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Implementing Enterprise Risk Management in Swedish Corporations: A Study of Incentives and Obstacles

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ABSTRACT

In Sweden, a number of companies have started viewing risk management from a holistic perspective rather than a silo-based one. This holistic approach is referred to as Enterprise Risk Management (ERM). Research on ERM has mainly focused on the implementation process and whether it can be value adding for shareholders. This study is designed to look at *why* companies decide to implement ERM and what obstacles are faced in the implementation process. Based on interviews with CROs of 12 Swedish non-financial firms that explicitly claim to have ERM, we conclude that regulations on corporate governance and improved investment decision making are the two main drivers of ERM-implementation. We are also able to identify a set of obstacles including a conflict in who the risk owner is, difficulties to aggregate qualitative and quantitative risks, inhibited creativity due to ERM and that the character of the implementation is dependent on the CRO's background. Further, we suggest that the implementation can be done more efficient if preceded by a planning and communication phase, and that the implementation process itself can be value adding by improving internal cooperation and reducing internal problems.

Key words: Enterprise Risk Management (ERM), Risk Management, Implementation, Risk Ownership, Incentives, Obstacles, COSO.

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LIST OF ABBREVIATIONS

COSO	The Committee of Sponsoring Organizations of the Treadway Commission is a joint initiative of the five private sector organizations and is dedicated to providing thought leadership through the development of frameworks and guidance on enterprise risk management, internal control and fraud deterrence.
CRO	Chief Risk Officer. In the context of this thesis, by CRO we refer to the person responsible for ERM within an organization. Some companies call it group risk manager, risk manager or head of risk management.
ERM	Enterprise Risk Management
ISO31000	A family of standards relating to risk management codified by the International Organization for Standardization.
KonTraG	The German law on control and transparency in business that came into effect in 1998. Translated from: Gesetz zur Kontrolle und Transparenz im Unternehmensbereich.
SOX	Sarbanes-Oxley Act applicable in the US
TRM	Traditional Risk Management
WACC	Weighted Average Cost of Capital

1. INTRODUCTION

1.1 Background

Risk is of growing concern to companies, especially in the present time of crisis. The traditional view of risk is that it is something to avoid.¹ That being said, risk is an integral part of doing business and without taking it on, enterprises will not be able to create value for stakeholders. According to the Committee of Sponsoring Organizations of the Treadway Commission (COSO), value is maximized when “management sets strategy and objectives to strike an optimal balance between growth and return goals and related risks, and efficiently and effectively deploys resources in pursuit of the entity’s objectives”.² This optimal balance can be called the “Sweet Spot” and is illustrated in Figure 1.



Figure 1 - Optimal risk-taking³

In order to find this optimal level of risk-taking, a firm needs to assess and manage all the risks it faces to achieve its goals. Traditional risk management (TRM) views each risk on its own, in silos. This is suboptimal because there may exist portfolio effects comparable to that of a portfolio of stocks. In such a portfolio, stocks in different industries may be negatively correlated so that if one does well the other does badly. The same goes for risk management. TRM ignores these correlations and lead to flawed risk management.

The evolution of TRM is a relatively new discipline⁴ called Enterprise Risk Management (ERM), which views risk in a holistic manner. By managing risks of all types in an integrated

¹ Patchin Curtis and Mark Carey *Thought Leadership in ERM - Risk Assessment in Practice* (Durham, North Carolina: COSO 2012), 1.

² COSO *Enterprise Risk Management – Integrated Framework: Executive Summary Framework* (Durham, North Carolina: COSO 2004), 3.

³ Curtis and Carey, 1.

⁴ COSO *Executive Summary Framework*.

framework, an organization can get a better perspective of what risks they are exposed to, which makes for more effective risk management.

1.2 Previous research on ERM

Having read thesis papers, articles and books on ERM, we found that the topics are mainly divided into three areas: theory, value creation, and implementation. The theory is rather limited as ERM by nature is very practical. There are however a number of papers discussing empirical findings regarding value creation and implementation. These studies are still somewhat limited in the sense that they fail to show any commonalities in the field. The papers on value creation are grouped into those claiming that ERM can be value creating and those finding that it cannot. The papers on implementation mostly look at firms that have already implemented ERM and try to find similarities within categories such as firm size, leverage, and earnings volatility. The findings are however not in line with each other.

1.3 Research focus and purpose

As seen above, research exists on the implementation of ERM as well as the value creation aspect, but there is very little research on *why* companies decide to implement ERM.

If you play a game of snooker and aim to sink the yellow ball, you achieve your goal if the yellow ball is sunk in the hole you aimed for. If you miss however, and instead accidentally sink the pink ball in another hole, you still get to keep playing, but you failed to achieve your predetermined goal. This way of thinking can be transferred to the process of ERM. Only looking at if ERM creates value compares to sinking any ball in any hole. You take a shot in the dark and see if you make it or not, if it creates value or not.

After we completed the literature review we saw that very little academic literature exist on this topic and we believe there is a gap in existing research. What we aim to do in this study is to examine *why* companies decide to implement ERM. We believe this to be of great importance in order to get a deeper understanding of the value creation of ERM. If a snooker player aims to sink the yellow ball, what must be examined is whether the yellow ball was actually sunk. If a company implements ERM in order to create value in a certain way, what must be examined is if it did create value in that way or not.

Furthermore, we are going to examine what main obstacles are faced in the ERM-implementation process. Some research discusses the upsides of ERM and how it can add shareholder value, but only a few mention the problems of ERM. We believe that in order to get an exhaustive understanding of the concept, both the advantages and disadvantages must be taken into account.

Since the field of study is still new and not clearly defined, this paper is exploratory in its purpose⁵. This means that the purpose is to acquire new insight, which will result in new hypotheses that can be topics of further research. We hope that this study can aid future researchers focusing on ERM. If we can find the driving forces behind ERM-implementation, as well as identifying obstacles in the implementation process, it will be easier to understand the value creation process in the future.

Simply put, the *objectives* of this thesis are to:

1. Identify the incentives to implement ERM.
2. Identify the main obstacles faced in the implementation process.

1.4 Research methods in brief

A combination of a survey and a case-study research strategy was used when collecting information. 15 Swedish non-financial companies that explicitly communicate their use of ERM were selected as the sample, of which 12 chose to participate. The measuring instrument was interviews with the sample companies' CROs. More specifically a semi-structured form of interviewing was selected which is an appropriate mix of freedom for the researcher and for the respondent.

1.5 Summary of research findings

Having plotted the interview responses into a framework we created, we could see that the most common incentives for ERM-implementation were regulations on corporate governance, and wanting to improve the investment decision making process. We also found that other incentives were important, but not as central as the two mentioned. Regarding objective 2, our respondents mentioned several obstacles in the implementation process and the most common ones included: difficulties to define the ownership of various risks, problems aggregating quantitative and qualitative risks, inhibited creativity due to ERM, and the old habits of the CRO obstructing the development.

After analyzing the results, we discuss the implications they may have for companies and for future research. Here, we argue that it is rather difficult to pinpoint one or two key reasons for implementing ERM as the integration of risks itself might be an incentive. We also reason that some of the obstacles in the implementation process can be reduced or mitigated by thoroughly planning and communicating the change before it is made. Finally, we claim that the implementation process can be value adding to the company, as it is a process of learning where not only risk management is integrated but all personnel start working together towards the same enterprise-wide goal.

⁵ Robert Pojasek *Research Methods: Some Notes to Orient You* (Harvard University 2005), 1.

1.6 Structure of the thesis

This concludes Chapter 1, the introduction. Moving on, Chapter 2 provides a background of the evolution of ERM necessary to put this study in context. Chapter 3 is a literature review where both theoretical and empirical studies are presented. In Chapter 4, we present various aspects of why companies implement ERM in our own framework. Chapter 5 then describes the research methods in detail as well as our way to interpret the data collected. In Chapter 6, we present the results, plotted in our framework as well as discuss the identified obstacles in the implementation process. After this, we discuss the implications of our results in Chapter 7. Finally, Chapter 8 concludes the thesis together with some suggestions for future research.

