monitoring. From this perspective, this research is a valuable addition to the literature. This research concludes that peer monitoring not always results in positive effects. This research added some limitations regarding peer monitoring caused by the competition within the market. These are valuable additions to the, until know, mainly positive observations regarding peer monitoring.

It should be mentioned that the starting point of this research was identifying limitations within peer monitoring, since practice shows distresses in a sector were peer monitoring was expected. The question rises whether these limitations also were found when another starting point was used. It is argued here that the outcome would not differ, since the research is grounded in positive defined propositions based on literature. However, this starting point influences in another way the result of the research regarding moral hazard. If only moral hazard decreasing was the objective of the research, it would much more be focused on the impact of the vertical regulator, since this is the more natural regulation relation. Though, through the perspective of peer monitoring, the strong aspects of horizontal regulation became clear. While before this research, there was little attention to these aspects. Now, these strong aspects could be used in improving regulation by use of horizontal regulation.

17.2. **METHODOLOGIES**

The research was an explorative research which appears to be a good decision, due to the little scholarly information available regarding peer monitoring. The secondary analysis of interview reports was used besides the analysis of the research system. This combination of methodologies shows its value in supplement and substantiates each other’s conclusions. When only the case study was used, the substantiation of the observations would lack. On the other hand, when only the analysis was used, fewer dilemmas could have been identified and observations regarding motivation would lack. In addition, based on the interview reports and the contained information, the interview questions of the analysis could be refined.

Another decision in the approach of this research contains the used perspective. The outcomes are a result of an institutional perspective focused on regulation. When a more technical perspective was used, this research would struggle with the measurement of risk and of strategic behaviour. On the other hand, when a more psychological perspective was used “the dynamics and interactions between the different elements of the systems would lack, since this perspective is less taken into account system elements. For this reason, there is argued that the chosen perspective has an important influence on the results. This perspective was able to include social aspects as culture among banks, analyse the incentives in the system and also aspects like governance structures. In addition, the relations between these different system elements became clear by using the institutional perspective.
17.3. CONTENT

The content for this research makes the research for several reasons complex. First of all, the topic is highly sensitive. This affected the research in two ways. On the one hand, it is difficult to collect data by means of interviews. This was even more complex since the relevant interviewees were busy businesses man who did not have time for interviews. On the other hand, everyone, really everyone has an opinion about the topic and enlightened another potential system influence. This makes it hard to focus, especially since so many elements are interesting. The explorative character of this research enlarges this complexity of finding a focus.

Next to this sensitivity, the content of the research was influenced by the status of the system. The research was focused on micro prudential, i.e. individual institutes. However there was a macro prudential crisis ongoing, i.e. on a system level. This macro prudential crisis influences the individual institutes and all kind of system elements. It is for that reason that it is hard to say whether in normal circumstances the peer monitoring would function in a same way. Though, one could also question what a normal situation is and whether that exists.

17.4. PROCESS

This research is an independent part of a larger research to peer monitoring. The effect of being part of a larger research contains positive and negative effects for the research. Positive effects refer to the ability to struggle together with the concepts and discuss the research at a rather abstract level. This ensures that the helicopter view during the whole research is maintained. In addition, it is motivating and useful in identifying story line and structure of the report.

Main negative effect includes the tuning the researches to each other. This costs time and changes in structures which also costs time. The coordination and cooperation in the group would not reach this level of satisfaction, if the group was not established by themselves. There was a certain amount of trust, willingness to cooperate and ability to be vulnerable in the group. These aspects were the basis to improve the individual projects.

A SEPAM graduation project is a research that from start to end contains 21 weeks. This is rather little to define a research, perform the research and communicate the research by a report, scientific article and a presentation. The remaining time for executing the research contains more or less ten weeks which entails collecting data and analyzing data.

In this time frame, it is difficult to perform a research based on interviews. It is difficult to arrange interviews in an early stage, since it is then unknown who is relevant to interview and what the topic of interview is. Though, when the research progresses there is less and less time available to execute the interview. Especially, in the case when interviewees are busy and have to be planned long time upfront.
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Apendices
A. INTERVIEWEES

This appendix contains interview reports of the interviews conducted for the institutional analysis. The interview reports consist of the used questionnaire and aggregated answers based on the interpretation of the interviewer. Due to the fact that the interviews are conducted in the Dutch language, these interview reports will also be in Dutch.

The following people are interviewed for this study.

