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Reformation of the Credit Rating Industry – Is there a need?

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Abstract

Title: Reformation of the Credit Rating Industry

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Purpose: 1. From an extended principal-agent-theory analyze the credit rating industry.
2. Based on the findings of purpose 1 define if there is a need for reforming the credit rating industry. If this is the case suggestions on how to reform the industry are proposed.

Methodology: The thesis is based upon secondary data such as documents, journals and books that concern the subject of the credit rating industry. The main theories used in the thesis are the principal-agent-theory and the theory of corporate governance.

Conclusions: The credit rating industry is a complex and fascinating industry. Its history stretches back more than 150 years and has gradually increased in importance. During its history the dynamics of the industry have changed. The extended-principal-agent model was developed by synthesizing different principal-agent-relationships into one model. This model provides a holistic understanding of the credit rating industry and illustrates the interdependence between the different relationships. The industry structure that currently reigns is anti competitive and there is an absence of accountability of the CRAs Based on the findings of the industrial analysis there is a need for reform. It must however be stated that the CRAs overall have succeeded in determining the credit risk of issuers. This argument does not however justify the preservation of the status quo. There is a need for reform and suggestions for reform are presented in the thesis.

Keywords: Credit rating, principal-agent, reform, regulation and corporate governance

Preface

We would like to thank the people that have made this Master Thesis possible. We would especially like to thank our tutor Hossein Asgharian. His advice, but even more important, his patience and flexibility have been crucial to the completion of our thesis. Since this Master Thesis is our last assignment at the University of Lund before graduation, we also like to thank our families for their support during our time in Lund.

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1. Introduction

“There are two superpowers in the world today in my opinion. There’s the United States and there’s Moody’s Bond Rating Service. The United States can destroy you by dropping bombs, and Moody’s can destroy you by downgrading your bonds. And believe me, it’s not clear sometimes who’s more powerful.”[1]
- Thomas Friedman

"the most powerful force in the capital markets that is devoid of any meaningful regulation.”[2]
- Glen Reynolds

1.1 Background

The most important goal of a firm is to create an environment favourable to earning long term profits. A large portion of a company’s value is due to its current and future earnings capability. Finding ways to increase profits from core operations can increase its value. Expansion in the long term usually requires additional capital and consequently increases the risk exposure of a firm. Two important determinants of future success are to what extent companies are able to access capital markets and maintain a stable risk exposure.[3]

Financial markets hold an essential function in the economy. They channel funds from people who have no productive use for them to people who do. An important aspect to consider for investors and issuers is to determine the credit risk involved. Credible and accurate information is needed to conduct this assessment. Techniques and consequently institutions have been developed to solve these problems. As the level of international integration of capital markets increases the need for a global governance system that regulates the markets increases. An important actor in this governance system is Credit Rating Agencies (CRA). These agencies are specialised in providing market actors with expertise that facilitates the estimation of risk when appraising an investment.[4]

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[1] Partnoy (2001)
[2] Economist (2005)
[3] Nofsinger (2004) p.1
[4] Kerwer (1999)

The activities of CRAs produce significant effects. A poor rating can drive up an issuer's borrowing costs and in certain cases put companies out of business. Credit rating agencies also rate sovereign debt, which has significant implications for international government to government business relations.

Since the collapse of WorldCom and Enron which both had high ratings prior to their downfall, a debate has been waged across the world as to the role of CRAs. They have been accused of protecting the companies they rate instead of acting in the interests of the investors. An illustrative example of a conflict of interest is that the CRAs offer consulting services to the companies they rate. A survey from 2004 conducted by the Association for Financial Professionals showed that 34% of CFOs considered the ratings they received to incorrect and 41 % found that the CRAs did not respond quickly enough to changes in their respective business environment.[5]

Regulators such as the Securities and Exchange Commission (SEC) speak of the importance of preserving the integrity of the market through reforming the credit rating industry, but as yet nothing has happened. The credit rating industry is dominated by two major companies, Standard & Poor's and Moody's, and is considered a duopoly. This duopoly is shielded from competition through their designation as Nationally Recognised Statistical Rating Organizations (NRSRO), a status that only a limited number of companies have obtained. The SEC is currently debating the credit rating industry and a possible industry wide reform. June 11th 2005 has been set as deadline for providing comments to the SEC as to what this reform, if needed, should imply.

We find it of interest to study and analyse the role of CRAs and the future of the industry, because the credit market is becoming more and more powerful in the global economy. Since the 1970s, credit markets have been the driving force in finance and have generated huge trading volumes, substantial profits and there have been several debates concerning legal and regulation related issues.

[5] http://www.afponline.org/pub/pdf/2004_10_research_cra_report.pdf

1.2 Prior research

There have been several studies written on the subject of the credit rating industry. These studies have studied quantitatively for example the correlation between a change in a rating and the effect on the stock price as well as the bond price. The majority of the studies we have read have been qualitative where the dynamics of the credit rating industry have been analyzed. Well known books and journals have been written by Cantor & Packer (1994), Fight (2002), Kerwer (1999 & 2004), Partnoy (2001) and Fisch (2005). All these studies have depicted the credit rating industry from different perspectives and they have all provided suggestions on how to reform the industry in order to make it more efficient. The authors of these studies have different theoretical approaches when analyzing the credit rating industry. There is however an absence of studies that have applied the Principal-Agent theory as the framework for analysis. There is a void in the research field. The Principal-Agent theory is of interest to use as a framework as the role of the CRAs is to reduce the agency costs between the shareholders and management. . This theory however is insufficient in its original form as it does not completely capture the dynamics of the credit rating industry. The credit rating industry, as with most industries, consists of multilateral relationships between the involved actors. For this reason we have developed an"Extended Principal-Agent Model" that captures the interdependence of the different actors. It is our belief that this model is conceptually more illustrative and effective when analyzing the credit rating industry than previously applied theories.

1.3 Purpose

The thesis has a dual purpose:

1. From an extended principal-agent-theory analyze the credit rating industry.
2. Based on the findings of purpose 1 define if there is a need for reforming the credit rating industry. If this is the case suggestions on how to reform the industry are proposed.

1.4 Target group

The target group for this thesis are academics studying master level and above. Our thesis will also be sent to the SEC, before the 11th of June 2005, in order to be able to provide

suggestions on the reform, if needed, of the credit rating industry. Finally the thesis can be of interest for the CRAs.

1.5 Delimitations

The thesis focuses on the role of CRAs and their role as monitors in the corporate governance system. By this we imply that the relationship of CRAs to companies and not to sovereign states is analysed. The focus of the thesis is placed on the two dominant market actors Moody's and Standard & Poor's and when the abbreviation CRA is used this refers to these two actors, if it is not stated otherwise. Further in the principal-agent analysis the question of internal governance controls are excluded as the thesis concentrates on external principal agent relationships. In the theoretical discussion concerning regulation of securities intermediaries, oligopolies are briefly discussed. The reason for the exemption of more detailed theories of oligopolies and more specifically game theories such as Cournot, Stackelberg and Bertrand is that our thesis addresses the subject on a more general level.

1.6 Outline

In this chapter the structure of the thesis from chapter 2 to chapter 6 is presented.

Chapter 2 - Methodology

In this chapter we will discuss the methodological framework of the thesis. The methodological approach that has been chosen is discussed as well as, how the data has been gathered and how it has been processed and whether or not our findings can be considered trustworthy.

Chapter 3 – Theory

In this chapter the chosen theories will be explained. In order to provide an holistic understanding of the credit rating industry, the theoretical chapter starts by providing the underlying assumptions of corporate governance theory and the structure of the system. In this system the role of the CRAs is illustrated. Integrated into the corporate governance theory is an extended principal-agent theory that illustrates the interdependence of the different actors in the corporate governance system. Following this presentation the underlying theory

of why financial intermediaries, such as brokers, exist is presented. To conclude the theory of regulating securities intermediaries is depicted.

Chapter 4 – The empirical study

This chapter begins with a description about what a rating is and the history of the credit rating industry. We believe that this gives the reader a pre-understanding which is necessary to relate to the following analysis. The chapter also describes the major firms in the market, Moody´s, Standard & Poor´s, as well as how the rating process is performed and the underlying criteria upon which this are based. The chapter ends with a description of the dynamics of the credit rating industry that the NRSRO-designation has given rise to and a presentation of certain corporate scandals that have involved CRAs.

Chapter 5 – Analysis

The analysis is divided into two parts. The first one consists of applying the extended principal agent framework from chapter 3 to the credit rating industry. The second part of the analysis is dependent upon the results of the first part when proposing suggestions for improvement.

Chapter 6 - Conclusions

In the last concluding chapter the findings of our thesis are presented and discussed.

1.7Abbreviations

CRA – Credit Rating Agency

NRSRO – Nationally Recognized Statistical Rating Organization

S&P – Standard & Poor's

SEC – Securities and Exchange Commission

SOA – Sarbanes Oxley Act

2. Methodology

2.1 The approach of the thesis

The scientifical approach a researcher chooses determines to a large extent the conclusions that can be drawn. This thesis takes its starting point in already existing theories and has therefore a deductive methodology.[6] The choice between inductive or deductive was easy since we in our information collection phase found literature and theories that gave us a pre-understanding for our field of research. This pre-understanding was necessary in order to conduct an analysis. A deductive approach aims to verify or falsify existing theories in the research field. Within the deductive approach a research synthesis perspective has been used. The objective of the research synthesis is not to repeat past research but to analyse its implications and further the knowledge base. The contribution of the thesis is to introduce a new theoretical perspective in order to offer a practical solution to the reform of the credit rating industry.

Since the purpose of the thesis is to develop a deeper understanding in the subject, a qualitative method is considered more suitable than a quantitative. To be able to conduct a qualitative thesis the researcher must put himself in the place of the object and see the investigated phenomena from its perspective. It is only when the researcher is studying the phenomena from the inside that he can develop a deeper and more complete understanding about the investigated issue.[7] A further reason underlying the choice of the qualitative method is that the investigated variables are hard to quantify and therefore excludes the quantitative approach. The importance of a pre-understanding, which the deductive qualitative method requires, can be criticized since the researcher may focus on gathering information which supports this pre-understanding, which negatively impacts on the neutrality of the information chosen.

The thesis is based upon secondary data that has been collected through articles, journals and literature in the designated research field. The choice of using secondary data instead of primary data was to a large extent because of the insufficient time at the authors' hands. Secondly during the data gathering phase a substantial amount of literature including books,

[6] Arbnor et al. (1994) p.108
[7] Holme et al. (1997) p.92

journals and articles was found that provided a holistic understanding of the research field. This was the underlying reason for the choice to write a thesis from a research synthesis perspective, where existing theories could be developed. If the authors had chosen to rely on primary data, collected by ourselves, we would only have been able to cover a limited area of the subject. There were also doubts as to if it would be possible to collect sufficient amounts of data and that the reliability of that data could be low.

New knowledge can be produced through empirical studies in two ways.[8] The first one implies that the developed results challenge existing theories and new knowledge is created. The second way is to, through empirical findings, develop existing knowledge. This thesis should be categorized in the type of knowledge lastly specified.

In order to help the reader to understand the complexity of the credit rating industry we have chosen to demonstrate how the industry is constituted, why it exists, the history of it and a presentation of the dominant actors. The empirical part of the thesis is of a descriptive character and it is the author's belief that is a necessity for the reader to develop a fundamental understanding of the industry dynamics in order to be able to relate to the analysis part of the thesis.

2.2 Validity and reliability

The definition of validity states that research should not be affected by irregular or systematic errors. Research exists in two levels, the *theoretical level* and the *empirical level*. How a researcher formulates his hypothesis and how he interprets the results from the empirical study are issues related to the theoretical level. The second level, the empirical level, concerns how the researcher collects data and how the data is processed. Validity is expressed as the extent to which the theoretical level and empirical level correspond. One cannot empirically judge whether or not the validity is good. Instead one has to make a judgement if the chosen point of departure is suitable and argue for its advantages and disadvantages. The validity of our thesis is believed to be good but this can be questioned. On the theoretical level the purpose of the thesis is clearly specified and so is the method by which the data is interpreted. The empirical level of the thesis is also considered satisfying. We have collected data from credible sources and following the collection phase the information has been handled and

[8] Jacobsen (2002) p.15

analysed. There is, as already mentioned, questions about the validity. When secondary data is used it is difficult to interpret how this data was initially collected. The majority of the authors and researchers this thesis refers to are well-known in the academic sphere or are representing institutions that are well-known. Despite the fact that they are well-known or are representing well-known institutions there is still room for committing errors. However the reliability of these sources in relation to other less credible sources leads us to believe that the scope for subjectivity for is limited.[9]

The reliability of research refers to the absence of random measurement errors. A high reliability means that a research study should obtain identical results from studies conducted independently of one another and not be dependent upon variables as to who is conducting the research or when the research is conducted. As a mean to obtain a high reliability, the conducted research should be precise. Given the definition of reliability it is the authors' belief that the thesis has a high reliability since we are performing a study based upon secondary data from many different authors that have pursued different approaches to the formulated research problem.