2. THE EVOLUTION OF ERM

Before going into detail on why firms implement ERM and how the process progresses, it is important to understand the foundation of ERM and where it originates. This chapter presents a brief introduction to how risk management has developed throughout the years.

2.1 Traditional risk management

The International Organization for Standardization defines the need for risk management as:

*“Risks affecting organizations can have consequences in terms of economic performance and professional reputation, as well as environmental, safety and societal outcomes. Therefore, managing risk effectively helps organizations to perform well in an environment full of uncertainty.”*⁶

It covers the foundation of why companies should not leave everything to fate. As mentioned, risks can come in all sorts of fashions and affect an organization in a number of ways. For this reason, companies should manage their risks and hopefully this will make the company more profitable, stable, and attractive to investors.

Looking back in time, the origin of the word risk is from Italian *risicare*, which means *to dare*⁷. We believe this is a good definition of the word since risks are often seen as options rather than the certain future. Risks are in this sense not something that have to be faced, but something chosen in order to get a return. It can be the risk of being hit by a car in order to get across the street or the risk to lose money investing in a stock. Whatever the risk, most of the time you have the option not to take it on. Taking this concept into business, managers must constantly evaluate various risks and decide which ones to take on and which ones not to. Looking at acquisitions, investments, product development etc., managers must decide whether they are willing to take the *risk* in order to get the *return* associated with the risk. This trade-off between risk and return is one of the most traditional theories of finance and is the foundation for most decision making in companies.

Companies can chose to take on a risk in order to get a return, but this is not the case for all risks. Some risks occur unwillingly and without a return. Those risks can be defined as perils, accidents and hazards⁸ such as hurricanes, fraud or theft. Those risks arise without management choosing to and hence do not really fit the previously mentioned definition of *to dare*. Despite this, those risks must also be taken into account when looking at the total risk exposure of an

⁶ International Organization for Standardisation, “ISO 31000 – Risk Management” (online) available from <http://www.iso.org/iso/home/standards/iso31000.htm> (accessed 13 February 2013).

⁷ Peter L. Bernstein *Against the Gods: The Remarkable Story of Risk* (John Wiley & Sons 1998).

⁸ Christopher L. Culp *Structured Finance and Insurance: The Art of Managing Capital and Risk* (Hoboken, New Jersey: John Wiley & Sons 2006), 27.

organization. Being a manager of an organization facing these various risks, finding out which specific risks the company is actually facing is the first step in TRM⁹. This part is called the risk identification process and deals with everything from financial risks to accidents and hazards. Once the risks are identified, they have to be assessed. This can be done rather simply by determining the frequency that the risk will occur and the impact it will have on the company. Risks are traditionally mapped in a matrix where one axis represents the impact and the other represents the probability. Such a matrix is often referred to as a heat map and an example is presented below.

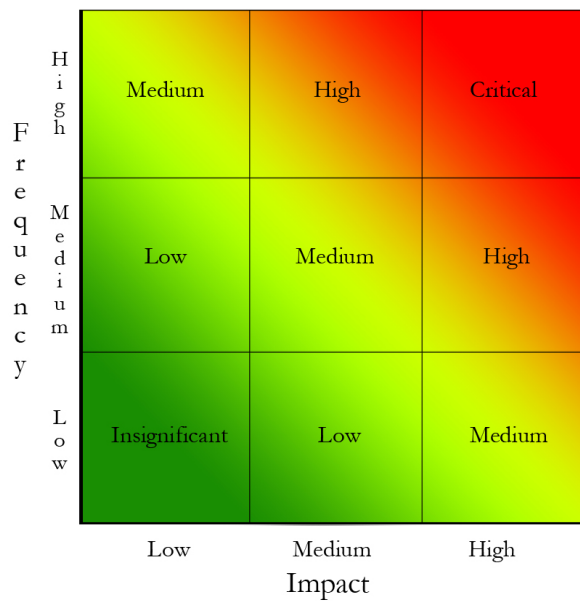


Figure 2 – Example of a heat map

One could also solve this mathematically by setting up an equation:

$$\text{Risk} = (\text{Loss if risk occurs}) * (\text{Probability that risk occurs})$$

Whatever way a company chooses to do this, the focus is on assessing what implications the various risks have to the company. Managers then decide what to do with the results they come up with. Risks can be managed in three ways; they can be retained, neutralized or transferred¹⁰. The way to do this is typically by insurance and hedging, but other instruments can be used as well. TRM can be rather difficult to define whereas identifying the limitations of TRM might present some insights to what it essentially is.

⁹ Christopher L. Culp *The Risk Management Process: Business Strategy and Tactics* (New York: John Wiley & Sons 2001), 210.

¹⁰ Culp *Structured Finance and Insurance*, 32.

2.2 Limitations of TRM

In TRM, the risk management process is often referred to as *silobased*¹¹ which relates to a single risk being isolated and dealt with individually. This approach comes with some limitations, among others that it is considered inconsistent in the way that it may lead to different treatment of similar risks¹².

Another important aspect is that the silo-based risk management approach does not take into account the interdependency between risks¹³. This is an important limitation for two reasons: the lack of understanding the risk and the unnoticed natural hedge. Managing risks one at a time makes the firm incapable of understanding the risk in-depth and the consequences of it. To illustrate, an unanticipated change in the interest rate can from a financial point of view affect the cost of debt, but from a commercial point of view, it can also affect the demand of the company's product. The other aspect of limitations in interdependency concerns the natural hedges. If a company has both import and export to a country with a certain currency, the cost to hedge the net effect arising from changes in the exchange rate will be lower than to hedge both the import exchange rate risk and the export exchange rate risk. These two aspects of risk interdependencies, as well as the inconsistency, are features a silo-based risk management approach cannot handle.

2.3 Moving from TRM to ERM

COSO describes in their executive summary framework that ERM

*"...is a process, effected by an entity's board of directors, management and other personnel, applied in strategy and across the enterprise, designed to identify potential events that may affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives."*¹⁴

It shows three important parts of ERM in contrast to TRM: (1) different types of personnel are included, (2) it is an enterprise-wide process, and (3) the identified risks are matched to the risk appetite and the company's objectives.

(1) The many different people involved is a key aspect of the ERM-system. To make sure that risk management is not only dealt with by people at the management level, it should be integrated into all employees' minds, which creates a better understanding of risks throughout the

¹¹ Andrew Kurtizkes, Til Schuermann and Scorr Weiner "Risk Measurement, Risk Management and Capital Adequacy in Financial Conglomerats" *Brookings-Wharton Papers on Financial Services* (Washington DC: Brookings Institution Press 2003), 142.

¹² *Ibid.*, 148.

¹³ Lars Oxelheim and Claes Wihlborg *Corporate Decision-Making with Macroeconomic Uncertainty: Performance and Risk Management* (New York: Oxford University Press 2008), 219.

¹⁴ COSO, *Executive Summary Framework*, 4.

company. In ERM it is still common that financial risks are hedged on a higher level within the company, but personnel of all levels can be included in operational risk management. It is also important to recognize the different cultures and backgrounds of the personnel, something that can add another dimension to the risk management¹⁵.

(2) The enterprise-wide part of the definition is another important feature of the framework. COSO's ERM framework includes compliance, reporting, operations, strategic risks, and deals with them in a holistic manner as well as in every subsidiary, business unit, division, and entity-level¹⁶. This creates a thorough understanding of risk management within the company at the same time as it is made sure that nothing is overlooked.

(3) The matching of identified risks with the companies' risk appetite and overall objectives is the last part of the definition. This is a central step in order to see risks as an opportunity for good business instead of just viewing it as something negative. Focusing only on risks may lead to excessive hedging, but matching risks with the tolerance of the company could rather lead to favorable openings.

In summary, the integration part of ERM is the most important feature since it allows the company to integrate all risks in all parts of the company together with all personnel and focus the efforts on creating value for the company. This is also the most significant difference from TRM and the reason why ERM has become so interesting in the last couple of years.