- Michiel Peeperkorn   13 march 2013
  o Expert in risk management
  o Former employee ING
- Jaap Koelewijn.      3 april 2013
  o Professor in Nyenrode business university
  o Promoted in supervision in banking sector
- Alex Hilgevoord      17 april 2013
  o Employee DNB
  o Head of department that is responsible for supervise ABN Amro
- Jan de Wit           7 may 2013
  o Head of parlementairy committee regarding the causes of the financial crisis
- Hein Blocks          8 may 2013
  o Former chairman Dutch BankingAssociation.

The following structure is used in this appendix:

- Michiel Peeperkorn   section A.1
- Jaap Koelewijn.      section A.2
- Jan de Wit           section A.4
- Hein Blocks          section A.5
Apendices
Het interview met Mr. Peeperkorn is gehouden in een oriënterende fase van het onderzoek. Gezien de expertise van Mr. Peeperkorn op het gebied van risico management heeft het onderzoek tot doel gehad om bekend te raken met risico gedrag binnen de banken sector. Dit interview betrof een open interview waarbij de vragen slechts als leidraad zijn gebruikt.

**Questionnaire**

1. **Hoe zit de structuur in de bank in elkaar en hoe liggen de bevoegdheden?**
   
   Mr. Peeperkorn is zelf werkzaam geweest als internal audit, CFO/COO, compliance officer at ING, Freelance auditor Staal Bankiers

2. **Welke interne systemen en relaties binnen een bank zijn gevoelig voor Moral Hazard en waaruit blijkt dat? (hierbij kan ook gedacht worden aan moral hazard in relaties tussen verschillende medewerkers.)**

3. **Welke externe toezichtstructuren zijn er in de banken sector?**

4. **Welke posities zijn er ten aanzien van risico gedrag/ Is er een moreel vraagstuk?**

5. **Hoe werkt de interne audit, wat zijn de taken en verantwoordelijkheden van deze groep?**

6. **Welke belangen van verschillende stakeholders worden meegenomen in afwegingen?**

7. **Is er sprake van bewuste moral Hazard (als strategisch gedrag) of is er meer slordigheid als gevolg van de vele handen waar keuzes door heen gaan?**

8. **Welke invloed heeft de cultuur in de banken sector op het risico gedrag??**
Aggregate answers

Crisis
Voor de crisis was het toezicht compleet kwantitatief gebaseerd. Er was sprake van zogezegd bedrijfseconomisch toezicht. De oorzaak van de crisis kan gevonden worden in het gedrag en de houding van de banken. Iets waar geen toezicht op gehouden worden. De cijfers gebruikt voor het toezicht konden daardoor de crisis niet detecteren.

Een tweede oorzaak van de crisis is dat risico's moeilijk te vertalen zijn naar kwantitatieve cijfers. Hier uit volgt dat het moeilijk is om binnen de organisatie op risico's te sturen.

Een derde grondslag van de crisis is de beperkte specifieke deskundigheid die gemist worden in het toezicht. Het systeem is opgezet door accountants en hun manier van werken. Maar deze ‘taal’ is nooit doorvertraald naar effectieve taal voor de werkvloer.

Als laatste moet de cultuur binnen de banken sector aangewezen worden als oorzaak van de crisis.

Risico beslissingen en risico appetite
Risico beslissingen worden genomen door de verschillende business units, maar zij worden hierbij gestuurd door een limietensysteem. Het de limieten voor risico's worden opgesteld door het interne risico management, die zich baseert op de risico strategie van de Raad van Bestuur.

Om toezicht te houden op het limietensysteem zijn er voor de verschillende risico's verschillende risico commissies. Daarboven staat een centraal risico commissie die de risico's combineert tot een risico profiel van de bank. Deze informatie wordt gebruikt door de Raad van Bestuur als huidige risico profiel.

Een probleem van dit systeem is dat alle business units targets krijgen om te halen en dat deze targets de inschattingen van risico's kan beïnvloeden. Risico's zijn inschattingen en door creatief te boekhouden kan je zorgen dat jouw business unit zijn targets haalt. Dit resulteert weer in een bonus. Dit creatief boekhouden gebeurt ook.