2.3 Data collection

The thesis is based solely upon secondary sources. These sources are predominantly books, journals, articles and statements from experts in this research field. Since these books and articles are written by recognized authors the potential for lacking credibility should not be significant. One other reason to believe that the sources are reliable is that they have been found at the Economic Library at the University of Lund, at LOVISA, at ELIN, from well-known economic magazines or at homepages from regulatory authorities. There is however a potential problem about the fact those researchers often refer to other researchers in their work. As we are using secondary sources we have found our references in the work of other researchers where they also make reference to priory written research. Information has been collected from the homepages of the CRAs, and this information is presumed to be more subjective than the other data collected and this has been taken into consideration.

In the data collection phase when we performed searches for books, articles and journals at ELIN and LOVISA using keywords such as credit rating, regulation of financial markets,

[9] Jacobsen (2002) p.255

SEC, corporate bonds and other keywords linked to those previously mentioned. In order to reduce the large number of articles, journals and book we found from these keywords we ranked our findings and chose the ones we believed were the most relevant.

Finally we have also used a survey conducted by Cantwell & Company in 2001. Cantwell & Company is a specialised consultancy in advising issuers on how to manage the rating process.[10] The company conducts each year an international survey directed at issuers where they are questioned concerning their perception of the credit ratings received and their viewpoints on the relationship between CRAs and themselves.

2.4 Determining the credibility of information sources

We have investigated the credibility of our sources of information through four different phases. These are observation, origin, interpretation and usefulness.[11]

- **Observation**
  To obtain a broad picture of how the credit rating industry works we have used a vast number of different sources both in English and Swedish.
- **Origin**
  In order to evaluate the reliability of the sources we have compiled sources with different point of views on the subject within the research field.
- **Interpretation**
  Since our pre-understanding of the credit rating industry before having conducted this thesis was limited, we assume that we not have been misled by our own subjectivity towards the subject. We find our sources to be objective and the potential for subjective analysis to be limited.
- **Usefulness**
  By comparing different sources of data, the thesis has achieved a higher reliability. When we have found data that corresponds between independent sources a higher reliability has been subscribed as opposed to if this was not the case.

[10] Fight (2001) p.151
[11] Holme et al. (1997) p.107

3. Theory

3.1 Corporate Governance Theory

Corporate governance issues are receiving greater attention in both developed and developing countries as a result of the increasing recognition that a company's corporate governance affects both its economic performance and its ability to access long-term, low-cost investment capital. Corporate governance is a term that can be referred to as the framework through which companies are controlled. The framework specifies the *systems*, *processes*, *relationships* and *rules* to which companies are exposed to. The aspect of systems and processes includes factors such as reporting requirements, measures of performance, accountabilities and delegation of authority. Relationships refer to the main actors that are management, owners, board of directors, regulators, employees and shareholders. Rules consist of rules determining the internal obligations of a company as well as external obligations imposed by government.[12] Corporate governance can be regarded as the instrument through which trust is maintained across the involved stakeholders.

The principals of the corporate governance system have been developed by the OECD in their "Principles of Corporate Governance" and these function as an international benchmark for policy makers, investors, corporations and other stakeholders.[13] In addition to these principals there are other regulatory institutions that exert an influence over the rules of the corporate governance system. The Securities and Exchange Commission (SEC) is the US governing body which has primary responsibility for overseeing the regulation of the securities industry and is an important stakeholder in the corporate governance system.[14]

The Sarbanes Oxley Act (SOA) signed in 2002 is an attempt by regulators to restore the confidence in the market following corporate scandals involving companies such as Enron and WorldCom. The aim of the SOA is to protect investors through increasing among other things the accountability of regulators such as auditors and requiring public companies to establish an accounting oversight board to limit the occurrence of fraudulent corporate practices.

[12] http://www.corpgov.net
[13] http://www.oecd.org/dataoecd/32/18/31557724.pdf
[14] Nofsinger (2004) p.7

A holistic understanding of the corporate governance system can be found by studying figure 1 found below. This figure illustrates the separation of ownership and control as well as the role of monitors acting as a liaison between the stakeholders and controllers.

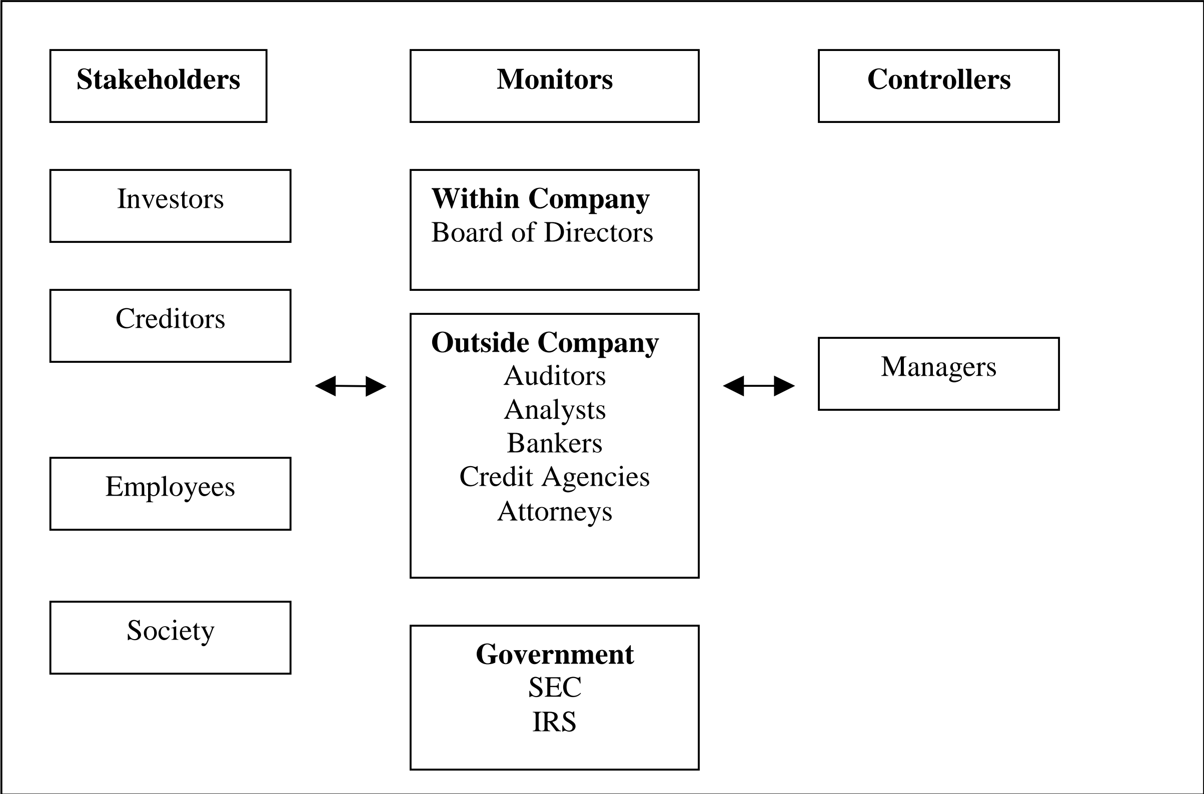

Figure 1: The Corporate Governance System[15]

3.2 Principal Agent Theory

In a company, the shareholder also known as the principal delegates their decision rights to management also known as the agent to represent their interest. This delegation of authority implies that the shareholders as the owners of a company are separated from management that controls the company. This separation of ownership and control is the main reason for the existence of corporate governance controls. The interests of the shareholders need to be

[15] Nofsinger (2004) p.6

aligned with the interests of management to reduce potential conflicts of interest. The problem of lack of motivation of management as agents to act in the interest of the shareholders, the principals, is in economics referred to as the principal-agent problem. The principal-agent theory is a means to conceptualize the relationship between the owner of a company (its shareholders) and the agents (the management team). The underlying assumption of the theory is that each individual is profit-maximizing. Given the divergence of interest between principals and agents agency costs arise. These agency costs arise because of information asymmetries, uncertainty and risk as is the case with most contracts entered into. The principal lacks the means to monitor the agent in order to guarantee that their interests are represented.

Adverse selection is one type of informational asymmetry which can distort a market. A common example to illustrate adverse selection is the insurance market. If buyers of insurance policies can calculate the probabilities of loss better than the provider of the insurance, this may distort the market since the providers not may be able to set accurate premiums because of the fact that they not have accurate measures of expected loss. The resulting equilibrium can be an undesirable outcome for many participants on the market. In order to for this disequilibrium not to appear the companies are in need of producers of information, to set accurate premiums on their products.[16]

The solution to limiting information asymmetries is similar to the moral hazard problem, which is to ensure (to the largest extent possible) the existence of suitable incentives in order to align the interest of both parties. From a game theory perspective, this implies that the rules of the game need to be changed to create a harmonization of interests. The harmonization of interests can be achieved through internal and external corporate governance controls.

3.2.1 External corporate governance controls

External corporate governance controls refer to the controls external stakeholders have over companies. These external controls are mainly exercised through; external auditors, government regulators and debt covenants.

[16] Perloff (2004) p.659

When the principal agent theory is applied to regulation through external corporate governance controls, there are certain problems. To begin the theory can be criticized for providing an inaccurate perception of a company's primary relations. It is insufficient to believe that the primary duties of management are to represent the shareholder as their agents. A more accurate perception is to regard management as the agents of the company as a whole. A company consists of several stakeholders (suppliers, customers, government etc) and it's the effectiveness in handling these multilateral relationships that ultimately determine if the principals (shareholders) will make a profitable investment.[17] A focal point of the principal agent theory is the aspect of agency costs. Agency costs arise due to the time consuming task of monitoring the agents and can be regarded as transaction costs. These costs are a result of the need for monitoring the agents so that potential conflicts of interest do not materialise, such as management seeking to maximise themselves. The second problem relating to the principal agent theory is the difference in motives between regulators (public or private), management and shareholders. The main motive of regulators is to improve the economic efficiency of the market, the shareholders seek to maximise shareholder value and management seek to maximise themselves given the opportunistic assumptions underlying the theory. These are conflicting motives and there are several principal agent relationships that are interdependent, which increases the complexity of an analysis.

The relationship between management and shareholders represents the classic relationship depicted in the principal agent theory. The shareholders are the owners and the control of the assets is delegated to management that functions as agents. In order to minimize the agency costs of this principal agent relationship it is dependent upon the well functioning of relations between; Government and regulators, regulators and management and shareholders and regulators.[18] Shareholders can also be referred to as investors when discussing corporate bonds. When analysing the dynamics of the principal agent relationships it is important to recognize the interdependence of the different relationships.

3.2.2 Relationship: Government and Regulators

One could define a principal agent relationship between government and regulators as the government being the principal and the regulator as the agent which implements the goal of

[17] Nofsinger (2004), p. 6
[18] Prosser (2005)

the principal to maximise economic efficiency.[19]The agent on the other hand if it's a private regulator such as auditor or CRA has the diverging aim to maximise profits. In this relationship there is a potential for conflicts of interest to arise. There is hence a strong need to regulate the regulators in order to minimize these potential conflicts of interest. An example of government trying to minimize conflicts of interest was through the SOA where auditors were forbidden to provide consulting services in conjunction to acting as independent auditors.

3.2.3 Relationship: Regulators and Management

Regulators are principals as they are responsible for monitoring the implementation of the rules and regulations imposed by government. Management acting as agents is accountable to the regulators to act in accordance to the law by aligning their operations to that of the requirements set forth by regulators.[20] There exists a potential for conflicts of interest within this relationship if both regulators and management are profit maximising entities. Private regulators have been criticised for their lack of independence from the companies they are regulating. This lack of independence stems from the fact that they are dependant upon the fees they charge their clients and as such have incentives not to act upon negative information provided by them.

3.2.4 Relationship: Investors and Regulators

The investors are principals as they are owners of for example shares or corporate bonds. The regulators represent the interests of the investors so that the actions of management are aligned to that of the objectives of investors. Given the function of regulators as monitors they can be considered agents in this relationship.[21] The agents are accountable to the principals and this is illustrated by the fact that investment banks and auditors can be sued for providing incorrect information.

The different principal agent relations are illustrated in an extended "Principal Agent Model". This model is the theoretical framework from which the credit rating industry is analysed.