2.4 Components of ERM and the implementation process

As noted in the previous chapter, research objective 2 attempts to evaluate the issues companies face in the process of implementing ERM. In order to better understand the results later on, this section commences with a brief summary on the components of an ERM-system as well as a description of the implementation process.

2.4.1 Components of ERM

Though several frameworks for ERM exist, the most widely used was released in September 2004 by COSO. This framework contains their recommendation regarding the components of ERM that a firm ought to have. It contains 8 components and make up the face of what is commonly referred to as the COSO-cube, as seen below.

¹⁵ COSO, *Executive Summary Framework*, 18

¹⁶ *Ibid*, 7

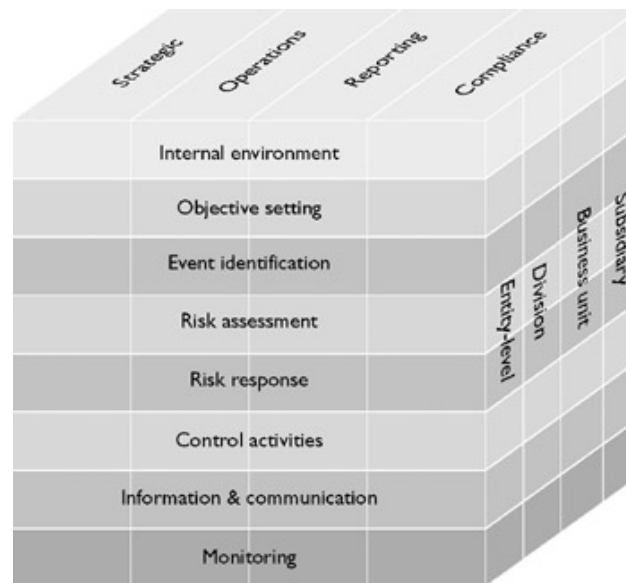


Figure 3 - The COSO Cube¹⁷

The internal environment (1) defines a firm's culture, risk management philosophy, organizational structure, and oversight by the board of directors. The objective setting (2) outlines the firm's strategic objectives, risk appetite and risk tolerance. Event identification (3) describes the events that can affect an enterprise, both positively and negatively. Risk assessment (4) allows an entity to consider the extent to which the events in (3) can impact a firm's strategy and operations. It includes probabilities of loss as well as impact. Risk response (5) evaluates possible risk responses for each risk and mitigating responses. It is important to note that this is done from a portfolio mindset. Control activities (6) are integrated with (5) and contain the policies and procedures that make certain risk responses are carried out. Information and communication (7) needs to be clear, accurate and timely which enables people to carry out their responsibilities. Finally, monitoring (8) is the process that ensures that all parts of the system are working properly and reevaluates and improves as necessary.

2.4.2 The implementation process

No firm is exactly like another and they vary on many levels such as size, age, culture, and industry. This means that there is no typical ERM-implementation process nor is there an established best practices approach. There are however some commonalities that exist among firms that have successfully implemented ERM as described by COSO in a book on application techniques¹⁸.

¹⁷ COSO, *Executive Summary Framework*, 7.

¹⁸ COSO *Enterprise Risk Management – Integrated Framework: Application Techniques* (Durham, North Carolina: COSO 2004), 3.

COSO lists 9 steps that successful implementers have taken:

1. Core team preparedness
2. Executive sponsorship
3. Implementation plan development
4. Current state assessment
5. ERM vision
6. Capability development
7. Implementation plan
8. Change management development and deployment
9. Monitoring

An essential first step is to establish a core team with representation from all divisions of the firm. This team will be the driver of the implementation process and will familiarize itself with all the components of the framework. Secondly, it is important to initiate executive sponsorship because the support of senior management drives success. The team should then develop a complete project plan including work streams, milestones, schedules and resources. Then they need to assess the current state of risk management and procedures that are in place. The team should envision what a future ERM-system looks like and use this as the basis to integrate it with the firm's objectives. By assessing what is in place right now and what the future should look like, the firm will know if there is a gap of capabilities that has to be filled. The implementation plan is then updated and improved. Change management development and deployment also need to be planned, containing deployment plans and training sessions. Lastly, monitoring procedures need to be set up to ensure that the system is functioning according to plan.

3. LITERATURE REVIEW

Since ERM is a relatively new phenomenon the academic research on the subject is limited. That being said there are some fine published works we would like to review in order to set the stage for this research paper. We highlight some papers that we believe to be the most important on ERM drivers and implementation. Academic literature on ERM can be split into two areas, theoretical and empirical papers. The empirical ones consist of two subgroups where the first one is about whether ERM is value creating and the second area investigates the implementation. This literature review will begin with theory, and then move on with the empirical research.

3.1 Theory

From a theoretical point of view, there are a lot of similarities between TRM and ERM. It is suggested that TRM can be value adding by smoothening of tax payments, lowering the costs of financial distress, and reducing managerial risk aversion.¹⁹ The same goes for ERM, however there are some additional sides to this.

In 2006, Nocco and Stulz published a paper called “Enterprise Risk Management: Theory and Practice” in which they discuss how ERM can create value for shareholders²⁰. The authors argue that the value drivers of ERM can be grouped into “macro” (company-wide level) and “micro” (business-unit level) benefits.

At the macro level, ERM adds value by enabling management to make better-informed decisions as they can evaluate a project’s impact on the total well being of the firm when they are faced with the trade-off between risk and return. This way they can make sure they can secure funding for good projects that decrease the strategic risk that affect a company in the long run. It also allows for better access to capital markets and risk ownership. Good risk assessment can reduce the volatility of cash flows, which increases the probability that money is available when the firm needs it. A cash flow shortfall might do more damage than the actual loss of money because the lost funds could be put to better use by being invested in risky projects. This can thus be contagious because it affects the firm’s ability to take on positive NPV projects. The inability to undertake promising projects is commonly referred to as the underinvestment problem.

At the micro level, ERM becomes imbedded in the company culture and employees think more about risk-attitude and the pros and cons of decisions for the enterprise as a whole instead of just for their business unit. ERM can also help mid-management make better-informed

¹⁹ Clifford Smith and René M. Stulz “The Determinants of Firms’ Hedging Policies” *The Journal of Financial and Quantitative Analysis* 20 no4 (December 1985).

²⁰ Brian W. Nocco and René M. Stulz “Enterprise Risk Management: Theory and Practice” *Morgan Stanley Journal of Applied Corporate Finance* 18 no4 (Fall 2006).

decisions that fit into the overall company strategy. The theoretical literature on ERM is very limited but empirical studies can give additional insights.

3.2 Value creation through ERM

Gates discovers that ERM can help build greater management consensus about the “exact nature of key company-wide risks”²¹. This can be of great benefit to a company as senior managers often have different backgrounds, which lead to disagreements of which risks are the most important ones to manage. He also advocates that ERM can improve the communication of risk within an organization by establishing a common risk language. Defining risks more clearly also increases transparency to external stakeholders such as rating agencies and shareholders. In one of the cases Gates studied, the firm was able to decrease their cost of debt resulting from an improved rating.

Since risks are dealt with on an enterprise-wide basis in ERM, it can be more effective in managing risk than in TRM where they are managed in silos. Some of an enterprise’s risks are likely to exist in multiple business units and by taking a holistic approach all of these risks can be managed once instead of many times. This portfolio-think avoids duplication of risk management efforts that reduces labor costs and transaction costs if risks are hedged.²²

The interest in ERM from the rating agencies has increased in recent years. In 2006 Standard & Poor’s began to make ERM a criteria in the rating analysis for insurers and in 2008 they announced that it would become a separate and major category for corporate ratings as well.²³ Based on this, McShane, Nair and Rustambekov did a regression analysis on how the ERM-rating correlated with firm value. They found that advanced TRM was value adding, but that ERM was not²⁴. The same year, Hoyt & Liebenberg did a similar study where they examined how the firm value (approximated by Tobin’s Q) was affected by the level of ERM and they found that ERM had a statistically significant premium²⁵. This means that while some research claim that ERM is value adding, some papers state the opposite.