Kwalitatieve meet factoren
Sinds de crisis word er ook steeds meer rekening gehouden in het toezichtsysteem met de kwalitatieve kant die risico gedrag beïnvloeden. De vraag blijft dan wel hoe je cultuur kan meten? Wat in ieder geval gebleken is in de crisis is dat je aan ‘hard controls’ niets hebt als je de ‘soft controls’ niet meeneemt. Op dit moment worden deze soft controls voornamelijk meegenomen door te kijken hoe de risico beheersing binnen een bank is opgesteld.

Toezicht regimes
Toezicht houden op de risico’s gebeurt op verschillende manieren. Intern is er risico beheer en de Raad van Commissarissen die toezicht houden op het risico profiel van de bank. Een probleem met het interne risico beheer is dat zij betaald worden door de Raad van Bestuur, die ook belangen heeft bij bepaalde risico profielen. De Raad van Commissarissen miste voor de crisis de deskundigheid om toezicht te kunnen houden. Daarnaast is er een echt old boys netwerk waardoor de onderlinge relaties de kritische blik wel eens zouden kunnen vertroebelen.

Extern word toezicht gehouden door DNB en de externe accountant. De externe accountant beoordeeld te processen in de bank en de betrouwbaarheid van de cijfers. Ook hier zit weer een belangen kwestie achter. De Raad van Bestuur kan namelijk als ze niet tevreden zijn over hun accountant de volgende keer een andere accountant zoeken.
A.2. JAAP KOELEWIJN

Questionnaire

1. Wat zijn volgens u de peer-to-peer arrangements in de bankenwereld en wat zijn de motieven van deze arrangementen?

   Uitkomst in ieder geval:
   a. informatie disclosure/Market discipline (third pillar Basel II),
   b. Depositogarantiestelsel
   c. Nederlandse Vereniging van Banken samenkomsten

2. Welke functies hebben deze peer to peer arrangementen formeel? En in de praktijk? Hebben ze ook een effect op risico-afwegingen? Hoe werkt dat in de praktijk?

3. Vanuit het toezichtsperspectief, zijn de peer-to-peer arrangementen dominant? Of zijn er andere dominantere toezicht instituties (regels, organisaties)? En welke zijn dat dan?

4. Indien peer to peer arrangementen geen rol spelen bij risico-afwegingen, onder welke omstandigheden zouden ze wel een rol kunnen spelen? Welke instituties zijn hierbij van belang?

5. Als peer-to-peer arrangementen geen toezichtfunctie hebben, zijn peer-to-peer arrangementen dan, in uw mening, een toevoeging aan de huidige toezichtstructuren? Zo ja, hoe zouden ze kunnen functioneren? Zo nee, waarom niet?

   Overige potentiele vragen
   a) Hebben banken wel middelen die ze kunnen inzetten? Formeel danwel informeel?
   b) Overheerst onderling concurrentie boven stabiliteit van financiële sector?
   c) Kan er wel toezicht gehouden worden op de geaggregeerde data?
   d) Kan er niet een anoniem p-p review systeem komen? Eventueel onder eigendom van DNB.
Aggregate answers

Dit antwoorden van dit interview hebben zich vooral toegespitst op de netwerken in de banken sector.

Geschiedenis en ontwikkeling van netwerken binnen de banken sector

Het onderzoek raakt aan de theory of clubs, zoals beschreven in de literatuur. Theory of clubs beschrijft een gesloten system waarin verschillende. De banken sector kan hiermee vergeleken worden. Vroeger kon er informeel toezicht gehouden worden binnen dit gesloten systeem, maar ook toen al ging er een bank af en toe failliet door de genomen risico’s. Dit is van alle tijden en ook toen werden de deposito houders beschermt door banken op te kopen.


Iedereen dacht dat er een model was bedacht waarbij risico genomen kon worden waar winst gemaakt werd waarbij de risico’s mee vallen. Alle banken zaten in een systeem en zolang dat systeem in evenwicht is dan loopt het allemaal wel. Het gaat pas mis toen het systeem opeens instabiel bleek. Toen instabiliteit bleek wou iedereen van zijn risico producten af. Als één bank dat doet is er niet direct een probleem, maar als iedereen dat doet dan is het wel een probleem. Banken moeten in twee systemen kunnen denken. Huidige rustige situatie en wat gebeurt er als een systeemshock plaats vind.

Het risico management heeft niet voor elkaar kunnen krijgen dat er in de top van de banken werd besloten om even minder hard te willen groeien. Er waren geen prikkels aanwezig om je even verstandig te gedragen. Dat koste je alleen maar winst.