[19] Prosser (2005)
[20] Prosser (2005)
[21] Prosser (2005)

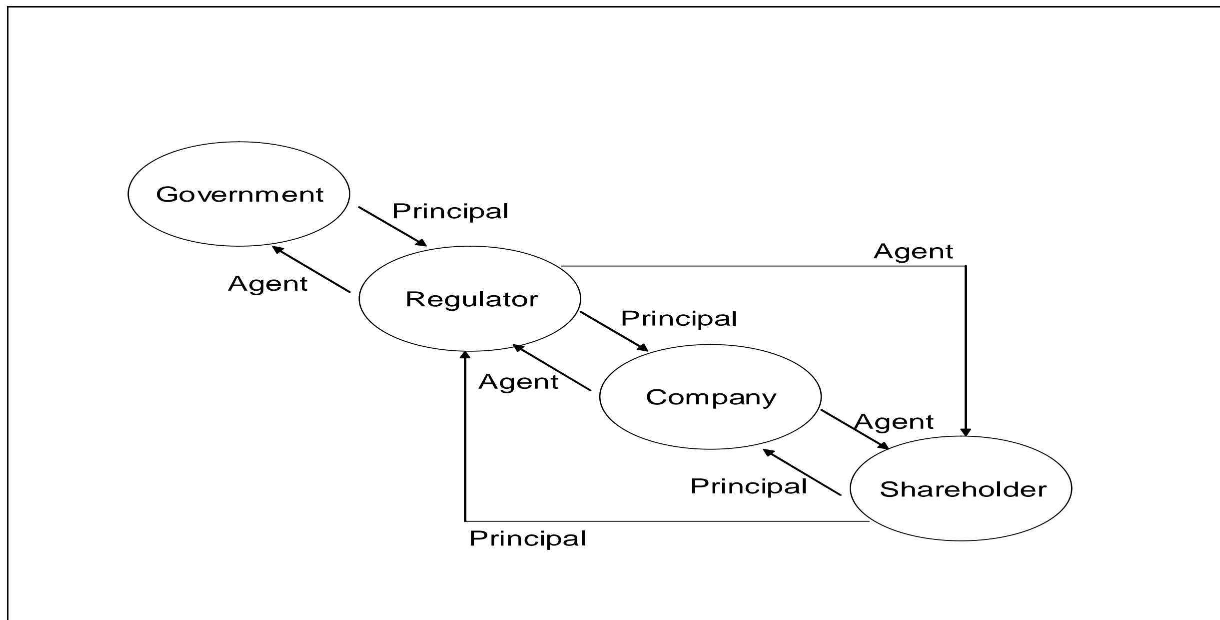

Figure 2: The extended Principal-Agent-model (own construction)

3.3 Financial Intermediaries

The core concept of financial intermediation is through the use of a third party to facilitate the transfer of information or wealth between two other parties. The reason for their existence is that a market that lacks intermediation, where borrowers and lenders deal directly with one another, is less efficient.[22] An intermediary is a facilitator which provides information about future investments, that investors themselves are incapable of obtaining either because of lack of time or lack of expertise. An intermediary can provide this information at a lower relative cost to the investor. Such an intermediary is referred to as a broker and there exists several types of brokers; CRAs, investment banks, auditing firms and different specialist information providers. Certain intermediaries also make investments on the part of the investor and these intermediaries can be divided into two groups; mutual funds and banks.[23]

A broker is an intermediary that earns its revenues from selling information, but does not purchase financial assets from its customers or issue financial assets to them. There are several different kinds of brokers such as investment analysts, CRAs and auditing firms.[24] The most important reason for using brokers is that they can provide their customers with information at a cost and less inconvenience than they would be able to themselves without the assistance of brokers. An illustrative example is where an investor is considering

[22] Arnold (2003), p. 126
[23] Dowd (1996) p.114
[24] Arnold (2003), p.126

undertaking an investment, but does not have the expertise to determine the risk so the person collaborates with an expert who conducts the assessment for him.[25]

The major reason underlying the existence of financial intermediaries is that financial markets are not perfect. Certain market frictions exist and if one are to determine the efficiency of the market ceteris paribus with and without financial intermediaries one will find that the market where they are present is more efficient.[26]

3.3.1. Intermediaries reduce search and transaction costs

Intermediaries are able to accept for example lending to or selling information to clients at lower rate of return due to the economies of scale in their operations in comparison to primary investors. Two important factors that intermediaries seek to limit are transaction- and search costs. [27] Normally it will be the case when an investor is looking for a firm to conduct business with that there will be an element of search activity. Investors or firms could pursue with the search themselves but significant cost savings can be made by working through an intermediary. An intermediary will remove unnecessary duplication of work and achieve economies of scale in the search process. Transaction costs are decreased as intermediaries create a market for engaging in contracts. This market is characterized by standardised contracts and predictable terms which reduce the transaction costs of both the investor and firms through for example the removal of un-coordinated business transactions.[28] Intermediaries are able to spread funds across a large number of clients and consequently reduce overall risk. Individual investors may be unable to do this.

3.3.2 Informational asymmetries

Unlike common markets, where the price is the same for everyone, there are several reasons to believe that the price for information acquisition differs among individuals.[29] Some individuals may posses relevant skills or experience in information acquisition whereas other individuals not may have this ability. The problem of adverse selection can be solved through the gathering of more information relating to the financial situation of the borrower. This can

[25] Dowd (1996) p.121
[26] Dowd (1996) p.114
[27] Arnold (2002) p.29
[28] Dowd (1996) p.115
[29] Nicholson (1998) p.246

be done through private companies collecting and publishing information on firms' balance sheet positions and financial statements.

3.4 Limitations of brokerage

There are predominantly two limitations which concern the work of brokers and these are; the *reliability of their operations* and the *resale problem.*

3.4.1 Reliability of operations

An area of concern with regards to brokers is that the information they provide is at times unreliable. In order for investors to perceive brokers as credible, brokers need to be able to ensure that their information is reliable. If investors accept to pay fees for using the services of a broker, this is an indication that the information provided is reliable, otherwise the investor would not buy the services.[30] A solution to the problem of lack of reliability is for the broker to take a direct stake in the information they provide. An example of this would be if the broker provided information concerning investment opportunities and he invested himself in the projects he considered the most lucrative. The problem however is than intermediary can no longer be considered a broker if he chose to do this and would then be referred to as a bank or mutual fund. Brokers need to provide assurance in different ways.

Given that a broker cannot actively buy into an investment that he provides information on, he can instead use his own wealth as collateral to guarantee a certain level of quality. An illustrative example of this is that it is possible to sue lawyers for malpractice. The lawyers or the law firms' wealth then functions as collateral. This is also applicable to accounting firms that guarantee the quality of their audits using the personal wealth of partners as collateral. The potential to sue brokers such as accounting firms exist, but the possible compensation is limited to the wealth in this case of brokers. Proving malpractice has proven to be a costly and time consuming endeavour for investors. Another guarantee which is more intangible yet omnipresent is referred to as "reputational capital".[31] Brokers with a "good" reputation will be preferred to brokers with a "bad reputation". If brokers were to exploit the interests of their clients on a regular basis this company would probably see themselves losing clients and

[30] Kerwer (2004)
[31] Partnoy (2001)

eventually going out of business. Reputational capital takes time to build and functions as barrier to entry for newly established companies.[32]

3.4.2 The problem of reselling

The second problem relating to brokers is the risk that their information is resold. The problem stems from the fact that in the moment when the information is sold to a customer, the customer can have an inclination to resell the information himself, and thereby directly compete with the broker. When a competitive situation arises in which the broker and client compete head-on this adversely affects the price the broker can charge and at times the price of the information falls below the cost of obtaining it. In order for the broker to be profitable a solution is to charge a high price on the first sale and consequently this price will be higher than if the broker had been protected. A problem with this solution is that a considerable price increase could impact the demand of consumers to the extent that it is eliminated. Hence the problem of reselling could lead to considerably higher prices for the information and the worst case scenario being that the broker's market is destroyed. An alternative solution to this problem is for the broker to sell all the information to one party on behalf of all. This would imply that instead of selling the information to individual investors, and consequently being confronted with the resale problem, the information could be sold to a company in which investors are interested in its debt. The company would then make the information public to the investors as it's in their interest for it to be public.[33]

3.5 Regulation of securities intermediaries

The regulation of securities intermediaries by government is justified by the argument that it is a prerequisite to achieving macro economic efficiency. In order to improve the macro economic efficiency of the corporate governance system regulation seeks to:[34]

- To minimize the potential risk for conflicts of interest
- To provide a legal framework from which the intermediaries work from
- To delegate and revoke the authority of the intermediaries

[32] Dowd (1996) p.123
[33] Dowd (1996) p.125
[34] Löffler (2005)

- Limit the possibility of excess profits

The government functions to an extent as monopolists as they exert control over certain forms of sanctions, including criminal penalties. Furthermore, the government, as a centralized actor, has economies of scale in monitoring the securities market as well as providing information to investors.

3.5.1 Risks

There are certain risks when government actively works to intervene in the market in order to create an environment which is conducive to earning profits and that serves the interests of all involved stakeholders. The main risk that has been identified as a result of government intervention is the creation of legal barriers to entry.

3.5.2 Barriers to entry

The higher the propensity of governments to intervene the higher is the possibility that legal barriers to entry will arise.[35] Monopolies and oligopolies often arise due to government enforced legislation, rather than economic laissez faire market conditions. The legal barriers can be broken down into two different types of barriers; legal protection of a production technique by a patent and the awarding of exclusive licenses or franchises to serve a market. The first one is legal protection of a production technique by a patent, which implies that companies are shielded from competition under a certain time period given the protection from intellectual property rights. The second legal barrier refers to the awarding of franchises or licenses. These franchises and licences create oligopolies or monopolies and are very common in the case of public utilities. These utilities are known as "natural monopolies" as the marginal cost of new entrants by far exceeds the marginal utility. An illustrative example of such a monopoly is the responsibility for distributing water. There are no gains from having several parallel water infrastructure systems. Government intervention is necessary in order to optimize the efficiency of such water systems.

Barriers to entry reduce the competitiveness of the market and limit the options for consumers. It also implies that the consumers are less able to influence producers to serve their interests.

[35] Nicholson (1998) p.546

An oligopolistic market is characterized by the fact that the firms on the market have the possibility to influence the market price. A simple reason why an oligopoly (and monopoly as well) exists is because other firms find it unprofitable or even impossible to enter the market. An oligopolistic market is hard to penetrate for outsider firms because of the barriers to entry. The barriers of entry can be seen as the source to all oligopoly and monopoly power.

4. The empirical study

4.1 What is credit rating?

There are several definitions as to how a credit rating is defined. Moody's provides the following definition:[36]

"A rating simply helps investors determine the relative likelihood that they might lose money on a given fixed income investment. More technically it is an opinion of the future ability, legal obligations and willingness of a bond issuer or other obligor to make full and timely payments on principal and interest due to investors."

A credit rating should not be confused with an audit or control of the company's financial statements. Instead it is an overall opinion or assessment delivered to investors founded on an internal process known as the ratings process. The fact that credit ratings are opinions stem from that CRAs are acknowledged as guarantors of free speech, similar to that of media, under the First Amendment of the US constitution. Given that credit ratings are considered opinions they have been exempted from liability under the Securities Act of 1933, under what is referred to as Sector 11 liability. Opinions, such as credit ratings, are considered different from recommendations that are liable under Sector 11, such as buy-, hold- and sell recommendations. This has had implications for investors as the CRAs are immune from liability if the information they provide is incorrect. Rating agencies have been sued on several occasions such as in 1983 when Washington Public Power Supply System defaulted, in 1996 by Orange County in California and more recently by in conjunction with the Enron and WorldCom corporate scandals. CRAs have on all occasions been acquitted. Other brokers such as investment banks are however liable to lawsuits as is exemplified by the recent conviction in May 2005 when Morgan Stanley were convicted of not having detected accounting fraud in a company called Sunbeam.[37]

Ratings are intended to only measure the risk of credit loss and are not intended to measure other risks in fixed income investments, such as market risk. Ratings portray the long term

[36] http://www.moodys.com/
[37] http://www.reuters.com/newsArticle.jhtml?type=topNews&storyID=8540230

outlook for a company's bonds, and are consequently not intended to fluctuate with the business cycle or the latest quarterly report.[38]

4.2 History

The credit rating system emerged as a private sector institution in the middle of the 19th century. Louis Tappen started the Mercantille Agency in 1841. John Moody applied ratings to bonds in the early 1900s. Shortly after the introduction of Moody's, Poor's Publishing Company, Standard Statistics Company, Inc. and Fitch Publishing Company entered into the market.[39] In the beginning the CRAs sold their information to investors, rather than charging issuers as is the case today. Some issuers were sceptical in the beginning and regarded the CRAs as intruding, but in the end they were forced to provide the agencies with information because absence of information would affect their rating. In these initial stages the ratings provided by CRAs were financed through the sale of publications. Following the invention of the photocopier however and ease at which these publications were copied, CRAs started to charge the issuers. Since the beginning of the 1980s, the role and importance of rating agencies has increased. As it stands today they hold a central role in the international system of capital allocation. Two important factors underlying this development are; *disintermediation* and *globalisation*.[40]

By tradition, banks have played a central role in allocating capital. Banks received money from lenders and then lent this money to borrowers and functioned as intermediaries. Since the 1980s, with the expansion of financial markets the role of banks as an intermediary is not as given as before. Examples of this disintermediation are that investors entrust mutual funds (which then acquire the shares) rather than banks and that corporations can raise funds through issuing stocks and bonds to investors on the capital markets. With the erosion of the relationship between bank and borrower, there is a shift towards a more abstract relationship between numerous issuers and buyers. The increasing role of the market as compared to banks places greater demands on the information provided by credit rating agencies, when determining the credit risk of different issuers.[41]

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[38] Fight (2001) p.4
[39] Fisch (2005)
[40] Kerwer (1999)
[41] Gonzales (2004)

The second reason that explains the growing importance of credit rating agencies is globalisation. Prior to the deregulation of financial markets in the western world, governments played an important role in the allocation of capital. As integration has increased, the role of governments in allocating capital has decreased. Investment funds now invest directly around the world without restrictions. The international credit relationships following the integration of financial markets are to a large extent dependant on the actions of rating agencies. These agencies do not only rate corporate issuers but also countries. This sovereign rating is of importance when considering investing abroad.[42]

The combination of factors namely, disintermediation and globalisation, have reduced the relative power of banks and governments in favour of the market. Rating agencies can in the 21st century be considered one of the most important actors in the global system of capital allocation.[43]

Today about 95% of the CRAs revenues stem from issuer fees, as opposed to charging investors for the information. Fees are determined on the size and complexity of the issue. The shift from investors paying to issuers paying was in large due to what is often referred to as the “tragedy of the commons”. Information can be considered a public good and because circulation of information is hard to restrict, the only viable option for CRAs is to charge the issuers. The potential for free riding would be too great if investors were to buy the ratings as nobody is willing to pay given the fact that if they wait they will obtain it for free.[44] The change of fee structure was a natural solution to the problem of reselling that confronts brokers.