²¹ Stephen Gates “Incorporating Strategic Risk Into Enterprise Risk Management: A Survey of Current Corporate Practice” *Morgan Stanley Journal of Applied Corporate Finance* 18 no4 (Fall 2006), 88.

²² Robert E. Hoyt and Andre P. Liebenberg “The Value of Enterprise Risk Management” *The Journal of Risk and Insurance* 78 no4 (2011).

²³ Standard & Poor's “To Apply Enterprise Risk Analysis To Corporate Ratings” *Global Data Solutions RatingsXpress Credit Research* (May 7 2008), 3.

²⁴ M. McShane, A. Nair and E. Rustambekov “Does Enterprise Risk Management Increase Firm Value?” *Journal of Accounting, Auditing & Finance* (2011).

²⁵ Hoyt and Liebenberg.

3.3 ERM-implementation

Gates also evaluated the drivers for implementing ERM as well as the greatest impediments to ERM²⁶. His study was a survey of 1000 financial and risk executives in which 271 responded. He listed corporate governance requirements as the primary driver, closely followed by greater understanding of risks, regulatory pressures (including rating agencies), board request and competitive advantage. The greatest obstacles were competing priorities, insufficient resources (people and technology), lack of consensus on ERM's benefits, as well as getting the organization to make changes.

Another case study, by Acharyya and Johnson²⁷, investigates motives for implementing ERM and the challenges their sample companies face when implementing ERM. This survey indicates that the key driving forces for ERM are regulations, corporate governance, and a volatile economic situation. Regarding challenges in implementing ERM they have divided these into operational challenges and technical challenges. What stand out in the first group are difficulties in communication and problems with data accuracy and consistency. The main technical difficulties are measurement and modeling of operational risks. Calculating correlations is also a problem, although not as prevalent. One key takeaway from this study is that people working with ERM should be multi-disciplinary generalists in order to understand multiple perspectives instead of being specialists.

In 2011, Pagach and Warr²⁸ did a study similar to one made by Liebenberg and Hoyt²⁹ in 2003. Both studies examine whether various characteristics (such as firm size, leverage and volatility) correlates to the implementation of ERM (approximated by the announcement of a CRO). Pagach and Warr find that firms implementing ERM are generally larger, have more volatile cash flows and riskier stock returns. This is not supported by Liebenberg and Hoyt who only discovers that highly levered firms are more likely to implement ERM.

Nocco and Stultz mention the main obstacles in the implementation process for an insurance company they studied³⁰: inventory of risks, economic value vs. accounting performance, aggregating risks, measuring risks, regulatory versus economic capital, using economic capital to make decisions, and governance of ERM.

²⁶ Gates.

²⁷ Acharyya and Johnson "Investigating the Development of Enterprise Risk Management in the Insurance Industry" (University of Southampton 2006).

²⁸ D. Pagach and R. Warr "The Characteristics of Firms That Hire Chief Risk Officers" *The Journal of Risk and Insurance* 78 no1 2011).

²⁹ Andre P. Liebenberg and Robert E. Hoyt "The Determinants of Enterprise Risk Management: Evidence From the Appointment of Chief Risk Officers" *Risk Management and Insurance Review* 6 no1 (2003).

³⁰ Nocco and Stulz.

Another study mentions 12 challenges of ERM, where the most central ones are selecting an appropriate ERM-framework for the company, communicating the benefits of ERM throughout the company, creating a culture of risk awareness and to integrate all parts of the company in the ERM process³¹. These impediments are similar to the ones identified by Acharyya and Johnson with the difference that the latter also mentions linking risks with corporate strategy as a challenge³². Gates adds competing priorities and insufficient resources to the list of problems, something that can be derived from the inability to see the benefits of ERM³³.

³¹ A. Schanfield and D. Helming “12 Top ERM-implementation Challenges” *Internal Auditor* (December 2008).

³² Acharyya and Johnson.

³³ Gates.

4. OUR FRAMEWORK

Having gone through a substantial amount of theory, empirical papers, consulting agency recommendations and similar information, we found that there are several different aspects of why companies decide to implement ERM. As we wanted our responses to be easily overviewed, we created a framework consisting of the most common reasons for ERM. We created this by identifying reasons and putting them together, comparing them and bundling the similar ones. The framework consists of six categories, which in turn depend on two major aspects: where the *focus* is and what the *incentives* are.

4.1 Focus and incentives

By focus we mean what part of the incentive is emphasized, the internal or the external part. The internal part consists of activities such as internal control, monitoring, enhanced processes, portfolio effects etc. Put simply they are the activities that deal with the internal environment of the company. By external focus, we mean that the environment the company works within is more highlighted than the internal environment. It involves competition, mergers and acquisitions, rating agencies and external stakeholders. There are naturally some cases where it is difficult to draw a clear line between internal and external focus whereas we define our topics more in-depth below.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
		Incentives		

Figure 4 - Reasons for ERM-implementation

Moving on to incentives, we have identified three major incentive categories: control, cost savings, and decision making. Control concerns the monitoring and transparency of the company and is often used in corporate finance theory to reduce agency costs and asymmetric information³⁴. Control is also used by external stakeholders to rate the company, put a correct price on the company's debt and to make sure that the managers act in a appropriate way given the stakeholders' incentives. Next incentive is cost savings, which includes reduced cost of debt, less hedging costs or lower taxes, aspects that directly improves the company's cash flow. The last incentive regards the decision making process which can be improved by a thorough risk assessment before making a decision.

Putting these two parameters, focus and incentives, into a matrix we are able to create a framework consisting of six possible reasons why companies implement ERM, all presented and discussed below.

4.2 Internal control/Corporate governance

As a response to financial fraud and crisis in the 2000's a lot of new laws and regulations came to be. One of the first ones was the Sarbanes-Oxley Act (SOX)³⁵ in 2002, which was the result of internal fraud at Enron and WorldCom³⁶, among others. The act states that all companies listed in the US had to follow the guidelines regarding internal control. This led to reorganizations and some companies chose to leave the stock exchange.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
		Incentives		

Figure 5 - Corporate governance

³⁴ Joseph P. Ogdén *Advanced Corporate Finance: Policies and Strategies* (Upper saddle river, New Jersey: Pearson Education inc. 2003), 83-120.

³⁵ Sarbanes-Oxley Act of 2002 *H.R. 3763 ENR* (Washington 2002).

³⁶ Allison Fass "One Year Later, The Impact of Sarbanes-Oxley Act" *Forbes* (22 July 2003).

Shortly after, the international environmental standards of ISO 14000 came, focusing on environmental management and in 2009, the ISO 31000³⁷ focusing on risk management were introduced. This resulted in complications for various departments in many organizations, which again led to reorganizations.

In Sweden, the Swedish code of corporate governance was announced in 2005 with the instructions to comply or explain³⁸. It was updated in 2010 to become more similar to the SOX in the way that it regulates the internal control. One of the most important parts of the code is found in the chapter on the responsibilities of the board of directors. Here it states that “The principle tasks of the board of directors include [...] ensuring that there is an effective system for follow-up and control of the company’s operations, [and] ensuring that there is a satisfactory process for monitoring the company’s compliance with laws and other regulations relevant to the company’s operations”³⁹. This means that since 2010 Swedish boards of directors more or less have to make sure that there is a system for internal control within the company. It also states that “companies applying the Code must attach special report on corporate governance to their annual report. They must also have a special corporate governance section on their website.”⁴⁰ This implies that the companies not only have to have a system for internal control but must also be able to show it to the market, an act of transparency.

Similar laws and regulations are seen all over the world at this time including the KonTraG from 1998 in Germany, which dictates how companies should work with control (Kon) and transparency (Tra). Already having TRM system and implementing an internal control system makes it appealing to merge the two systems into one ERM-system. This constitutes the top left corner in the “reasons for ERM-framework”. It could be argued that corporate governance should be considered an external force since the impulses come from governments, but as mentioned in the “focus and incentives” section, the framework consists of incentives divided in focus areas whereas the *control* in this case is *internal*.