Netwerk dynamiek

Er is veel veranderd in de banken sector. In 1993 riep DNB alle banken bij elkaar om te zorgen dat een andere bank niet in de problemen kwam. Dat kon toen nog. De sector werd geforceerd om met zijn alle problemen op te lossen. Doordat ze bij elkaar zaten was het weer een klein gesloten systeem waar druk opgebouwd kon worden.


Onderling toezicht functioneert alleen wanneer er hele vervelende consequenties zijn als je niet meedoet. Als je als bank stout was geweest, dan werd je daarop aangesproken. Als je het nog een keer deed kreeg je een pak slaag. Dat gebeurt nu niet meer. Die informele systemen werken op basis van kleine systemen, repetitiviteit en een meer ronde systeem. Tot 1980 kon dit. Nu niet meer.
The capability of peer monitoring to manage moral hazard

Je ziet nu weer een terugtrekkende beweging van banken naar kleinere systemen omdat de risico’s onbeheersbaar bleken. Nadeel hiervan is wel dat de mogelijkheden van internationalisatie ook weer verdwijnen.

Informele relaties

Peer to peer arrangementen hangen ook aan de personen in de sector. Er wordt af en toe met elkaar gedineerd en ze hebben vroeger bij elkaar op school gezeten. Motief om elkaar te controleren is dat niemand belang heeft bij al te grote ongelukken, want dan ben je je baantje kwijt. Uiteindelijk heeft iedereen er belang bij dat je het niet te bont maakt.

De kracht van netwerken is ook dat er onderling vertrouwen is. Dit zorgt dat er relaties ontstaan en mensen elkaar kunnen controleren. Aan de andere kant, onderling vertrouwen kan ook zorgen dat er geen tegenspraak gegeven durft te worden aan beslissingen.
Apendices
The capability of peer monitoring to manage moral hazard

A.3. Alex Hilgevoord

Questionnaire

1. Kunnen banken naar elkaar kijken, met betrekking tot de informatie die beschikbaar is?
2. Kijken banken naar elkaars risico positie?
   a. Vinden ze het nodig?
   b. Waarom wel of niet?
3. Staat de cultuur het ook toe dat banken zich bezig houden met elkaar?
4. Welke mogelijkheden hebben banken om wat van elkaar te zeggen?
   a. Worden deze middelen naar uw weten ook gebruikt?
   b. Heeft u een beeld van het informele netwerk van banken en bankdirecteuren die elkaar beïnvloeden. Heeft dit invloed op keuzes die gemaakt worden? Of word er gepraat over derden?
5. Krijgt u als DNB wel eens signalen van andere banken over ABN of van ABN over andere banken?
   a. Waar bestaan deze signalen uit?
   b. Wat doet u met deze signalen?
6. Hoe gaat u verder om met de relatie tussen ABN en andere banken?
7. Ziet u een toegevoegde waarde van banken die elkaar reguleren?
   a. Wat is de toegevoegde waarde?
8. Ziet u gevaren in het reguleren van banken
Aggregate answers

Mr. Hilgevoord heeft aangegeven niet al zijn antwoorden in een openbaar rapport terug te willen zien. Daarom zal deze sectie zich beperken tot de antwoorden die zijn gebruikt in het onderzoek. Mr. Hilgevoord heeft expliciet aangegeven geen bezwaar te hebben tegen het gebruik van deze uitspraken:

Banks very well know that there is burden sharing in case of financial distress.

banks have ample information regarding their peers. Sharing of information is a necessity to function in the market. For example when a banks needs funding for investments. This funding is gathered by requesting investment of companies. These companies will only invest if they trust the investment and the bank. Therefore, the bank needs to be open in their financial situation to gather funding. The usually do this when informing rating agencies and bank analysts as well as the general public when reporting their quarterly figures and their annual report. These presentations are kept at so many places that this information becomes a public secret, also to peers.

Willingness to sanction also relates to the competitive relation amongst peers. As Mr. Hilgevoord stated: “If a competitor walks into the swamp, you usually do not warn him.”

The Dutch Central Bank has meetings with the NVB. During these meetings banks sometimes discuss (most times absent) behaviour of peers.