4.3 Credit rating agencies in the corporate governance system

Financial reporting is an important factor which is essential for the corporate governance system and financial markets to function effectively.[45] The reporting of financial information is mainly the responsibility of accountants, auditors and CRAs, as they are the main providers of information to investors.

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[42] Kerwer (1999)
[43] Kerwer (1999)
[44] Fisch (2005)
[45] O´Donovan (2004)

The credit rating agencies are monitors in the corporate governance system (see figure 1). In comparison to certain stakeholders that focus on protecting shareholders, credit agencies focus on protecting company bondholders and other creditors. For investors that chose to invest in fixed income investments such as bonds the safety level aspect is of great importance. By safety level it is implied that the bondholder wishes to receive the best return in interest payments and principal upon maturity, given the holders risk attitude. Credit rating agencies facilitate the otherwise time consuming task of determining whether the debt issued is safe or risky.[46] On a general market level credit ratings are important as they according to the SEC in order to enhance the efficiency of the market and increase transparency.

CRAs have a special relationship with the issuers of debt as they have access to private information, that other monitors in the corporate governance system, do not have access to.[47] The reason for this access to private information is that they are exempted from Regulation Fair Disclosure. This regulation requires entities that have access to propriety or private information to immediately disclose this information to the market. Given the exemption CRAs, are more likely to detect fraudulent activities than other actors. The aim of the regulation is to create a level playing field between market actors with access to sensitive information and those who do not. The justification provided by the SEC for this exemption on the part of the CRAs is that they do not use the information they obtain for investments, but instead they provide this information to the market through their ratings. The possibility for rating agencies to use insider information in their analysis increases the credibility of the rating process. There is however confusion when ratings are fixed as to the level of insider information and public information that have been used as input into the analysis as this is not specified.

The CRAs have in recent years started to offer consulting services in conjunction with the formal rating process in order to help issuers improve their ratings. The consulting services imply mainly that an issuer pays additional fees and in return they receive an indicative rating as to how their rating would change given a proposed corporate strategy.[48] This strategy may involve M&As, sale of assets or for example the repurchase of stocks. This service is named by Moody's as a "Rating Assessment Service". S&P apart from offering rating assessments

[46] Nofsinger, (2003) p .60
[47] Kisgen (2003)
[48] Harrison (2003)

also offer consulting services known as "Risk Solutions" to help banks comply with the requirements of the Basle 2 accord that will be effective in 2007.[49]

4.4 Why get a rating?

What are the motives companies and banks paying fees to secure a credit rating? There are several reasons and they are the following: market access, build up market reputation, lower cost of funding, and distinguish oneself from the competition.

Market access

Any company that wishes to capital markets and issue debt in for example the US is obliged to obtain a credit rating. This has the consequence that companies seek ratings from multiple firms such as S&P and Moody's to reassure the market and gain more legitimacy for a debt issue.

Build up market reputation

New companies that seek to build a reputation in the international financial markets demand credit ratings to increase the exposure of their brand name. This brand exposure is important when companies for example initiate foreign direct investments.

Lower cost of funding

A less known company can at times lower their cost of borrowing if they obtain a favourable investment grade rating. An unknown company can receive legitimacy through the granting of a rating. The lower cost of funding argument is also applicable to more well known companies that chose debt issues as means to lower their borrowing costs. The higher the rating received the lower is the perceived credit risk and vice versa.[50]

Distinguish oneself from the competition

In sectors that are characterized by a limited number of competing companies such as the banking or car industry, a credit rating is a tool to distinguish them from the competition.[51]

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[49] http://www.standardpoors.com
[50] Cantor et al. (1994)
[51] Fight (2001) p.5

4.5 The use of ratings in regulations

The role of CRAs stretches beyond providers of neutral information through credit ratings and monitors in the corporate governance system. The criteria used by CRAs to assess the creditworthiness of issuers decide in fact the conditions for entering the financial markets. The higher the quality of the rating (investment grade) received the more access an issuer will have to the markets that are the most liquid, while a lower rating (speculative grade) will consequently lead to the exclusion from these markets. Large institutional investors as well as smaller investors rely on CRAs to a large extent in their investment decisions. Given this dependence CRAs can be considered regulators in the financial markets. Their role as regulators is further enhanced by the fact that they are embedded in public regulation. During the 1930s and the introduction of the New Deal credit ratings were recognized as important in risk regulation. Until the 1980s this was a phenomenon limited to the US but during this decade it spread geographically to most of the countries in the developed world. This has been exemplified by the fact that the Basel Committee for Banking Supervision has in its Basle 2 accord obliges banks to use credit rating to define their capital requirements.[52]

There are three sorts of regulatory requirements that CRAs expose financial institutions to; *investment restrictions, disclosure requirements* and *capital reserve requirements.*

Investment restrictions refer to restrictions imposed on financial institutions to limit their tolerated risk exposure. An example of this are pension funds that are only allowed to invest in investment grade bonds in order to protect the interests of future pensioners. Disclosure requirements oblige financial institutions to disclose more information about investments rated speculative grade in comparison to investments rated investment grade in their quarterly reports. Finally capital reserve requirements implies that in respect to the perceived credit risk, financial institutions in America receive a discount on their capital reserve requirement if their portfolio investments are of a favourable credit rating.[53]

4.6 The major credit rating agencies

Moody's and Standard & Poor are the dominant actors in the credit rating industry. They both received the NRSRO designation in 1975. They both publish credit opinions, research and

[52] Kerwer (2004)
[53] Kerwer (2004)

ratings on fixed income securities, issuers of securities and other credit obligations. In addition they provide a wide range of business and financial information.[54]

4.6.1 Standard & Poor's

Standard & Poor (S&P) is a company with a history that dates back to 1860 when Henry Varnum Poor opened a publishing house that produced manuals of railway companies. It was not until 1923 that S&P started to publish ratings and these were limited to loans of industrial companies. In 1941 Poor Publishing merged with Standard Statistics to form the S&P. In 1960 S&P acquired a stake in Fitch Investors Service rating agency operations. The ratings symbols that are today used worldwide that were developed by Fitch were incorporated into the S&P ratings. In 1966 McGraw Hill an American publishing house bought out S&P and still today they own the company. Standard & Poor is not a public company.

4.6.2 Moody's

Moody's history dates back to 1900 when John Moody founded the company. In 1909 Moody's published their first ratings when they rated loans and American railway companies. These were classified according to the same rating scale still in use today. These ratings were later applied to industrial companies and in the 1970s they began rating commercial paper and euro bonds. Since 1962 Moody's has been a subsidiary of the Dun and Bradstreet Corporation (D&B). In 1999 however Moody's was divested as independent quoted company but D&B still exerts an influence when appointing the president of Moody's. [55] Moody's alone assesses the likelihood of default on $35 trillion on debt.[56] Warren Buffet, chairman of Berkshire Hathaway Inc, owns as March 2004 16 % of Moody's stock.[57]

4.7 The rating process

When companies wish to issue debt, they are required to contact CRAs to receive a solicited rating. In order to increase the legitimacy of the debt issue several CRAs are often contacted to conduct an analysis. The CRAs assign credit rating analysts the responsibility to conduct

[54] Fight (2001) p.29
[55] Fight (2001) p.29
[56] Economist (2005)
[57] Carnahan (2005)

the analysis. A credit rating analyst can cover as many as 55 issuers at a time.[58] These analyses are both quantitative and qualitative and a rating process usually takes from a couple of weeks to a couple of months depending on the complexity and size of the issue. After having completed the analysis the analysts report back to a committee consisting of senior members of the CRAs. It is then the committee after having discussed the debt issue that makes the final decision as to what rating the issue shall receive. Before the formal decision is taken the issuer is permitted to make objections if they consider the rating to be incorrect. If this is the case then the issuer can chose to disclose additional information to increase the probability for a favourable rating. This is important as the lower the rating the higher the interest costs the issuer must pay. Having determined the rating CRAs re-evaluate the rating on an annual basis unless there are dramatic changes relating to the issuer's affairs. Active issuers such as financial institutions normally meet with the agencies twice or more per year (see Appendix 1). Such changes can be prospective mergers, inability of the issuer to meet revenue projections or changes in the regulatory environment of the issuer.[59] Not all ratings are however solicited ratings, there exists also those that are known as unsolicited ratings. Unsolicited ratings imply that CRAs actively rate companies, even though they haven't demanded it. The credit rating process in these cases is solely based on public information, which increases the uncertainty of determining the credit rating.[60] To provide a more comprehensive understanding of the rating process and the interaction between the rating analysts and the issuers the Cantwell survey from 2001 has been included in Appendix 1.

4.8 Criteria underlying ratings

In order to assess the credit risk underlying a debt issue during the rating process CRAs evaluates issuers on the basis of certain criteria. The default risk is not only determined by the financial situation of the issuer. Other factors that are considered concern the industry in which the issuer operates as well as the country in which the issuer is located.[61] Credit ratings are not based upon an assessment of macroeconomic risk exposure or event risk.[62]

4.8.1 Country risk

The credit risk of a country is expressed as the probability that a country will default on their foreign debt. The focus of this analysis is to determine if there is a risk that a domestic

[58] Klein (2004)
[59] Economist (2005)
[60] Fight (2001) p.213
[61] Kerwer (1999)
[62] Jacobson et al. (2000)

currency cannot be exchanged for a foreign currency when debts are to be repaid. If such a situation was to arise an issuer within that country will also be unable to repay their debts. When a CRA has determined the country risk this places an upper ceiling upon the credit rating that an issuer in that country can receive. An issuer cannot receive a rating higher than the estimated country risk.[63]

4.8.2 Industry risk

When a CRA determines the industry risk the objective is to understand the nature and structure of the industry. An important factor is the analysis of the degree of competition in the industry.[64] The higher the degree of competition is the higher is the likelihood that an issuer will default. Factors of interest to study are the level of national and international competition, the barriers to entry, cyclical behaviour and the risk of government interference. The lower these are the more favourable the credit rating will be.[65]

4.8.3 Issuer risk

At the company level, the risk of default is determined by studying a company's ability to influence prices, its reputation, the geographic spread of sales and the reliance on certain suppliers and customers.[66] Other factors of interest are management's ability and aims, revenue structure and earnings projections, capital structure and financial risk.[67]

4.9 The Ratings

There is no uniform standard in the credit rating industry for the ratings. However Fitch and S&P have the same rating symbols. A distinction is made between high quality and low quality grades. High quality grades range from AAA to BBB and are known as investment grade bonds. Low quality grades range from BB to D and are referred to as speculative grade bonds or junk bonds.

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[63] Kerwer (1999)
[64] Fight (2001) p.139
[65] Kerwer (1999)
[66] Kerwer (1999)
[67] Fight (2001) p.140

The Rating Scale for the CRAs		
	Moody´s Rating	**S&P´s Rating**
Best Quality	Aaa	AAA
High Quality	Aa	AA
Upper Medium Grade	A	A
Medium Grade	Baa	BBB
Non-Investment Grade	Ba	BB
Highly Speculative	B	B
Defaulted or Close To It	Caa to C	CCC to D

Table 1: The rating scale for the CRAs[68]

4.10 Market power of CRAs

In recent years, the CRAs have experienced increasing demand for their services. The expansion of securitization has to an extent played an important role. Also, many institutional investors are increasingly relying on CRAs in their investment decisions. From an industrial organization perspective an assessment of the competitiveness can be made by analysing the profit levels of the incumbent companies such as S&P and Moody's. Above normal profits during longer time periods can be an indicator to measure the relative market power. The only credit rating firm for which stand alone data on profits is available is Moody's. Moody's had an operating income of $ 556 million in 2003 on an annual turnover of $ 1.2 million, and an ROI of 74 %.[69] Moody's is the only CRA that is listed on a stock exchange and as such it is difficult to obtain data concerning S&P and Fitch. One can however realistically extends the discussion of the high ROI to S&P as they have an equivalent market share to Moody's.