4.3 External control/Improve rating

The external focus on control introduces other stakeholders than the actual company. Probably the most important external control stakeholders are rating agencies (such as Standard and Poor’s, Moody’s and Fitch), banks, and institutional investors. Starting with rating agencies, they look at a variety of aspects of the company and rate the companies’ debt according to a certain scale. In the last couple of years, these rating agencies have started evaluating the companies’ risk

³⁷International Organization for Standardisation.

³⁸ Swedish Corporate Governance Board *The Swedish Corporate Governance Code* (Stockholm: Hallvarsson & Halvarsson 2010), 8.

³⁹ *Ibid.*, 16.

⁴⁰ Sven Unger *Special Features of Swedish Corporate Governance* (Stockholm: Hallvarsson & Halvarsson 2006), 6.

management more in depth and have included ERM in their evaluation process. Standard and Poor's states that larger, multinational companies are expected to already have ERM whereas not having it can lower the rating. Smaller companies are generally not expected to have ERM so implementing it could actually improve the rating⁴¹.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
Incentives				

Figure 6 - Improve rating

However, only having a good rating is not value adding per se, but the effects of it can be indeed. Theory states that a company's credit rating is one of the primary determinants of the company's cost of debt⁴², something that is empirically confirmed in a study by Gates.⁴³ Banks do their own due diligence before deciding on a suitable lending cost, but the rating is often used as a guideline since it is thoroughly done by the agencies. If we were to prolong this argument, it could be said that implementing an ERM-system can effectively decrease the company's cost of debt.

Another aspect of an improved rating is the available number of investors. Some mutual funds, pension funds, and institutional investors have established policies stating that they are only allowed to invest in investment-grade stocks⁴⁴ (BBB-rating or higher). This creates an incentive for companies to remain above investment-grade in order to keep their investors. This pressure to maintain a certain credit rating in order to keep their investors might also be an incentive to implement ERM.

⁴¹ Standard & Poor's, 3.

⁴² Justin Pettit *Strategic Corporate Finance: Applications in Valuation & Capital Structure* (Hoboken, New Jersey: John Wiley & Sons 2007), 14.

⁴³ Gates.

⁴⁴ See for instance SEB K1329, Nordea 1KE 3575, Handelsbanken FROBL.

4.4 Internal cost savings/Natural hedges

This incentive for ERM-implementation is linked back to the inability to view risks as interdependent in TRM. Looking at risks from a holistic, enterprise-wide perspective, the company can get a better understanding of the various risks as well being able to find natural hedges in their risk management strategies. This could be done with for instance exchange rate risks in various departments. In silo-based TRM, all various departments deal with their own risks and hedge the exchange rate risk in their import and export. Aggregating these risks may show that some import and export come in the same currency and as such does not have to be hedged. Instead, the natural hedge will mitigate a change in the rate to the extent that when import becomes more expensive, the company will increase their earnings on export. These natural hedges are a way to save money internally, without interacting with external parties. This way of dealing with natural hedges is similar to the theory of avoiding duplication of risk management efforts by Hoyt and Liebenberg.⁴⁵

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
		Incentives		

Figure 7 - Natural hedges

Another aspect of internal cost savings is reducing earnings volatility. A stable stream of cash flow is important from a liquidity point of view but is also a factor to take into account in the company's tax planning. Smith & Stulz argue that in a convex tax environment, as opposed to a linear one, firms can reduce their aggregated taxes by reducing the volatility in pre-tax income⁴⁶. Simply put, it is better to have a stable pre-tax income of 10 for three years than to have unstable cash flows of 10, 0, 20 for instance. The aggregated earnings will be the same, but due to the convex tax schedule, the aggregated tax payments will be lower in the first scenario thus making

⁴⁵ Hoyt and Liebenberg.

⁴⁶ Smith and Stultz, 392.

this more attractive to the company. This is something that can be facilitated by an ERM-system, which makes it an incentive for implementation.⁴⁷

4.5 External cost savings/Reduce costs

The external focus of cost savings includes external stakeholders such as creditors, investors and customers. Investors traditionally look at what risks they are willing to take and from this demand a certain return. If a company were to reduce its risk, the company's risk premium could also be reduced. An empirical study from Malaysia⁴⁸ finds that implementing an ERM-system actually reduces the risk premium and hence lowers the financing costs of the company. The case is similar regarding creditors who also demands a certain return (interest) depending on the riskiness of the company. Reducing the risk will thus lower the cost of debt, which together with the lower risk premium decreases the overall WACC of the company.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
Incentives				

Figure 8 - Reduce costs

By integrating operational risks in the ERM-system, a company can generate a better understanding of the risks in its operations. This can reduce production failures and operational mistakes which in turn affects the output. Being able to guarantee a stable and qualitative output is an important part of good customer relationship. It could be argued that integrating operational risks in the ERM framework will improve customer relations, which will become more profitable for the company.

⁴⁷ Nocco and Stulz.

⁴⁸Fong-Woon Lai and others, eds., "Multifactor Model of Risk and Return Through Enterprise Risk" (paper presented on 3rd International Conference on Information and Financial Engineering Singapore 2011), 559.

4.6 Internal decision making/Risk portfolio

We define internal decision making as deciding on hedging and risk management strategies on a holistic level through an ERM-perspective. Looking at risks in silos, there are often a *bundle* of risks in every silo. The business risk connected to entering a new market is *bundled* with the interest rate risk in that market, the exchange rate risk of the certain currency etc. In TRM these risks can be unbundled into even more silos and managed separately. In addition to this, Culp argues however that through an ERM-system, these risks can be regrouped into new bundles of interdependent interest rate risks, exchange rate risks and so on⁴⁹. This differs a bit from the argument of natural hedges in the sense that here, the risks do not mitigate each other, but hedging together will lower the transaction costs of the contracts. This is also in line with Schrand and Unal who in 1998 initiated the expression *coordinated risk management* where value could be created by regrouping unbundled risks⁵⁰. Jankensgård reasons that centralization of the company's risk management can reduce costs mainly in two ways: through concentration of key skills, and by reducing the number of bank contacts⁵¹.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
Incentives				

Figure 9 - Risk Portfolio

The reduced transaction costs are however merely a bonus compared to the decision making incentive. Unbundling and regrouping risks can improve the risk management process by giving risk managers more flexibility regarding which way to manage certain risks. Core risks and non-

⁴⁹ Culp *Structured Finance and Insurance*, 747.

⁵⁰ C. Schrand and H. Unal "Hedging and coordinated risk management: Evidence from thrift conversions" *The Journal of Finance* 3 no3 (June 1998).

⁵¹ Håkan Jankensgård *Essays on Corporate Risk Management* (Lund: Lund Business Press 2011), 158.

core risks can easier be identified and dealt with correctly and more efficiently on an enterprise-wide level than in the previous mentioned silos⁵².

Another internal decision making process that can be facilitated by ERM is the decision on how much debt to hold and how much risk to take on. Culp means that risk management can be seen as synthetic equity, or more specifically, contingent synthetic equity through a rights issue. If a risk event occurs, the company gets a payment from the insurance company, not as a loan but as a payment. This transaction can be seen as the company increasing its equity, hence the parable with a rights issue. The contingency is derived from the risk occurrence. Looking at a lot of various insurance contracts individually does not create any opportunities, but aggregating all contracts on an enterprise-wide level the total contingent synthetic equity may prove to be substantial. This equity has a value and can be used as collateral when taking on more risks or as an argument for increased debt capacity⁵³. In other words, integrating all risks in an ERM framework will affect the way internal decisions are made.