The central banking part of DNB informs the supervision part of DNB, when strange behaviour or prudential risks are noticed in the financial markets.
The capability of peer monitoring to manage moral hazard

A.4. JAN DE WIT

Questionnaire

Kunnen reguleren

Proposition 1: Peers have information about each other’s behaviour
- Verzamelen banken informatie of elkaars risico afwegingen, naar uw inzicht?
  - Houden ze elkaar in de gaten?
  - Met welk doel doen ze dit?
- Wat voor type informatie is dit? Formele documenten of onderlinge telefoontjes en tijdens dinertjes?
- Wat is de kwaliteit van deze informatie?
  - Zijn ze op basis van deze informatie ook echt een inschatting kunnen maken?
  - In hoeverre speelt perceptie een rol? Kijk naar ABN Amro en ING, allebei actief op Amerikaanse huizenmarkt. Een trekt terug, andere neemt positie van 40 miljard aan.

Als u bedenkt dat risico zich ontwikkelt. Eerst word er een keuze gemaakt, daarna ontstaat er een probleem en pas een samenloop van problemen brengt een crisis
- Wat is dan volgens u het moment dat banken naar elkaar kijken?
  - Doen ze dat al in het uiterste begin of als er een probleem ontstaat of constant?

Proposition 4: Peers have formal & informal means to intervene
Vanuit de verslagen van uw commissie concludeer ik dat banken voornamelijk de DNB inlichten als zij potentiele misstanden zien bij andere banken. Dat betekent dat ze in ieder geval in het allerlaatste stadium doorhebben als er iets mis zit bij een collega bank.
- Gebeurt er volgens u nog meer?
  - Zouden banken onderling nog meer kunnen doen?
  - Hoe ziet u dit voor zich?
  - In welke stadia van risico zou dit kunnen?

Proposition 5: Peers have enough degrees of freedom to adjust regulation to the situation at hand
Enerzijds willen we dat banken elkaar tot de orde roepen anderzijds kunnen ze vanwege marktwerking eigenlijk onmogelijk afspraken met elkaar maken over wat mag en wat niet. Herkent u zich in deze opmerking?

Willen reguleren
Naast kunnen, is willen een belangrijk onderdeel voor het goed functioneren van zelfregulering. Bij deze vragen mag u indien u dat nodig vind een onderscheid maken in voor en na de crisis.

Proposition 2: Peers have a sense of urgency to regulate one another
- Hebben banken de wil om zelf te voorkomen dat een andere bank omvalt?
  - Waarom? Welke prikkel zijn er?
  - Welke afwegingen spelen hier een rol?
  - Het zijn toch concurrenten?
- Heeft de aanwezigheid van DNB hier invloed op?
- Markt/ maar wel sociale functie, wat overheerst?
Proposition 3: Peers may interfere with each other's business
Naast de wil van een individuele instelling, is er natuurlijk ook zoiets als een cultuur tussen banken. Dit kan invloed hebben op de zelfregulering.

- Hoe zou u uit uw ervaring deze cultuur tussen banken definiëren?
- Zouden banken als ze vinden dat een ander onverantwoorde risico's neemt daar wat van durven zeggen?
  - Welke motieven zitten hierachter?
    - Non intervention?
    - Non receiving?
    - Image?

Aggregate answers
SP lid tweede kamer, Voorzitter parlementaire commissie de Wit I en de Wit II
Onderzoek de Wit I en de Wit II doen onderzoek naar drie gebeurtenissen. De miljardensteun, de credit crisis en het garantieloket waar in eerste instantie geen en uiteindelijk beperkt gebruik van wordt gemaakt.

Kunnen reguleren
Proposition 1: Peers have information about each other's behaviour
Over het verzamelen van informatie kan Mr. De Wit geen inschatting maken. Wel heeft hij sterk het vermoeden dat ze elkaar in de gaten houden. Dit is ook een soort vingerspitzen gevoel, dat soms of weinig concrete informatie gebaseerd is. (zie bijv. de bijdrage van Mr. Bruggink over IceSave, die zonder in de boeken gekeken heeft kan stellen dat het helemaal mis zit). Het systeem zit vol met aannames, maar als iets concreet genoemd word, betekent dit door de marktwerking al snel einde van de bank.