4.11 NRSRO

The limited number of credit rating firms is to a large extent due to the fact that in 1975 the SEC designated S&P, Fitch and Moody's as "Nationally Recognized Statistical Rating Organizations" (NRSROs). The SEC later designated four more agencies as valid, but these were quickly acquired by the major original three CRAs.[70] In February 2003 the SEC

[68] Nofsinger (2004) p.63
[69] McTague (2004)
[70] White (2001)

designated a fourth company called Dominion Bond Rating Service and in March 2005 A.M.Best that focuses on the insurance industry received the designation. The SEC rules protect the incumbent CRAs and make it difficult for smaller CRAs.[71] These earn their fees from charging subscribers instead of issuers and given the fact that the ratings of the NRSROs are provided for free to investors, earnings are restricted.[72]

Efforts were made in 1994, 1997 and recently in April 2005 to fix these criteria. As it stands today these criteria are not in place only recommendations. The situation since 1975 with the duopoly created by the SEC can be summarised as having the following characteristics:[73]

- There are no standards for entry
- There are no formal application procedures for obtaining NRSRO status
- There is no process for systematically monitoring rating agencies

The SEC did not have the intention in the 1975 for the NRSRO designation to be a means to regulate the industry. It was instead created to minimize the need for regulatory monitoring. As it stands an NRSRO designation function as an invaluable property right and source of competitive advantage.[74] No NRSRO that has been designated has ever lost its designation due to misconduct.[75]

4.11.1 SEC proposal

The SEC is proposing in April 2005 to define the term NRSRO as an entity that:[76]

- Issues publicly available credit ratings that are current assessments of the creditworthiness of obligors with respect to specific securities or money market instruments.
- Is generally accepted in the financial markets as an issuer of credible and reliable ratings, including ratings for a particular industry or geographic segment, by the predominant users of securities ratings

[71] Appin (2003)
[72] Smith (2000)
[73] Fight (2001) p.226
[74] Fisch (2005)
[75] White (2001)
[76] SEC-proposal (2005) p.20-21

- Uses systematic procedures designed to ensure credible and reliable ratings, manage potential conflicts of interest, and prevent the misuse of non-public information, and have sufficient financial resources to ensure compliance with those procedures.

In June 2005 the SEC will once again meet to try to formalize the criteria for NRSRO designation. In the Sarbanes Oxley Act Section 702 there is a requirement for the SEC to conduct an investigation into the reformation of the industry. There is however no requirement beyond the initial investigation.[77] There is a catch 22 situation for smaller CRAs as they cannot receive the designation before they are generally accepted in the financial markets, but they cannot grow before they can charge the issuers instead of the subscribers. This has created an anti-competitive industry environment where the incumbents have prospered and mainly S&P and Moody´s.[78]

4.12 Failures

The CRAs have overall been successful in predicting the probability of issuer default. However, during the last decades there have been a number of corporate scandals where CRAs in their role as monitors in the corporate governance system have been subject to criticism. In these instances the CRAs have failed to notify investors about the gradual deterioration of creditworthiness on the part of the issuers they were rating.

The mistakes that have been the most debateable are the following:

- Enron was rated investment grade by the CRAs four days before they went bankrupt.[79]
- The California Utilities were rated A- by the CRAs two weeks before defaulting.[80]
- WorldCom was rated investment grade three months prior to bankruptcy.[81]
- Global Crossing was rated investment grade in March 2002 and was declared bankrupt in July the same year.[82]
- AT&T Canada was rated investment grade in February 2002 but defaulted in September the same year, seven months later.[83]

[77] Borrus (2002)
[78] Nofsinger et al. (2004) p.62
[79] Nofsinger et al. (2004) p.65
[80] Egan-Jones (2002)
[81] Nofsinger et al. (2004) p.65
[82] Egan-Jones (2002)

- Orange County was in 1994 downgraded from "high quality" to "close to default" in one day on December 7.[84]
- GM was in the spring of 2005 downgraded to junk bond status. The CRAs were criticized having delayed this downgrade.[85]

[83] Egan-Jones (2002)
[84] Nofsinger et al. p.65
[85] Ablan (2005)

5. Analysis

The framework for conducting the analysis is based on the extended-principal-agent model from chapter 3. The model illustrates the interdependence of different principal-agent-relationships involving government, regulator, company and investor. In the analysis, the extended-principal-agent model has been applied to the actors within the credit rating industry. When applying this model government is represented by the SEC, regulators by the CRAs, companies by the issuers and shareholders by investors. In the extended principal-agent-model CRAs are both agents and principals.

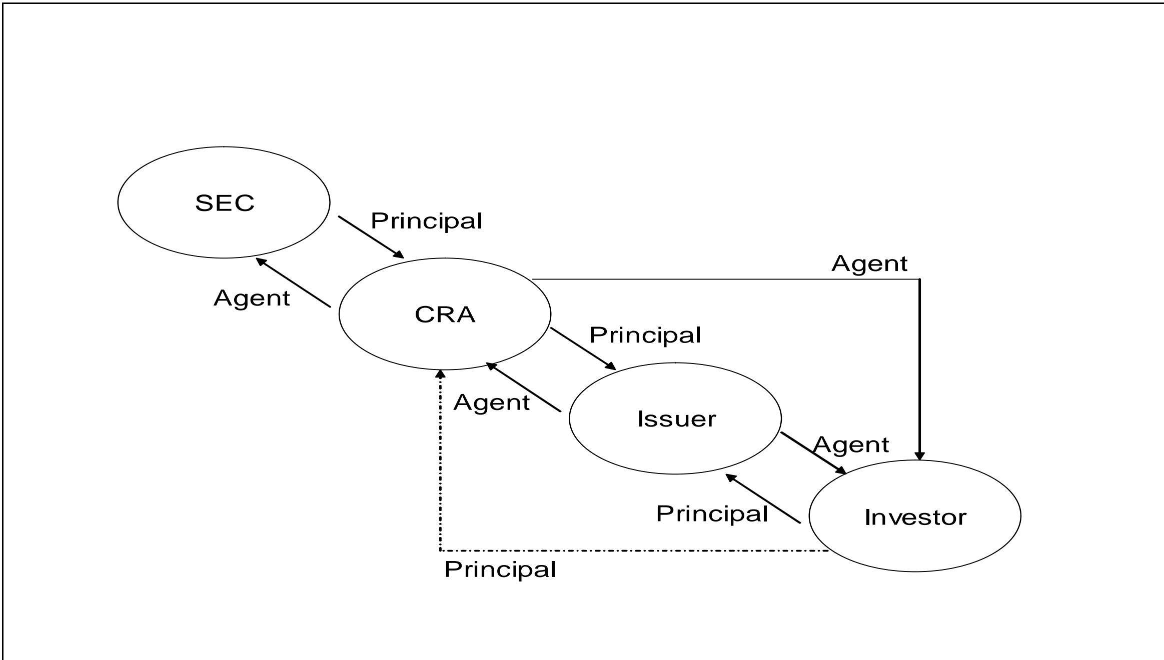

Figure 3. The extended principal-agent-model applied to the credit rating industry

5.1 SEC and CRA

In the principal-agent-relationship between the SEC and the CRAs, the structure of the credit rating industry is determined. The SEC acting as principals decides the rules of the game and delegates the responsibility to increase the economic efficiency of the market to the CRAs acting as agents. It is of interest to evaluate the rules that the SEC has imposed that have shaped the industry. These laws are the following; freedom of speech rights of CRAs, exemption from both Sector 11 liability and regulation of Fair Disclosure as well as the implications of NRSRO designation.

5.1.1 Freedom of speech

Under the First Amendment of the US constitution CRAs are acknowledged as guarantors of free speech. The reason for this being that credit ratings are considered opinions and as such the information the CRAs provide is equal to that of media such as newspapers and television. CRAs provide information concerning credit quality in the same manner as media provides information on events in the world. The CRAs argue that it's important that they are free to request information and then conducting comprehensive internal analysis on the basis of the information received without the interference of third parties. This absence of interference the CRAs claim is important to preserve the client confidentiality relationship between themselves and the issuers. Given that credit ratings are considered opinions they are differentiated from other brokers such as investment analysts that offer recommendations. This distinction is important from a Sector 11 liability perspective, where brokers offering recommendations are accountable for their actions. It is the SEC that ultimately decides if the information provided by brokers should be considered opinions or recommendations

It is somewhat surprising that credit ratings be considered opinions as opposed to recommendations as they are used as a means to regulate financial markets. The three sorts of regulatory requirements that CRAs expose financial institutions to are investment restrictions, disclosure requirements and capital reserve requirements. Credit ratings play a central role in regulating markets and hence a definition of ratings as recommendations would be more appropriate if only to legitimize its use for regulation purposes. To compare credit ratings to information provided by media appears premature.

5.1.2 Sector 11 liability

Given that credit ratings are considered opinions under the First Amendment they have been exempted from liability under the Securities Act of 1933, under what is referred to as Sector 11 liability. As it stands today the CRAs are not legally accountable for their ratings if the information they provide is incorrect, which would be the case to a larger extent should they be considered recommendations. The argument used by the CRAs is that they are integral part of media and as such they are only providing opinions. Opinions they claim are different from recommendations and as such they are not recommendations to buy, sell or hold a security.

When analysing the work of CRAs from a corporate governance perspective their mission as monitors and their internal structures are more similar to investment banks than media companies. Given these similarities it is arguably more correct to claim that they are more similar as entities than CRAs and media companies. Sector 11 legislation shields the CRAs, as agents, from prosecution and creates an industry where the involved companies irrespective of the information provided can operate without the risk of being sanctioned by the principal. This could consequently reduce the incentives for the CRAs to act in accordance with the interests of the SEC and more in profit maximising interests.

5.1.3 Regulation Fair Disclosure

The SEC has provided CRAs with exemption from what is known as Regulation Fair Disclosure (Regulation FD). The Regulation FD requires entities that have access to propriety or private information to instantaneously disclose this information to the public. The justification provided by the SEC for this exemption on the part of the CRAs is that they do not use the information they obtain for investments, but instead they provide this information to the market through their ratings. The possibility for rating agencies to use insider information in their analysis increases the credibility of the rating process. This can regarded from a principal agent perspective as the principal SEC providing the agents, the CRAs, with the best possible conditions to gather information, provide correct ratings and monitor issuers. Form a corporate governance perspective CRAs can be considered to be one of the most likely monitors to detect corporate fraud. If one is to be critical the exemption from regulation FD can be viewed as a regulatory subsidy which presents the CRAs with a competitive advantage in relation to other brokers acting as information providers, such as investment analysts.

5.1.5 NRSRO

The development of the credit rating industry and the NRSRO legislation has created a market dominated by a limited number of actors. Monopolies and oligopolies often arise due to government enforced legislation and this has been the case in the credit rating industry. The industry is dominated by Moody's and S&P even though new entrants have emerged recently such as Dominion Bond Rating Service and A.M.Best. There are numerous smaller actors that

work in selected niches of the market, but that lack the wide service portfolio of the larger companies.

The industry can as such be considered a duopoly, which has expanded from its origins in the US to the world at large. NRSRO legislation can be regarded as a legal barrier where a licence has been awarded to the designated companies. These forms of licences create oligopolies or monopolies and are very common in the case of public utilities (see chapter 3.5.2). These utilities are known as "natural monopolies" as the marginal cost of new entrants by far exceeds the marginal utility. The credit rating industry cannot be considered a natural monopoly but an industry in which competition fosters improvement. The duopoly that currently prevails does not promote competition as the trend in the industry is to purchase ratings from both S&P and Moody´s. Given this situation there exists barely any competition between the two and the high level of ROI for example for Moody's in excess of 70 % exemplifies the market power of the two dominant companies.

As it stands, NRSRO designation functions as an invaluable property right and source of competitive advantage. The situation since 1975 with the duopoly created by the SEC can be summarised as having no standards for entry, no formal application procedures for obtaining NRSRO status and no process for systematically monitoring the CRAs. The lack of clear directives has created substantial barriers to entry into the industry and shielded incumbent companies from competition. From a principal-agent-theory the situation during the last decades can be described as the principal delegating power to a limited number of agents, hence creating a duopoly stifling competition and reducing the choice of the investor. The market power of S&P and Moody's can to a large extent be accredited the protection provided by the SEC.

The Sarbanes Oxley Act of 2002 aims to strengthen regulation in order to reduce the incentives for corporate fraud. Auditing companies were for example forbidden to provide consulting services in addition to their audits as this posed a conflict of interest, In the Sarbanes Oxley Act Section 702 there is a requirement for the SEC to conduct an investigation into the reformation of the industry and among other things the role of NRSROs. There is however no requirement beyond the initial investigation. In April 2005 the SEC provided suggestions on how to among other things determine what requirements CRAs lacking NRSRO status need to fulfil to be eligible for the designation (see chapter 4.11). Until

June 2005 the SEC are accepting comments concerning the reformation of the credit rating industry and the question concerning NRSRO designation. As it stands there is a “catch 22” situation for smaller CRAs as they cannot receive the designation before they are generally accepted in the financial markets, but they cannot grow before they can charge the issuers instead of the subscribers.