4.7 External decision making/Investment decisions

External decision making regards decisions on which companies to buy, mergers, and other investment decisions. Compared to internal decision making, we mean that external decision making regards all decision making that involves external parties. ERM can enhance the companies' investment decisions mainly in two ways. First, assessing the risks related to a certain project or creating a risk map⁵⁴ will give the decision makers a broader perspective of the investment. It is then easy to see how the opportunity fits in the company strategy from a financial, operational and strategic point of view.⁵⁵ Only looking at Net Present Value or Internal Rate of Return overlooks these risks and may present a false picture to managers. Second, profitable investment opportunities might not be accepted if only evaluating the risks in a traditional manner. Managers may see the project as too risky and chose not to take it on. However, through ERM, natural hedges may appear and the net risk of the investment opportunity will not be as much as first believed⁵⁶.

⁵² Culp *Structured Finance and Insurance*, 30.

⁵³ *Ibid.*, 184.

⁵⁴ Culp *The Risk Management Process*, 249.

⁵⁵ Nocco and Stulz.

⁵⁶ Liebenberg and Hoyt, 41.

Through an ERM-system managers can receive support in making good investment decisions both in the manner that they will not take on unsuccessful projects and that they do not discard profitable investment opportunities. In other words, both the *underinvestment problem* and the *overinvestment problem* can be reduced.

Focus	Internal	Corporate Governance	Natural hedges	Risk portfolio
	External	Improve rating	Reduce costs	Investment decisions
		Control	Cost savings	Decision making
Incentives				

Figure 10 - Investment decisions

5. RESEARCH METHODS

As mentioned in the introductory chapter, the research objectives of this thesis are to identify why firms choose to implement ERM and the impediments they face in the process. The literature review shows that this has not been done before. Studies have been done on ERM-implementation in insurance companies and on a broad market of both ERM firms and non-ERM firms, but never on firms that explicitly state that they use ERM. Hence, there is a gap in previous research that explains the need for this study. We have also found that previous research mainly is quantitative whereas we will be the first ones to do a qualitative interview study in the field.

By comparing theory with empirical discoveries the research will gain a more thorough understanding of a firm's journey from TRM to ERM. This chapter explains the research strategy that was used to answer to the objectives above, the means by which data was collected, as well as limitations and potential problems with the practical research.

5.1 Research strategy

The overall research strategy for this thesis is a combination between survey research and a case study. This was deemed the most appropriate course of action because a case study is “a research design that entails the detailed and intensive analysis of a single case”⁵⁷. Hence a case study would not be indicative of the Swedish market as a whole, which is the ambition of this thesis. Survey research on the other hand qualifies with respect to this criterion because it is a cross-sectional study. One drawback of the survey is that it is quantitative in nature. Business research can be done either quantitatively or qualitatively⁵⁸ and the approach chosen for this thesis is primarily qualitative in nature because it is not possible to quantify the responses that we are looking for. We decided that the best approach would be to combine the cross-sectional benefits of the survey with the qualitative aspects of a case study through exhaustive interviews.

5.1.1 Sample of companies

Fifteen companies have been chosen as focus companies for this study, of which twelve chose to participate. Due to the fact that ERM is being forced into the financial services industry through strict regulations and the purpose of this thesis is to look at the reasons behind why firms choose to implement ERM, the sample companies consists of non-financials. Data from OMX Stockholm large cap and mid cap companies were collected and presence of ERM was noted if it was mentioned on their website or in their annual reports. The small cap list was not examined as ERM is complex and expensive which led us to the conclusion that it is most likely absent on the

⁵⁷ Alan Bryman and Emma Bell *Business Research Methods* (New York: Oxford 2007), 62.

⁵⁸ *Ibid.*, 28.

small cap list. No rating was made as to which degree ERM was present, but only if ERM was or was not mentioned. From this, we were able to identify eleven companies. Since eleven is a rather small number, alternative ways to find companies were evaluated. After talking to representatives from the Swedish risk management association “SWERMA”, four additional companies could be included, increasing the sample to fifteen companies. It might be that there are other Swedish non-financials who claim they have ERM, but these will be considered a minority in this context and can hence be excluded from the sample. The companies will remain anonymous, however below we listed the various industries in order to show the differentiation of our sample.

Company	Industry
1	Energy
2	Search and directories (Media)
3	Outdoor power products
4	Food and agriculture
5	Utilities
6	Security services
7	Biopharmaceutical
8	Paper, biomaterials, wood products, packaging
9	Gambling
10	Supplier of tools and equipment for construction and industrials
11	Telecommunications
12	Industrial
13	Energy
14	Manufacturing
15	Technical consulting

Table 1 - Sample of companies

From each of these firms the person responsible for the ERM-implementation was interviewed. In most cases she had a title similar to CRO, Group Risk Manager or Risk Manager. We believe one person per company to be sufficient as we are doing an aggregated analysis of the market and not on a specific company.

5.2 Data collection

The collection of data from the sample companies was done by interviewing the person responsible for ERM within each organization. Other methods were reviewed such as a questionnaire but because of the inflexible nature we decided that interviewing was more suitable. Various interviewing techniques were then evaluated and the semi-structured interviewing form was deemed the most adequate because of its flexible character. This technique is a mix of the structured and unstructured form and enables the interviewee to answer freely while the interviewer can steer the interview in a pre-determined orientation with the use

of an interview guide.⁵⁹ The interviewer may pose follow-up questions not in the guide to make sure to get an acceptable answer to the original question but all the questions from the interview guide are always asked and the wording is similar. The interview guide that was used can be found in Appendix A.

This type of data collection is often referred to as social constructivism, which means that we as researchers construct knowledge and generate theories from what we interpret from these interviews⁶⁰. The interviews are therefore subjective in nature and if someone was to replicate this study it is uncertain if they would get the same results. The semi-structured interview form helps mitigate this by limiting the scope of the interview.

5.3 Interpretation of responses and adoption of framework

Unlike quantitative research, qualitative research has few well-established techniques that can be applied to analyze the type of data that was collected through the interviews.⁶¹ According to Bryman and Bell, the most prevalent framework for analyzing qualitative data is referred to as grounded theory⁶², which is also the approach we decided was the most appropriate for this study. Soon after the data was collected, it was broken down into component parts and coded into the framework we had constructed in advance. The responses were then entered into Microsoft Excel in order to calculate the shares relative to the total. We were also able to divide our respondents into sub groups and analyze the responses from various angles.

5.4 Limitations and potential problems

We have identified the following limitations to this research:

1. Sample size
2. One person interviewed per firm
3. Interpretation of responses

First, the small sample size is a limitation in this study that makes it difficult to generalize from the conclusions. It can however paint a vivid and rich picture of the incentives for ERM and the obstacles that can arise in the ERM-implementation process. As all our sample companies explicitly state that they have ERM, the sample might be limited but concentrated.

Second, only the person in charge of ERM (usually the CRO or group risk manager, henceforth referred to as the CRO) was interviewed and was thereby the only source of data that would

⁵⁹ Bryman and Bell.

⁶⁰ Kim Beaumie *Social Constructivism – Emerging Perspectives on Learning, Teaching, and Technology* (University of Georgia: 2013) http://epltt.coe.uga.edu/index.php?title=Social_Constructivism (accessed May 19, 2013).

⁶¹ Bryman and Bell, 579.

⁶² Ibid., 584.

represent an entire company. Breaking this down further, it is possible that the CRO does not know the company's history and what the incentives and obstacles were. This is especially true in companies that have been using ERM for a long time.

Third, the interpretation of responses that was introduced in the previous section is subjective in nature and it is worth noting that this is our perception of what the interviewees told us. When interpreting the results we looked for key terms in the responses, however what we define as for instance natural hedges might not be the same as a certain CRO's definition. We would also like to acknowledge that our framework might have influenced us as it was constructed in advance. We might wrongly interpret some of the responses, and some answers may not fit at all in the framework. However, as the categories are broad, we did not get any responses that did not fit into our framework. To reduce potential failures in the interpretation process, we asked our respondents to clarify certain answers regarding terms like for instance portfolio effect.

These are limitations we find to be of importance, but not invalidating to our research. We keep this in mind when moving on to the results and analysis.

6. RESEARCH RESULTS AND ANALYSIS

In this chapter, we are first going to present and analyze the responses we got from our interviews. Secondly, the obstacles mentioned in the interviews will be presented and discussed. Finally, the responses will be compared to previous research in order to see how our research turns out compared to others.