Informeel ontmoeten bank bestuurders elkaar. Bijvoorbeeld in de Catshuissessie (kabinet Balkenende, augustus 2008.) Tijdens deze catshuissessie niet over de op handenstaande crisis gesproken. Ook op een symposia op Nyenrode zag Mr. De Wit dat alle bankenbobo’s daar aanwezig waren met elkaar, inclus Mr. Sybrand (directeur DNB). Hier zullen ze volgens Mr. De Wit ongetwijfeld ook met elkaar spreken over risicos in de markt, maar dit is een ongegrond vermoeden. Daarnaast wijst Mr. De Wit erop dat de raad van bestuur soms zelf te weinig kennis heeft, helemaal door de complexiteit van de producten. Hierdoor hadden ze zelf niet een goed beeld van hun eigen risico’s. Om echte inzicht in risico's te hebben, zal ze due diligence moeten doen toepassen. Dit lukt in het specifiek geval van Fortis niet eens in de dataroom. Daarom vermoeden dat dit zonder specifieke openheid zeker niet mogelijk is.

Mr. Staal heeft gezegd dat samenwerken tegen de crisis niet mogelijk is vanwege de NMa inmenging. Mr. De Wit vindt dit argument ongegrond en denkt dat er zeker wel iets mogelijk was qua afspraken om de financiële sector stabiel te houden. Dat hoeft zeker niet direct betrekking te hebben op vaststellen van rentes e.d.

Proposition 4: Peers have formal & informal means to intervene
Banken kijken inderdaad naar de DNB. DNB is de controleur en moet ingrijpen. Dit hebben ze niet goed gedaan. O.a. door Regulatory Capture (steeds zelfde mensen die relatie opbouwen met hun inspectee). Natuurlijk zit er bij DNB ook het aspect in dat ze internationaal niet strenger willen zijn.
The capability of peer monitoring to manage moral hazard

dan andere, vanwege de concurrentiepositie. Ook hadden ze minder middelen voor de crisis, dan nu na de crisis met de interventie wet. Dit heeft het speelvlak wel vergroot.

Willen reguleren
Proposition 2: Peers have a sense of urgency to regulate one another

Proposition 3: Peers may interfere with each other's business
In het openbaar is het sowieso not done om te interfereren in elkaars bedrijf. Je ziet dat Mr. Bruggink het wel gedaan heeft bij IceSave, met een brief naar DNB en tweede kamer, maar dat was een enorme stap. Informeel stellen ze elkaar naar het vermoeden van Mr. De Wit wel op de hoogte van elkaars standpunten. Wel is het goed te beseffen dat er nogal wat cultuur tussen de banken zit. De Rabobank is ongeschonden de crisis door gekomen, wat nogal wat haat en nijd vanuit de andere kampen gecreëerd kan hebben. Als zij nu betweter gaan spelen is daar waarschijnlijk niet zoveel behoefte aan. Daarnaast blijkt uit het onderzoek dat er een onderling wantrouwen is. Je geeft je problemen niet toe. Als je dat doet, zijn je problemen bekend in de financiële markt en ontstaat er wantrouwen. Dit kan enorme gevolgen hebben. Ook ben je concurrenten van elkaar, wat het onderlinge wantrouwen vergroot.
Apendices
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A.5. Hein Bloks

Questionnaire
De eerste lijn van vragen gaat over het **kunnen** reguleren van elkaar. Een tweede lijn van vragen gaat over het **willen** reguleren van elkaar.

Kunnen reguleren

**Proposition 1: Peers have information about each other's behaviour**
- Verzamelen banken informatie of elkaars risico afwegingen, naar uw inzicht?
  - Houden ze elkaar in de gaten?
  - Met welk doel doen ze dit?
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- Wat is de kwaliteit van deze informatie?
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  - In hoeverre speelt perceptie een rol? Kijk naar ABN Amro en ING, allebei actief op Amerikaanse huizenmarkt. Een trekt terug, andere neemt positie van 40 miljard aan.

Als u bedenkt dat risico zich ontwikkelt. Eerst word er een keuze gemaakt, daarna ontstaat er een probleem en pas een samenoop van problemen brengt een crisis
- Wat is dan volgens u het moment dat banken naar elkaar kijken?
  - Doen ze dat al in het uiterste begin of als er een probleem ontstaat of constant?

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Vanuit de verslagen van uw commissie concludeer ik dat banken voornamelijk de DNB inlichten als zij potentiele misstanden zien bij andere banken. Dat betekent dat ze in ieder geval in het allerlaatste stadium doorhebben als er iets mis zit bij een collega bank.
- Gebeurt er volgens u nog meer?
  - Zouden banken onderling nog meer kunnen doen?
  - Hoe ziet u dit voor zich?
  - In welke stadia van risico zou dit kunnen?