The oligopoly character of the market has resulted in the fact that the incumbent companies have gained economies of scale and scope and have been able to build solid reputations under this period. Their respective reputations have been built by having a vast knowledge of bond issues. The intangible aspect of reputational capital that S&P and Moody’s possess is another barrier to entry into this lucrative industry. A risk that accompanies high barrier to entry is that the incentives to constantly innovate and improve on existing procedures are likely to decrease.

One of the rights that governments hold is the right to sanction securities intermediaries (see chapter 3.5) and for example revoke the right of these intermediaries if malpractice is proven. From a moral hazard perspective it can be said that the CRAs are operating without supervision, which in theory raises the question if they are operating in the interests of the investors. Given the importance of CRAs in the corporate governance system as monitors and regulators, it is surprising that the SEC has not moved to promote competition in this industry which is oligopolisitic.

5.1.6 Concluding remarks

This principal agent relationship is characterized by a lack of accountability on the part of the CRAs, an oligopolistic market and certain potential conflicts of interest. The underlying reason behind the currently prevailing situation is to a large extent the result of actions taken by the SEC. These actions such assigning ratings the status of opinions under the First Amendment and hereby providing immunity from prosecution under Sector 11, has decreased the level of accountability of CRAs in relation to other brokers. Further given the ambiguities concerning NRSRO designation, the SEC has created substantial barriers to entry and placed smaller CRAs in a Catch 22 situation. CRAs such as S&P and Moody’s both have very high ROI which illustrates their market power. On the positive side the exemption from Regulation Fair Disclosure should at least in theory provide the CRAs with the means to functions as

effective monitors in the corporate governance system. Given this access to private information and the fact that SEC permits CRAs to offer consulting services, there is a potential conflict of interest. To conclude there is room for improvement in this principal agent relationship, and this is important as the different principal agent relationships are interdependent and what happens in this relationship affects the others.

5.2 CRA and issuer

The principal-agent relationship between CRAs and issuers is a complex relationship that is characterised by certain potential conflicts of interest. These potential conflicts of interest are on a general level due to the fact that both the CRAs acting as principals and issuers acting as agents are profit maximising entities. In the absence of strong regulation the possibility for these conflicts of interest to be exploited exists and agency costs to arise.

The potential for agency costs to arise that have been identified relate to the; conflicts of interests relating to billing structure of CRAs, to the offering of consulting services and employees working for both the CRA and issuer.

5.2.1 Billing structure

In the beginning was the information the CRAs provided sold to the investors as a publication and not to the issuers which is the case today. Following the invention of the photocopier were the CRAs needed to change who charge since the publications to investors were copied and redistributed. This a typical example of the problems brokers face concerning reselling of information. The solution to the problem of investors' free riding was to charge one party on behalf of all, namely the issuers. The issuers make the information public to the investors as it's in their interest for it to be public. It was logical for CRAs to charge issuers; however a potential conflict of interest has arisen between CRAs and issuers. The CRAs are profit maximising entities and when 95 % of the revenue stems from issuer fees, there exists an interest to preserve their relationships to issuers. The attempt to preserve good relations to issuers can take the form of delaying downgrades or providing too favourable ratings. A delay in a downgrade will benefit an issuer in different ways. Firstly it will postpone the increase in funding costs a downgrade imply and allow the issuer a time option to improve on his financial condition or be downgraded. A costly downgrade is when an issuer is downgraded

from investment to speculative grade, also referred to a “fallen angel”. In these situations rating triggers might be initiated and examples of these are that credit lines are removed; the issuer is forced to repay loans at a more accelerated pace. Rating triggers further worsen the financial situation of issuers and hence increase the bankruptcy risk. As a means to preserve their client portfolios CRAs have incentives to delay a downgrade.[86]

This clash between the different interests has been stated to be one of the most important factors for corporate scandals such as Enron and WorldCom. In the case of Enron the CRAs hoped that if they waited with their downgrading there was a possibility that a merger with another company could take place and consequently take over Enron’s debts. The criticism directed towards CRAs for delaying downgrades is to an extent exaggerated from the perspective that credit ratings are different from stock prices, as they do not fluctuate with the latest quarterly report, but instead have a more long term outlook which legitimizes a certain delay when downgrading debt issues.

In such a situation where CRAs rely on issuer fees and both entities are profit maximising, the importance of strong regulation in the principal-agent-relationship between the SEC and the CRAs is important. CRAs acting as regulators need to be regulated and be held accountable in situations where misconduct due to conflicts of interests can be proven. The CRAs claim that if they were acting in the interest of the issuers their reputation would fall and no-one would buy their services. The aspect of reputational capital is a legitimate argument. In a situation where CRAs constantly act in the interests of issuers, the market would punish them. It is clear that a reputation for technical competence, continuity, transparency, objectivity and impartiality is the key for rating agencies to be legitimized by the market. Given the fact that two companies S&P and Moody’s control 80 % of the market and are shielded from competition, this should in theory reduce the incentives of these companies to provide inaccurate ratings as the marginal benefit of providing unreliable ratings to win new business should be lower than the marginal costs due to a damaged reputation.

A reason to believe that CRAs such as Moody’s and S&P are not generally acting in the interests of issuers and that their ratings are reliable, is that more than 40 % of all issuers feel

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[86] Harrison (2003)

they have obtained an inaccurate rating. There is however a risk that when a rating analyst rates up to 55 companies at a time, that the reliability can be questioned. This relationship to issuers bears a resemblance to that of auditors and its clients who in the past have reluctantly disclosed sensitive negative information to the market by fear of losing clients.

When analysing the billing structure of CRAs it is comparable to that of investment banks that charge the clients they work for. This distinction is important when discussing whether or not CRAs should be considered apart of media or be recognized as brokers such as auditors and investment banks.

5.2.2 Consulting services

Brokers such as CRAs are providers of neutral information to the market. This neutrality is at times compromised due to conflicts of interest arising from brokers acting in the interests of the clients and not the investors. Prior to the SOA in 2002, auditors faced a conflict of interest when they provided in addition to their auditing services consulting services as well. Through the SOA legislation this was prohibited in order to eliminate the conflict of interest. The conflict of interest was due to the fact that auditors where auditing companies and at the same time providing advice to their clients on how to maximise profits. CRAs are today facing the same kind of conflict of interest. They are both providing credit ratings and selling consulting services that include hypothetical ratings prior to an issue, how issuers can improve their ratings and assist banks on how to meet the requirements of the Basle 2 accord. From the point of view of the CRAs given that they are profit maximising, offering consulting services is a profitable venture. However CRAs are also agents in the principal-agent-relationship with the principal SEC and the principal has acknowledged CRAs as monitors in the corporate governance system, representing the interests of investors.

Auditors solved the problem of conflicting interests by imposing firewalls between the different business operations. In the case of CRAs such Moody's there are no firewalls and there is a mixture of personnel. The mixture of personnel implies that is more difficult to separate the interests of the rating analysts and the consultants. A further problem with offering consulting services and more specifically by offering hypothetical ratings is that is difficult for CRAs not to give the same rating as the issuers have received prior to the issue as the one formally fixed after a rating process. The reason for this being that there would be

limited incentives for issuers to acquire hypothetical ratings if they do not match the actual rating received. Given the lower level of analysis during the consulting process as opposed to the formal rating process there is a risk that the hypothetical rating will be misleading. CRAs such as Moody's defend the selling of consulting services stating that only 1 % of the revenues stems from the consulting services. This argument seems to disguise the potential for this profitable business venture in the future and focuses solely on the present situation. There is also the possibility that given the existence of consulting services The introduction of consulting business in the operations of CRAs implies that they actively compete with investment banks that advise clients on how to improve their finances to raise their credit rating

5.2.3 Employment conflict

There exists a potential for a further conflict of interest within the principal-agent-relationship between CRAs and issuers and it is referred to as an employment conflict. There exists no regulation that prohibits employees at CRAs from working at the issuers they are rating. This poses the question if these employees can in credible manner differentiate between the two roles. An illustrative example of such a conflict of interest was in the case of the corporate scandal WorldCom when Clifford Alexander, chairman of Moody's, was a board member of WorldCom. Alexander resigned from WorldCom only one year before before the bankruptcy, the largest in the US history.[87]

This conflict of interest has been resolved in other institutions by not letting employees work at other companies that have a relation to the current employer, during the time they are working at the current institution and sometimes even after they have left that employment. In the Central Bank of Sweden employees are not permitted to have additional employments that can jeopardize their ability to remain partial.[88]

5.2.5 Concluding remarks

This principal-agent-relationship is characterized by several potential conflicts of interest. In the case of the billing structure of CRAs it must be noted that there was no other viable option

[87] Danvers et al. (2005)
[88] 18§ In compliance with 7 § the law (1994:260) of Swedish public employment

than to charge issuer fees. The problem however that has arisen is that given this strong dependence upon fees, the relative bargaining power of the issuers' has increased. This bargaining power is exemplified by the fact that many of the CRAs were slow to downgrade some of its largest customers such as WorldCom, Enron and recently GM. However the argument presented by the CRAs that they are reliant upon their reputation and can consequently not act in the interests of issuers, does minimize the risk for inaccurate ratings. The offering of consulting services poses a clear conflict of interest, where the profit maximising motive of the CRAs is the most evident. The fundamental role of the CRAs given the power delegated to them by the SEC is to function as neutral monitors in the corporate governance system. Considering the two conflicts of interest mentioned above as well as the fact that employees are permitted to be employed at both a CRA and an issuer jeopardises the legitimacy of the CRAs in their role as monitors. To conclude there is a need to reform the basic dynamics of this principal agent relationship between the two parties.

5.3 Investor and CRA

The principal-agent-relationship between the investors and the CRAs is characterised by the fact that there is a lack of accountability on the part of the CRAs when representing the interests of the investors. The investors acting as principals are unable to prosecute the CRAs acting as agents for misconduct, since they are protected through different laws.

The main law that protects CRAs and that can give rise to agency costs is the exemption from Sector 11 liability. The absence of accountability is illustrated in figure 3 through the use of a dotted line from the investor to the CRA. Another law of interest when analysing the dynamics of this principal-agent-relationship is the exemption from the law of Fair Disclosure. A law that should increase the probability of CRAs to detect fraud in companies.

5.3.1 Sector 11-liability

The exemption from Sector 11 liability provided by the SEC to the CRAs has significant effects on the principal-agent-relationship between investors and CRAs. The effects can be analysed from an accountability perspective. Given that a broker such as a CRA cannot actively buy into an investment that he provides information on, he can instead use his own

wealth as collateral to guarantee a certain level of quality. An illustrative example of this is as mentioned earlier the possibility to sue for example lawyers and accounting firms lawyers for malpractice. This is not the case with CRAs as their ratings are considered opinions under the First Amendment and hence they are not liable under Sector 11. This has had implications for investors as the CRAs are immune from liability if the information they provide is incorrect. Rating agencies have been sued on several occasions and they have on all occasions been acquitted. The combination of regulated protection from new competitors, exemptions from disclosure rules and First Amendment protection makes the CRAs almost untouchable. Untouchable against market forces (competition) and the court system. The investors are dependent upon an effective monitoring of the issuers by the CRAs and given the lack of accountability of the CRAs it is uncertain if this is the case. From an investor perspective it is concerning that CRAs are not treated equally before the law as other brokers such as auditors and investment banks. Investors such as mutual funds and pension funds are required through legislation to hold a certain level of investment grade bonds. They place great faith in the judgements of credit ratings as these determine their acceptable risk exposure. When CRAs fail in determining the correct rating it has severe consequences upon the lives of many investors and pensioners that mutual- and pension funds represent. When CRAs fail as exemplified in chapter 4.12 there should exist the possibility to sue and win a conviction if it is proven that CRAs have had vested interests for providing incorrect ratings.

5.3.2 Regulation Fair Disclosure

CRAs have through their exemption from the Regulation FD the right to obtain private information concerning the issuers without being obliged to immediately disclose it. From the investors perspective acting as the principal this should improve the conditions for the CRAs acting as agents to conduct in depth analysis. These in depth analysis should consequently lead to the fixing of a correct credit rating and a reduction of the agency costs between the investors and management should decrease. In general CRAs have succeeded in predicting the probability of default for issuers in a correct manner. There have however been instances as earlier mentioned where they have failed. This seems to indicate that even though they have had access to certain amounts of private information, they have failed to detect fraud. A reason for this could be that CRA analysts rate in excess at times more than 50 issuers, and this renders it impossible for to make sufficient in depth quantitative and qualitative analysis

of each issuer. Another reason could be that CRAs have vested interests and their loyalty lies more with the issuers that pay them, than the investors that obtain the information for free.

5.3.3 Concluding remarks

This principal agent relationship between investors and CRAs is characterised by certain problems relating to the lack of accountability of the CRAs. Given the exemption from Sector 11 liability of CRAs investors have not succeeded in suing CRAs for malpractice. This lack of accountability reduces incentives of CRAs to act in the interests of the investors as they know they are shielded from prosecution even if they provide misleading ratings. The exemption from regulation FD and the corporate scandals that have taken place during the last decades, verifies the assumption that potential conflicts of interest, as illustrated in the principal-agent-relationship between CRAs and issuers, actually exist. There is a need to increase the accountability of CRAs to promote the interests of investors during the rating processes.