6.1 Description of the respondents

12 of the 15 companies chose to participate in this study. The 3 companies who did not want to participate did so due to limited time and prioritizing other tasks. But as the respondents are 80%, the responses can still indicate what the market looks like.

6.2 What are the main drivers behind ERM-implementation?

This is the first research-related question asked in every interview for this study. Since a lot of different people were asked, the question was interpreted differently. Some answered according to the earlier presented framework at once, whereas others stated that the main reason was that the board had decided that ERM should be implemented. To the latter respondents, the question was rephrased to “how do you think ERM could add value to the company?” From this question, the responses could more easily be put into the framework.

Only a few respondents could pinpoint one main driver, most mentioned two, either ranked or of equal importance. For this reason, all responses have been broken down into two main drivers and put into the framework⁶³. Plotting the responses into the framework will ease the interpretation of the responses and give a holistic view of what the market looks like. The answers put into the framework were then calculated into percentages presented below.

⁶³ For instance: Company X's main drivers are corporate governance *and* reduced costs while company Y's are improved rating *and* investment decisions.

Focus	Internal	Corporate Governance 29%	Natural hedges 13%	Risk portfolio 4%
	External	Improve rating 13%	Reduce costs 8%	Investment decisions 33%
		Control	Cost savings	Decision making
Incentives				

Figure 11 - Aggregated responses on the driving forces behind ERM-implementation

6.2.1 Investment decisions as a main driver

Looking at the framework, it is clear that one of the most significant driving forces behind ERM-implementation is investment decisions. This is an important finding and rather intuitive when discussed. If a company makes better investment decisions, with regards to all potential risks, they will get a better understanding of the risks connected to the potential return of the investment. This allows decision makers to make more informed decisions and not leave as much to chance. Making better investment decisions may therefore reduce unnecessary costs associated with a project and as such increase the cash flow of the company.

When adding an extended risk analysis to an investment prospect, decision makers also look at how the prospect fit into the company. How does it fit in the risk portfolio and are there any natural hedges that come as a bonus when going through with the investment? These are questions that may be looked at in the investment decision process. Making better-informed decisions will also reduce unexpected risks, which in turn may improve the company's rating.

In conclusion, making better decisions is a way to add value to the company through almost all cells of the framework. It's important to remember that it however does not work the other way around. Having a holistic view on the company's risks and through this finding synergy effects in hedging strategies for instance is not a way to improve the decision making process. It may indeed add value to the company, but merely on its own, not in the integrated way as investment decisions.

This leads to investment decisions being the most important driving force behind ERM-implementation in this study.

6.2.2 *New regulations as a catalyst for ERM-implementation*

The other factor that scored high in the study is corporate governance. In this case however, the impulses do not come from value creation for shareholders but rather from government regulations.

As mentioned in the corporate governance section of the framework, a lot of new regulations came to be in a very short period of time, including the SOX, Swedish code of corporate governance, KonTraG and ISO 31000. During this time, there were also a lot of publications and seminars hosted by consulting agencies where the new laws and regulations were discussed and where risk managers could ask for advice on what to do. One of the most important frameworks was delivered by COSO in the mid-90s but was re-launched as a response to the SOX in 2004.

Another thing to keep in mind is the human factor. Before these new laws and regulations, many companies had a decentralized way of managing risks. Treasury typically dealt with managing the financial risks while the respective line managers managed the operational risks. All of a sudden, a new type of risk was introduced, the internal fraud, and it was too costly to set up a new department dealing only with this. For this reason, it was very convenient to let one of the current risk managers (or anyone working with risks) take care of the new regulations. A line manager had no idea of how to handle financial fraud and treasury didn't know the potential risks in the production process. It was therefore appropriate to turn to a consulting agency and ask for help.

As seen from this layout, new regulations made uncertain risk managers turn to consultants for advice regarding appropriate responses to these regulations. This was the case in the beginning for most of the focus companies in this study, and still is for companies in the early stages of the implementation process. After a while however, more risks are integrated and the ERM-system starts to add value through, as earlier mentioned, better investment decisions, reducing costs etc. In this way, regulations regarding corporate governance might not be a value creating driving force behind the ERM-implementation but rather a catalyst for the initiation of the process.

Another aspect that some respondents mentioned is that new regulations can be used as a motive to legitimize the ERM-implementation. Sometimes, implementing a new way of order in a company can be seen as additional work by some and is as such not well received. In those cases, it can be good to refer to a certain law stating that something *has* to be done. This legitimizes the implementation and employees are more open to the change and actually appreciate that the company develop in order to meet the regulations. In this sense, the regulations are used to turn a difficult implementation to something positive for the employees.

6.2.3 *The remaining 38% of the responses*

As seen in appendix A the first thing we asked all interviewees was to tell us a little bit about themselves and their history in the company. From this question, we found that the respondents could be divided into two main groups, CROs who had their history in a finance department and CROs with a past in operations/production. The ones with an operational background almost exclusively answered that the main incentives were corporate governance and investment decisions. The other group, the financial one, answered *either* corporate governance *or* investment decisions and something else. It could be for instance corporate governance and improved rating or investment decisions and risk portfolio but never corporate governance and investment decisions. We believe this to be derived from the fact that a CRO from a financial background understands the financial effects of ERM in a deeper way than the ones from operations. As this study is constructed from a financial point of view, it is not surprising that the financial CROs are more analytical in their answers.

CROs from operations answered that they implemented ERM since “it will improve our investment decisions and of course we have to due to new regulations”. CROs from a financial background were able to be more precise with answers like “it will improve our investment decision making but also lower our hedging costs as we are able to find natural hedges within the company” or “new regulations demands that we improve our internal control, but this can also improve our rating as a bonus.” This shows that the answers in the remaining boxes almost exclusively came from CROs from a financial background.

6.2.4 *Comparison to previous research*

It has been argued by some researchers that ERM is a response to the SOX in the US and to similar laws and regulations in other countries⁶⁴. For this reason, our finding that corporate governance is a main driver is not a surprise, however that many respondents answered that other aspects were important as well is more interesting. Fraser and Simkins argue that it is a failure to see ERM as a response to the SOX since they are different by nature. SOX is *backward* looking focusing on compliance and financial reporting while ERM is *forward* looking with profitability and value as central aspects⁶⁵. In this sense, Fraser and Simkins are opposed to Gates who find that the main driver of ERM-implementation is corporate governance requirements⁶⁶. Gates’ discovery is backed up by Acharyya and Johnson who claim that the key driving forces for ERM are regulations and corporate governance.⁶⁷ Our finding that investment decisions and

⁶⁴ Jefferey C. Thomson ”SOX 404 and ERM: Perfect partners... or not?” *Journal of Corporate Accounting & Finance* 18 no3 (April 2007).

⁶⁵ J.R. Fraser and B.J. Simkins ”Ten common misconceptions about enterprise risk management” *Morgan Stanley Journal of Applied Corporate Finance* 19 no4 (Fall 2007).

⁶⁶ Gates.

⁶⁷ Acharyya and Johnson.

other drivers are important is more in line with Nocco and Stultz claiming that there are several, interlinked benefits of ERM including investment decisions, risk portfolio and natural hedges⁶⁸. This result is also supported by Pagach and Warr who argue that firms choose to implement ERM for value creating reasons rather than regulatory pressure⁶⁹.

6.3 What were the main obstacles in the ERM-implementation process?

The responses we received on this question varied a lot between companies depending on different implementation tactics and how far they had come in the process. We were however able to find a few common issues the companies experienced including (6.3.1) conflict of risk ownership, (6.3.2) comparison of qualitative and quantitative risks, (6.3.3) old habits of the CRO obstructing the implementation, and (6.3.4) inhibited creativity.

6.3.1 Conflict of risk ownership

Many interviewees discussed the newly introduced problem of defining risk ownership. They claimed that this is a direct effect of the ERM-implementation.