**Proposition 5: Peers have enough degrees of freedom to adjust regulation to the situation at hand**
Enerzijds willen we dat banken elkaar tot de orde roepen anderzijds kunnen ze vanwege marktwerking eigenlijk onmogelijk afspraken met elkaar maken over wat mag en wat niet. Herkent u zich in deze opmerking?

Willen reguleren
Naast kunnen, is willen een belangrijk onderdeel voor het goed functioneren van zelfregulering. Bij deze vragen mag u indien u dat nodig vind een onderscheid maken in voor en na de crisis.

**Proposition 2: Peers have a sense of urgency to regulate one another**
- Hebben banken de wil om zelf te voorkomen dat een andere bank omvalt?
  - Waarom? Welke prikkels zijn er?
  - Welke afwegingen spelen hier een rol?
  - Het zijn toch concurrenten?
• Heeft de aanwezigheid van DNB hier invloed op?
• Markt/ maar wel sociale functie, wat overheerst?

**Proposition 3: Peers may interfere with each other's business**
Naast de wil van een individuele instelling, is er natuurlijk ook zoiets als een cultuur tussen banken. Dit kan invloed hebben op de zelfregulering.
- Hoe zou u uit uw ervaring deze cultuur tussen banken definiëren?
- Zouden banken als ze vinden dat een ander onverantwoorde risico’s neemt daar wat van durven zeggen?
  - Welke motieven zitten hierachter?
    - Non intervention?
    - Non receiving?
    - Image?

**Aggregate answers**

**Willen reguleren**
Er zijn veel verschillende standpunten over tal van zaken in de bankenwereld, ook over zelfregulering. Meeste Nederlandse banken zijn voorstander van zelfregulering, oplossingen zijn dan efficiënter. Laatste jaren is er wel meer verdeeldheid over ontstaan. Probleem is, wat te doen als ze zich er niet aan houden? NVB kan afspraken als bindend opleggen aan haar leden. Nadeel is wel dat externe partijen er niet aan gebonden zijn. De zelfregulering in gedragscodes lijkt niet echt gewerkt te hebben.

**Proposition 2: Peers have a sense of urgency to regulate one another**
Tussen voorkomen van omvallen en zelfregulering zit een nogal groot verschil. Idee dat banken kunnen omvallen is pas sinds 2007 echt ontstaan. Daarvoor hielden ze het binnen de bankenwereld niet voor mogelijk. Onderlinge verschillen en tegengestelde belangen (bijv. over de opzet voor DGS) zorgt dat er weinig eenheid is en daardoor verliest NVB haar slagkracht. Collegialiteit is essentieel om zelfregulering te laten functioneren, het is een kwestie van geven en nemen en uiteindelijk word dan het collectieve belang behartigd. Tegenwoordig is dat veel minder. Mensen kennen elkaar minder goed omdat ze allemaal uit verschillende milieus komen. Verder zijn de onderlinge afhankelijkheden door de crisis verkleind. Lenen doe je niet meer van elkaar, maar van de overheid of centrale bank die een veel goedkopere rente geeft.
Tegelijkertijd is er nu wel minder concurrentie dan vroeger. ING en ABN mogen geen prijsvechter zijn, dus bij de grote banken bepaalt Rabobank wat de rentes e.d. worden. Ondanks deze vermindering aan concurrentie is de eenheid binnen de bankenwereld wel verder heen dan vroeger. Dat komt o.a. omdat de NVB vroeger bestond uit de voorzitters van de 9 grote banken. Toen in 2005 Groenink van ABN zei, ik moet internationaler oriënteren, NVB kan ook wel door iemand anders uit RvB gedaan worden. Toen ging de rest ook andere RvB leden naar NVB sturen waardoor echte beslissingen zonder goedkeuring van thuisfront niet meer mogelijk werden.

**Proposition 3: Peers may interfere with each other’s business**
Interfereren is not done. Er zijn daarvoor teveel verschillende belangen. Anderzijds, als je zelf ook een kleine positie in die markt bezit wil je er eerst zelf vanaf, want je wil je positie zo duur mogelijk verkopen. Als de risico’s bekent worden word jouw positie ook minder waard.
Kunnen reguleren

Proposition 1: Peers have information about each other’s behaviour
Banken kijken feitelijk alleen naar hun eigen positie met de interne risicomodellen. Als ze dan in eenzelfde markt als andere bewegen letten ze indirect wel op hun peers. Vroeger waren er echte kartel afspraken (tarieven boekje) dat kan tegenwoordig niet meer.