6. Reform

In chapter 5 an extensive analysis was made of the credit rating industry when the extended-principal-agent model was applied. Based on the findings of these analysis there is room for improvement. Before discussing suggestions for improvement it is important to recognise that the CRAs have overall succeeded in determining the credit risk of issuers. What can be said however is that the dynamics of the industry are not optimal, measures can be taken and should be taken to improve this.

A reason which increases the incentives to reform the credit rating industry is also that there is a need to rebuild the confidence in the system. To reform for the sake of regulation is likely to increase the level of bureaucracy which could lead to inefficiencies. The potential for this to happen is due to the fact that regulators such as the SEC have not been immune to criticism and have been accused of "sleeping on the job". There are several reasons why the industry needs to be reformed and they concern the aforementioned conflicts of interests and protection through regulation. The suggestions for reform all take their starting point in the principal-agent-relationship between the SEC and the CRAs. The extended-principal-agent model is characterized by the interdependence of the relationships. The rules imposed by the SEC determine the "rules of the game". To conceptually illustrate this interdependence it should be stated that the laws that have been imposed by the SEC on the CRAs affect the

different principal-agent-relationships in different ways, certain actors such as the CRAs have benefited whereas the investors ultimately have been the most adversely affected.

6.1 Reform 1: New definition of a credit rating

The first reform concerns the definition of what a credit rating is. A credit rating is today defined as an opinion delivered to investors to help them determine the credit risk that accompanies a debt issue. Achieving the status of opinions rather than recommendations implies that CRAs from a legal perspective are considered as part of the media. Being apart of the media has several clear benefits for the CRAs. The most noticeable is that they are viewed as guarantors of free speech and are protected under the First Amendment of the US constitution. In addition given this status there are exempted from Sector 11 liability. The question that needs to be asked is whether CRAs are different from other brokers such as investment banks and auditors to the extent that they are more similar to media corporations. The answer to this question given the findings of the thesis is no. CRAs are more similar to brokers and have limited similarities to the media. It is understandable that CRAs strive to preserve the status quo, as any profit maximising entity would. The similarities between CRAs and other brokers are that they share the same billing and organizational structure, they are both information providers to investors and monitors in the corporate governance system.

The credit rating industry is an integral part of the global financial system and more specifically credit ratings are. A downgrade of credit rating from investment- to speculative grade can jeopardise the financial stability of a company. Given the power these credit ratings exert they cannot be regarded as opinions. In addition financial markets cannot be regulated in a credible manner through opinions. Credit ratings must be defined in accordance to their importance.

A suggestion for reform is to remove the First Amendment rights of the CRAs and make them subject to Sector 11 liability. Credit ratings should no longer be considered opinions but have the same legal status as the information provided by other brokers. An increased exposure to liability is believed to improve the incentives of CRAs to act more in the interests of investors. Such a reform imposed by the SEC could potentially have positive consequences in the principal-agent-relationship between the CRAs and the issuers. An increase in CRA accountability could for example reduce the propensity to delay downgrades as they could be

prosecuted for doing it. Further an increase in accountability could make CRAs more inclined to seek private information through their Regulation FD exemption and hence increase the likelihood that the credit rating is correct. The entities that would ultimately benefit the most from the proposed reform are the investors. The agency costs between themselves as principals and the issuers acting as agents should decrease and the dotted line in figure 3 would be replaced by a straight line.

6.2 Reform 2: NRSRO

As it stands an NRSRO designation functions as an invaluable property right and source of competitive advantage for companies such as Moody's and S&P. There is a catch 22 situation for smaller CRAs as they cannot receive the designation before they are generally accepted in the financial markets, but they cannot grow before they can charge the issuers instead of the subscribers. The credit rating industry is an anti-competitive industry dominated by two actors. For the last three decades there has existed no formal application procedure to receive NRSRO status as well as no standards to entry. Since the introduction of the NRSRO legislation no designated CRA has ever lost its designation due to misconduct. The lack of periodic review of the SEC of the CRAs has created an industry where the agents are only exposed to minor regulation from their principals. A risk that accompanies high barrier to entry is that the incentives to constantly innovate and improve on technologies for assessing the riskiness of debt are likely to decrease.

A suggestion for reform is to clarify clearly the requirements that need to be met in order to receive the NRSRO designation. The SEC are working to clarify these requirements, it is however uncertain how long this will take as there is no requirement for the industry to be reformed only for it to be examined under section 702 of the Sarbanes Oxley Act. The requirements that need to be fixed must be achievable for non-designated CRAs. If these requirements are not clearly stipulated there is a risk that the current catch 22 situation will persist. It is unrealistic to believe that new NRSROs will be able to compete in all markets against Moody's and S&P given their economies of scale and scope in information processing. A more likely scenario if the number of NRSROs was to increase is that these CRAs would be active within niche markets, such as for example the insurance market. An increase in the degree of competition in many different market niches should improve the overall dynamic efficiency of the credit rating industry as the incumbent firms would have to

constantly improve or risk losing business. Increased competition would most probably induce CRAs to provide more accurate and timely ratings. Further given the number of debt issues worldwide it is unrealistic to believe that S&P and Moody's have the resources at their disposal to undertake rating processes for all these. There is consequently a demand surplus from the issuers' point of view.

There are however risks by facilitating NRSRO designation. There is a risk that new NRSROs will inflate ratings to acquire clients. This is known as "rate shopping" and could potentially destabilise the credit rating industry. A further risk could be that investors will be confused when the number of NRSROs increases. An increase in the number of NRSROs will also imply higher monitoring costs for regulators such as the SEC. In such a situation it is uncertain whether or not the SEC has the resources to regulate the global credit rating industry. It is possible that a reason for the limited number of NRSROs is that the SEC is unable to regulate an industry with more designated NRSROs than currently is the case.

6.3 Reform 3: Prohibit consulting services

One of the most illustrative examples of conflicts of interest facing CRAs is that they both rate and offer consulting services to the issuers. There is no legislation in place currently to prohibit such business ventures. Auditing firms faced a similar conflict of interest prior to the introduction in 2002 of the Public Company Accounting Reform that forbid having both auditing and consulting services within the same company.

A suggestion for reform would be for the SEC to prohibit the selling of consulting services all together. There are already brokers and consulting bureaus that offer consulting services on how to improve one's credit rating. Eliminating this conflict would lead to a strengthening of the credibility of the CRAs and increase the confidence of the market for the credit rating industry. Impartiality is a key attribute for CRAs and imposing new legislation would have beneficial effects on the perceived impartiality of CRAs.

6.4 Reform 4: Eliminate employment conflict

CRAs have been criticised for having had employees working for both a CRA and the issuer they were rating. This poses an obvious conflict of interest and the most commonly referred to example of the employment conflict was when Clifford Alexander, chairman of Moody's, was a board member of WorldCom. There is, as it stands today, no regulation that prohibits employees of the CRAs to also be employed by the issuers

A suggestion for reform would be to forbid employees at CRAs to work for other companies, whilst employed at a CRA. In order to eliminate this conflict of interest, legislation would need to be imposed. This reform is similar to that of prohibiting consulting services, as it seeks to increase the creditability of the CRAs in the eyes of the investors. As earlier mentioned this form of legislation exists in for example certain public institutions such as the Central Bank of Sweden.

6.5 Reform 5: New industry structure?

There is a lack of competition in the credit rating industry and the incumbent CRAs are too powerful. There are risks as explained above by admitting new CRAs, but these must not hinder the admission of new entrants. It is possible that NRSRO designation has played out its role and that the SEC is not an optimal means to regulate the global credit rating industry. There is potentially the need for a global framework scrapping the NRSRO designation where each country designates a regulatory body equivalent to the SEC with the responsibility to oversee the credit rating industry in that country. For these country specific regulators to function as a unit, a global framework should be based upon uniform rating principals. These principals would clearly stipulate the methodologies by which CRAs are admitted and the principals that govern their operations. These principals could for example be known as Internationally Accepted Rating Principals (IARP). An organization that could oversee the implementation of such a framework is the "International Organization of Securities Commissions" (IOSCO) if given more authority.

In such a global system, market forces will play a more dominant role, as they will determine which CRAs are "generally accepted in the financial markets as an issuer of credible and reliable ratings", and competition should provide benefits of better prices, innovation,

customer choice, and efficiency. The transferral of regulatory power to the SEC has not been optimal and there is a need to identify a new industry structure. As it stands today no NRSRO has ever lost its designation. A market based system could revoke the authority of CRAs that constantly act in their own interests, as the aspect of reputational capital would once again increase in importance.

7. Conclusions

7.1 *Conclusions purpose 1*

The credit rating industry is a complex and fascinating industry. Its history stretches back more than 150 years and has gradually increased in importance. During its history the dynamics of the industry have changed. CRAs hold several different roles such as monitors in the corporate governance system and regulators in the financial system. As Thomas Friedman stated "*There are two superpowers in the world today in my opinion. There's the United States and there's Moody's Bond Rating Service…..*" This statement is exaggerated but it exemplifies nonetheless the significant power the CRAs exert in the world today.

The extended-principal-agent model was developed by synthesizing different principal-agent-relationships into one model. This model provides a holistic understanding of the credit rating industry and illustrates the interdependence between the different relationships. What happens in one principal-agent relationship such as between the SEC and CRA affects the other relationships in different ways. An interesting factor when applying the extended-principal-agent model is that different actors such as the CRAs are both principals and agents depending on the relationship, which increases the complexity of the analysis. There is a "chain reaction" that is not captured by other models that are more static. The extended-principal-agent model is not only applicable to the credit rating industry but also functions as a framework to analyse other brokers such investment banks and auditors. We have found the extended-principal-agent model to be successful when analysing the credit rating industry. Instead of only identifying problems on a general level, the extended-principal-agent model defines the problems where they arise, in which relationship, and the effects on the other relationships can be analysed. This is conceptually important when providing suggestions for reform.

In the analysis of the credit rating industry problems have been defined in all the different principal-agent-relationships. Given the fact that the regulators, the CRAs, are private companies there is a strong need to regulate the regulators. The majority of the problems encountered stem from laws or exemptions from laws imposed by the SEC. The industry structure that currently reigns is anti competitive due to NRSRO legislation and there is an absence of accountability of the CRAs due to an exemption from Sector 11 liability. The problems of the credit rating industry are further compounded by the fact that the CRAs are permitted to offer consulting services and that their employees also can be employed at the issuers they are rating. From a business perspective of the CRAs the current industry structure is optimal. However the role of the CRAs is to be monitors in the corporate governance system and represent the interests of the investors. Under the prevailing industry conditions the investors such as pension funds, mutual funds and the individual investors ultimately suffer, as was the case in the corporate scandals such as Enron and WorldCom. A positive law imposed by the SEC is the exemption of CRAs from Regulation FD. Given their access to private information they should in theory be the monitors that are most likely to detect corporate fraud. This was not the case on the other hand during the much debated corporate scandals which indicate that conflicts of interest exist and are at times exploited. There is scope for improvement in the credit rating industry,

7.2 *Conclusions purpose 2*

Based on the findings of the industrial analysis there is a need for reform. It must however be stated that the CRAs overall have succeeded in determining the credit risk of issuers. This argument does not however justify the preservation of the status quo. Measures need to be taken that on a general level increase the accountability of CRAs, the competitiveness of the industry as well as decreases the potential for conflicts of interest arise. Further there exists potentially a need for a new industry structure.

In order to increase the competitiveness of the credit rating industry the NRSRO legislation must be clarified. By clarified we imply that the entry requirements have to be formalised. The intention is to increase the transparency of the admission process to facilitate the entry of prospective suitable CRAs. The intention is not to admit all prospective CRAs as it is important to preserve the legitimacy of the system. The duopoly consisting of S&P and Moody’s should be exposed to more competition as this should increase the incentives of

incumbent CRAs to constantly innovate and price their services according to a standard supply-demand relationship.

From a principal-agent perspective there is a need to increase the accountability of CRAs. As it stands credit ratings are considered opinions via the recognition of CRAs as guarantors of Free Speech under the First Amendment of the US constitution. This recognition exempts CRAs from liability under Sector 11. From the investor perspective this has meant that on all occasions when CRAs have been sued they court has voted in favour of the CRAs. This thesis has compared the operations of CRAs to that of other brokers such as investment banks and auditors and found that they are to a large extent comparable. In fact the operations of CRAs are more comparable to that of other brokers than to media corporations. The reform proposed to increase the accountability of CRAs is to remove the recognition of credit ratings as opinions and instead classify them as recommendations. An increase in accountability is believed to increase the incentives of CRAs to act in accordance to their duties as monitors in the corporate governance system.