Proposition 4: Peers have formal & informal means to intervene
Tot 2005 luisterde je altijd naar DNB. Als zij iets wouden, dan deed je dat. Dat zorgde er ook voor dat je stil zwijgend met jouw problemen bij DNB kon komen, dan werd er samen naar tijd en een oplossing gezocht. Er was een vertrouwensband.
Toen DNB ook andere financiële instellingen onder toezicht kreeg, dachten ze nog steeds dat hun wensen uitgevoerd werden, ook als er geen juridische claim lag. Andere instellingen reageerden daar anders op, waardoor steeds meer in regels gegoten moest worden. Het aanvullende maatwerk kwam op die manier te vervallen.
De NVB heeft eigenlijk maar één mogelijkheid, namelijk een lid uit de vereniging zetten, wat natuurlijk een ontzettend zwaar middel is. Tegelijkertijd wil je het collectief belang behartigen. Dat betekent dat iedereen lid mag worden.
DSB werd lid, maar voldeed niet aan de eis. Hier werd tijdens vergaderingen heftig over gediscussieerd en werd behoorlijke druk op DSB uitgeoefend. Middelen waren er echter verder niet. Het volgen van de regels was een vanzelfsprekendheid, maar hoe krijg je dat weer terug? Dat is belangrijk voor de zelfregulering.
B. BASEL

Basel Committee on banking supervision is a committee of international experts (board members of national regulators) that set international standards for supervision. Its aims to enlarge the understanding of important supervisory issues and thereby improves the quality of banking supervision (BIS, n.d.). Though, officially this committee does not have any supranational powers, most of their advices are adopted by governments (Commissie de Wit, 2009). The basel accords are agreements between the central bankers and the bank supervisors (Commissie de Wit, 2009). The second accord of basel provides a supervision framework, which is depicted in Figure 15, a figure adapted from (Algemene Rekenkamer, 2009). This is also the used supervision framework by DNB (DNB, 2005).

**Het Basel II-ramwerk**

![Bazel II framework](image)

This figure shows the tasks of the supervisor in its context. Basically, there are three pillars that together should result in stable financial institutes. The first pillar contains the capital requirements, the second pillar is the supervisor and the third pillar is market discipline.

**Capital Requirements**

The capital requirement is the amount of money a bank should have available and is in relation to the risk profile of the bank. The directly available money is the liquidity and the long term available money is the solvability of the bank. The Basel I accord, in 2003, was the first time a minimum capital requirement was introduced of 8% of the capital (Algemene Rekenkamer, 2009). Before this accord, banks could decide themselves on what they found an acceptable, which resulted in much higher capitals. Eventually, this minimum requirement was not used as a minimum by the banks. Banks used this minimum requirement as a maximum capital and the rest of the money was used for investments. Not a lower boundary but an upper boundary was created.

Nowadays, in the Basel II framework the amount of capital required is depending on the amount of risk a bank takes. There is to opportunity for a bank to use it own risk model for calculating the capitals. This is only allowed with consultation and permission of DNB (Algemene Rekenkamer, 2009). Basel II made some changes in the way of calculation and introduces diversification, but roughly the order of 8% is maintained.
The capability of peer monitoring to manage moral hazard

Supervisor
The supervisor focuses on four main issues: organization and control (internal risk management), solvability and solvability management, liquidity and liquidity management and integrity of business (DNB, 2005). These four issues are partial strict norms and partial soft norms. The strict norms are about the liquidity and solvability in line with the capital requirements discussed above. The task of DNB is ensuring that these requirements are met. The soft norms relate to the organization and control norms. It is to the bank to convince DNB that their organization and control is able to mitigate the risks they take.

Next to these issues, DNB also focuses on the culture. The crisis has made aware that the soft controls and the environment of risk taking are as important as the hard controls. This is made clear in their vision on regulation (DNB, 2010a, 2012)

Market Discipline
The core of market discipline in the regulation framework is information disclosure (Algemene Rekenkamer, 2009). The regulator requires which information at least should be disclosed. The assumption or functioning of this disclosure is that it creates a natural pressure on the bank to perform. (Algemene Rekenkamer, 2009) An effect could be that subordinated deposit holders and other market players could demand higher interest rates and the market regulates itself in that way (Chen & Hasan, 2011; T. F. Hellmann et al., 2000).