A means to decrease the conflicts of interest that prevail is to prohibit them altogether. By them we imply the offering of consulting services and the possibility to be employed at both CRAs and the issuers they are rating. A compromise could be made where consulting services are separated from rating services through the use of firewalls. This is however not an optimal solution as the risk for diverging interests still exist. In such a situation where both these conflicts of interest are eliminated the CRAs can fully focus on their principle duties. From the perspective of the CRAs this will mean foregone revenues, and such a reform will be opposed but we believe it necessary to rebuild the confidence in the system.

To conclude there is potentially a need to re-examine the industry structure of the credit rating industry. It is inevitable that more CRAs will be admitted in the near future. This is illusrated by the fact that a CRA such A.M Best received NRSRO status a few months ago. In a credit rating industry where more actors are present one must oneself if the current regulatory regime is sufficient. Is the SEC capable of monitoring such an industry or is there perhaps a need for a new global framework, where the right to monitor designated CRAs is delegated to national securities commissions? We believe that the current NRSRO structure in the near future perhaps 5-10 years must be reformed as depicted above or perhaps the NRSRO

legislation should be removed all together and be replaced by a global framework governed by a global organisation.

The last day to send comments to the SEC is the 11th of June 2005 and it our hope and ambition that our thesis has raised certain interesting issues that will stimulate debate among the legislators in the US. The well functioning of the credit rating industry is of great importance for the global financial system and reform is needed. It will be very interesting to follow the future development of the industry.

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Appendix 1

Cantwell's survey

Was your initial rating requested or was it unsolicited?	**S&P**	**Moody's**
Number of respones	284	271
Percent requested	94.01	90.41
Percent unsolicited	5.99	9.59

If your initial rating was not requestd, was your most recent rating requested or unsolicited?	**S&P**	**Moody's**
Number of respones	292	275
Percent requested	73.63	73.45
Percent unsolicited		
Regular agency meetings	25.00	26.18
No regular agency meetings	1.37	0.36

Approximately how many years has it been since your initial rating was obtained?	**S&P**	**Moody's**
Number of responses	303	287
Less than one year (%)	5.28	3.83
One or two years (%)	6.93	6.62
Three to five years (%)	14.85	17.07
Six to ten years (%)	23.76	22.30
Eleven to fifteen years (%)	13.53	13.59
More than fifteen years (%)	35.64	36.59

Which rating did you obtain first?	**S&P**	**Moody's**
Number of responses	289	273
Long term rating (%)	55.71	57.14
Short term rating (%)	15.22	12.09
Obtained both at the same time (%)	29.07	30.77

What is your opinion of the accuracy of your current credit ratings?	**S&P**	**Moody's**
Number of responses	304	289
Much too high (%)	0.00	0.69
Too high (%)	0.00	0.00
About right (%)	66.78	54.67
Too low (%)	28.95	38.06
Much too low (%)	4.28	6.57

What criteria do you use when assessing the accuracy of your rating?	N=309	
Criteria (multiple responses permitted)		
Competitors' ratings	227	74%
Your rating from other agencies	218	71%
Publicly available ratings criteria	185	60%

Would you like to cancel any of your current ratings?	**S&P**	**Moody's**
Number of responses	7	20
Long term rating (%)	1.32	4.15
Short term rating (%)	0.33	0.69
Both ratings (%)	0.66	2.08

What factors would cause you to pursue additional credit ratings?	N=309	
Discontent with current rating	121	39%
Investor or banker recommendation	116	38%
Split rating	98	32%
Large acquisition or major restructuring	62	20%
New and increased CP programme	49	16%
Rating change	46	15%

How would you rate the overall level of service provided by each rating agency?	**S&P**	**Moody's**
Number of responses	301	287%
Excellent (%)	15.28	11.15
Very good (%)	40.20	29.27
Good (%)	30.23	33.10
Fair (%)	12.96	19.86
Poor (%)	1.33	6.62

Do you feel that the rating agencies understand your concerns regarding your ratings?	**S&P**	**Moody's**
Number of responses	298	285
Yes (%)	80.20	66.67
No (%)	8.05	16.14
Uncertain	11.74	17.19

How often does each agency publish a full analytical report in your company?	**S&P**	**Moody's**
Number of responses	276	260
More than once year (%)	3.99	4.23
Once per year (%)	73.19	71.54
Every two years (%)	22.83	24.23

How would you rate the quality of each agency's published research or analysis on your company?	**S&P**	**Moody's**
Number of responses	300	282
Excellent (%)	8.33	4.96
Very good (%)	36.00	28.37
Good (%)	34.67	34.04
Fair (%)	18.33	25.18
Poor (%)	2.67	7.45

What factors cause the agencies to publish updated analytical reports on your company?	**S&P**	**Moody's**
New issue (%)	42.91	40.99
Rating change (%)	65.88	66.78
Major development/acquisition (%)	66.55	62.90
Release of interim results (%)	10.81	10.25

Do you have an opportunity to review rating agency write-ups on your company before they are published?

	S&P	Moody's
Number of responses	295	282
For factual information only (%)	31.86	35.82
For factual and analytical information (%)	59.32	50.71
Unable to review write-ups (%)	8.81	13.48

Do you subscribe to research published and sold by the rating agencies?

	S&P	Moody's
Number of responses	302	286
Yes, a wide range (%)	7.95	6.29
Yes, selected publications (%)	46.03	46.15
No subscription (%)	46.03	47.55

How frequently do you normally meet with each rating agency?

	S&P	Moody's
Number of responses	304	290
Less than once per year (%)	4.61	4.83
Once per year (%)	65.79	64.83
Twice per year (%)	22.04	23.10
Three or more times per year (%)	7.57	7.24

Where do your annual ratings review meetings usually take place?

	S&P	Moody's
Number of responses	297	283
At the rating agency (%)	43.10	44.52
At our office (%)	39.73	38.52
Evenly divided (%)	17.17	16.96

Do you initiate the annual ratings meetings or do the ratings agencies initiate th process?

	S&P	Moody's
Number of responses	297	282
We initiate the meetings (%)	66.67	70.92
The rating agency initiates the meetings (%)	28.62	25.18
Evenly divided (%)	4.71	3.90

Aside from the actual ratings meetings, how often do you receive questions from the rating agency analysts regarding industry developments?

	S&P	Moody's
Number of responses	301	287
Frequently (%)	13.29	12.20
Sometimes (%)	53.16	52.96
Rarely (%)	28.90	26.48
Never (%)	4.65	8.36

What is the average length of your annual update meeting?

	S&P	Moody's
Number of responses	298	284
Less than two hours (%)	24.16	24.30
Two to three hours (%)	47.65	47.18
Four to five hours (%)	13.42	14.08
Six to eight hours (%)	12.42	11.97
More than one full day (%)	2.35	2.46

Who is the highest-ranking officer who routinely attends the rating agency meetings?	**S&P**	**Moody's**
Number of responses	299	285
CEO/president (%)	39.46	39.65
CFO (%)	52.17	50.53
VP, finance (%)	2.68	3.16
VP, investor relations (%)	0.33	0.35
Treasurer (%)	5.35	6.32
Assistant treasurer (%)	0.00	0.00

Who is the officer responsible for the day-to-day contact with the rating agency?	**S&P**	**Moody's**
Number of responses	301	286
CEO/president (%)	0.66	1.05
CFO (%)	15.95	14.69
VP, finance (%)	11.63	11.89
VP, investor relations (%)	16.94	16.08
Treasurer (%)	40.20	41.96
Assistant treasurer (%)	14.62	14.34

Aside from the face-to-face meetings, how frequently do you communicate with the rating agencies?	**S&P**	**Moody's**
Number of responses	301	287
Prior to all announcements (%)	14.29	13.24
Prior to major announcements only (%)	60.47	62.02
After all announcements (%)	4.32	3.83
After major announcements only (%)	14.62	15.33
Only when they call us (%)	6.31	5.57

What level of financial disclosure do you routinely provide to each rating agency?	**S&P**	**Moody's**
Number of responses	301	286
Publicly available info only (%)	6.64	5.59
Selected non-public info (%)	52.49	54.20
Substantial non-public info (%)	40.86	40.21

What type of financial projections do you normally provide to each rating agency?	**S&P**	**Moody's**
Number of responses	303	287
None (%)	10.23	8.71
Budget or one year (%)	28.05	28.57
Two years (%)	6.27	5.92
Three years (%)	25.41	26.83
Four or five years (%)	27.72	27.87
Six to nine years (%)	0.99	1.05
Ten years or more (%)	1.32	1.05

How do you present your financial projections?

	S&P	Moody's
Number of responses	273	263
On a consolidated basis only (%)	41.76	41.83
By business segment (%)	37.36	36.88
By subsidiary (%)	9.89	9.89
By both business segment and subsidiary (%)	10.99	11.41

How would you rat the explanation by each rating agency of its methodology and its ratings process?

	S&P	Moody's
Number of responses	301	288
Excellent (%)	12.62	3.47
Very good (%)	34.22	24.65
Good (%)	33.89	31.60
Fair (%)	13.62	27.43
Poor (%)	5.65	12.85

How consistent do you feel the rating agencies are in terms of their approach to the ratings process?

	S&P	Moody's
Number of responses	300	288
Very consistent (%)	37.33	26.04
Generally consistent (%)	55.00	59.03
Inconsistent (%)	7.67	14.93

How would you rate the primary analyst in terms of their preparation for the rating meetings?

	S&P	Moody's
Number of responses	301	287
Excellent (%)	21.26	16.72
Very good (%)	41.20	32.40
Good (%)	27.91	32.40
Fair (%)	7.31	15.33
Poor (%)	2.33	3.14

How would you rate the primary analyst in terms of their knowledge of your company and its industry?

	S&P	Moody's
Number of responses	301	288
Excellent (%)	22.59	16.67
Very good (%)	39.20	35.07
Good (%)	26.25	27.08
Fair (%)	8.64	14.58
Poor (%)	3.32	6.60

How would you rate other members of the rating team in terms of their level of knowledge about your company and its industry?

	S&P	Moody's
Number of responses	295	283
Excellent (%)	9.49	7.42
Very good (%)	37.29	30.04
Good (%)	35.59	35.69
Fair (%)	14.92	21.20
Poor (%)	2.71	5.65

Do you typically deal with the same primary analyst or do you feel there is a high level of analyst turnover?	**S&P**	**Moody's**
Number of responses	297	285
Same primary analyst (%)	82.83	68.77
Significant analyst turnover (%)	17.17	31.23

Approximately how much do you pay in total fees to each rating agency on annual basis (USD equivalent)?	**S&P**	**Moody's**
Number of responses	278	263
Do not pay for ratings (%)	3.96	6.46
Less than $25 000	11.51	9.51
$25 000 to $50 000	32.01	31.56
$51 000 to $100 000	26.98	23.19
$101 000 to $200 000	16.19	20.15
More than $200 000	9.35	9.13

Where do you go for advice regarding the management of your credit ratings?	N=309	
Internal sources	168	54%
Investment bankers	162	52%
Rating agency personnel	125	40%
Commercial bankers	37	12%
Independent advisors	5	16%

Appendix 2

S&P long-term issue credit ratings

AAA	An obligation rated AAA has the highest rating assigned by S&P. The obligor's capacity to meet its financial commitment on the obligation is extremely strong.
AA	An obligation rated AA differs from the highest-rated obligations only in small degree. The obligor's capacity to meet its financial commitment on the obligation is very strong.
A	An obligation rated A is somewhat more susceptible to the adverse effects of changes in economic conditions than obligations in the higher-rated categories. However, the obligor's capacity to meet its financial commitment on the obligation is still strong.
BBB	An obligation rated BBB exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.
BB	An obligation rated BB is less vulnerable to non-payment than other speculative issues. However, it faces major ongoing uncertainties or exposure to adverse business, financial, or economic conditions which could lead to the obligor's inadequate capacity to meet its financial commitment on the obligation.
B	An obligation rated B is more vulnerable to non-payment than obligations rated BB, but the obligor currently has the capacity to meet its financial commitment on the obligation. Adverse business, financial, or economic conditions will likely impair the obligor's capacity or willingness to meet its financial commitment on the obligation.
CCC	An obligation rated CCC is currently vulnerable to non-payment, and is dependent upon favourable business, financial, and economic conditions for the obligor's to meet its financial commitment on the obligation. In the event of adverse business, financial, or economic conditions, the obligor is not likely to have the capacity to meet its financial commitment on the obligation.
CC	An obligation rated CC is currently highly vulnerable to non-payment.
C	A subordinated debt or preferred stock obligation rated C is currently highly

	vulnerable to non-payment. The C rating may be used to cover a situation where a bankruptcy petition has been filed or similar action taken, but payments on this obligation are being continued. A C will also be assigned to a preferred stock issue in arrears on dividends or sinking fund payments, but that is currently paying.
D	An obligation rated D is in payment default. The D rating category is used when payments on an obligation are not made on the date due even if the applicable grace period has not expired, unless S&P believes that such payments will be made during such grace period. The D rating will also be used upon the filing of a bankruptcy petition or the taking of a similar action if payments on an obligation are jeopardised.

Obligations rated BB and below are regarded as having significant speculative characteristics. BB indicates the least degree of speculation and C the highest. While such obligations will likely have some quality and protective characteristics, these may be outweighed by large uncertainties or major exposures to adverse conditions.