Before ERM, all departments owned their own risks: treasury dealt with financial risks, production handled operational risks etc. Risks were dealt with in silos where every silo was responsible for its own risks. They were also responsible for their own goals, which meant that they could adjust their level of risk-taking in order to match their goals.

After implementing ERM however, the division was not as clear as before. Departments still had their own specific goals to reach, but since risks were managed on an enterprise-wide level, it was considered more difficult to match goals with level of risk-taking. A conflict arose where department managers wanted to deal with their own risks and the CROs wanted to manage risks on a holistic level. There are a few important aspects of this problem regarding (1) the knowledge of the risk, (2) bureaucracy, and (3) window dressing.

(1) Our respondents have identified that mid-management often has the best information about the certain risks connected to their specific department. They are good at calculating likelihood, know the possible impact on operations if a risk was to occur and they are experienced in how to mitigate it. For this reason the best risk managers are the ones “out on the field” working in the departments. However, CROs have a more holistic view and have more knowledge about the risks of the entire organization. They can more easily see the entire picture and thus know what would be best for the various departments. They also have a more integrated goal to reach. This means that they can assume more risk in certain departments and back it up with risk mitigation in others to get a balanced risk portfolio. This is something mid-

⁶⁸ Nocco and Stulz.

⁶⁹ Pagach and Warr.

management cannot do, and might not fully understand due to lack of information on the holistic level.

(2) The more people involved in the risk management process, the more time it will take to act. CROs do not have the time to fully familiarize themselves with all risks in the organization. Therefore, mid-management delivers risk management plans to the CRO. These plans however may or may not fit the overall objective of the company and may therefore be rejected. Mid-management then have to come up with new risk management plans and hope the new ones will be accepted. This bureaucratic process is time consuming and inefficient and could also be seen as very frustrating by mid-management. A more defined division of risk ownership could mitigate this and simplify the process.

(3) Window dressing concerns making something look different from what it actually is. This is most commonly referred to in fund management, venture financing and acquisitions, but the concept exists in ERM as well and is sprung from the conflict of risk ownership. Mid-management have their own incentives and top management, including the CRO have their own. Sometimes, these incentives are opposed to each other, either when the CRO wants to take on more risk than mid-management or when the case is the other way around. This creates a situation where mid-management finds reasons to report their risks in a distorted way. If a CRO wants a certain department to be almost risk-free and the manager of that department wants to take on risks in order to generate a better result and consequently a higher bonus, she might leave a misleading risk report to the CRO, stating that new projects are not as risky as they actually are. The other extreme is a case when the CRO who wants a department to take on very risky projects while the department manager is unwilling to risk losing her job if the project fails. She might then present reports describing projects as very risky when they in fact are not.

The problem of risk ownership can thus lead to inefficient and time consuming processes, frustration in mid-management as well as internal agency costs and asymmetric information due to the window dressing problem.

6.3.2 Comparison of quantitative and qualitative risks

One of the most important parts of ERM, discussed in the definition of ERM in section 2.3, is that it is enterprise-wide and that the risks are matched with the company's objectives. This means that all risks should be included in the risk assessment, including business risks, market risks, financial risks, operational risks, and so on. These risks should then be compared and evaluated in order to decide on a suitable risk management strategy. The problem is however, that some of these risks are more quantitative while others are more qualitative in nature. Quantitative risks include interest rates, exchange rates and such, while an example of a qualitative risk is reputational risk. Comparing these risks becomes difficult since they are different by nature. It is a lot easier to put a number on what effect it would have to the company

if a currency was to drop, than if for example a harmful rumor was to start spreading over the Internet for instance.

This complicates the application of ERM as it is important to have a comparable measurement of risks, or else these cannot be aggregated and the system fails. Our interviewees discussed various solutions to this problem, including the aforementioned heat map. However, this is not a sufficient solution. If we take the risk of a damaged reputation, it is extremely difficult to assess the likelihood of this occurring and the impact it would have on the company. But even if this was to be done, the next step, quantifying the risk, would be even harder. Some companies use Monte Carlo simulations to generate an estimated probability, but this is still only a theoretical aspect and is not quantified.

So instead of actually putting all risks together, most companies end up with a situation where quantitative risks are integrated and dealt with separately and qualitative are observed and discussed in another way. This segmenting is opposed to the definition of ERM and as such is an obstacle in the implementation process. None of our respondents had a good solution to this problem.

This causes difficulties for the management team in their decision making process. A part of ERM is to match the risks with the company's objectives and decide how much risk to take on in order to reach the predetermined goals. If risks cannot be assessed on an aggregated level, it becomes problematic to match with the objectives. And if risks and objectives cannot be matched, a central function in the ERM-system is lost.

6.3.3 *Old habits obstruct new designs*

Implementing an ERM-system takes long time and costs a lot of money. It is not something done overnight, but rather a deliberate process that grows into the company. While the system grows, much is spent on educating personnel, acquiring new IT-systems, and managing the change that comes with the implementation. This time and money consumption does not come without complications.

Depending on who is responsible for the implementation, there are mainly two sides to this problem. If the responsibility to overlook the implementation of ERM falls on someone from a financial background, for instance the former insurance manager, she will see this as an investment and expect a return on the investment. The longer time it takes and the more money the company put into the project, the worse the return on the investment will be. The other way of looking at this comes from CROs who have their background in operations. It could be within chemistry or industrial production for example, depending on what company they work for. The interviewees who work as a CRO with an operational background have another way of looking at ERM-implementation. They do not see this as an investment with a return connected to it, but

rather as something the company has to do in order to secure operations. They deal with risks in clinical trials, production lines, and with heavy machinery and are therefore used to deal with risks without a return connected to it.

It is important to understand the differences between the two groups since the implementation will be planned and executed differently depending on the person in charge. The responses we received from CROs with a financial background concerned problems connected to the time and money aspect. They mentioned that they tried to speed up the process, which led to not everyone understanding the new system. This in turn meant that employees did not appreciate the new way to work with risk management, but they rather thought that it was something additional they had to do because management demanded it. For this reason, ERM was not received well by the company and became something negative and time consuming rather than something value adding. The responses we received from CROs with their background in operations on the other hand talked about risks as something negative and something that the company should get rid of. They had been trained in getting rid of risks in production lines and were now ready to get rid of the risks throughout the company. "Mitigating risks is in my spine" one of the respondents said. This means that the ERM-system would be used as a risk mitigation system rather than a risk management system, something that is not the initial idea. This can in turn be linked back to the answers saying that risk managers with a background in operations have a more limited understanding of the positive effects of ERM. They can thus not communicate it well enough whereas employees will only see it as another burden they have to do and as such, ERM again becomes something negative.

These two mentioned ways of looking at risks and the implementation of ERM are indeed very extreme and no respondent was that narrow-minded, but we were able to pick up on tendencies towards these directions. Some respondents had thoroughly communicated the change before implementing ERM which led to a positive reception by the company, however most responses were more in line with the layout above. The problem is derived from the fact that all risks should be integrated on an enterprise-wide level with all personnel included. For obvious reasons, people dealing with strategic matters and those dealing with operations or financials do not think alike and will thus respond differently to the ERM-system. In order to get all personnel on board with the change, time and money should be put into the cultural change that has to be done. This is not something often discussed and might therefore be something that risk managers choose not to focus on. Not prioritizing the education of the staff and not letting the cultural change take time can thus lead to a failure in the implementation.

6.3.4 ERM inhibits creativity

Another problem identified by some CROs is the fact that the ERM-system may be too strict and only identify barriers and risks where there might also be opportunities. This is however not the intention of ERM. It should be seen as a framework where creative ideas and opportunities can be evaluated and accepted if they fit into the company objectives while those not suitable will be rejected. This is the case in a perfect world while the real world is slightly different. If a new business unit, investment opportunity or a new idea were to be evaluated from an ERM point of view, it would have to go through financials, strategy, how it fits in the company portfolio, operations and so on. All risks should be evaluated thoroughly and matched to the company's objectives. This means that creative ideas, that may not always be fully completed, will probably not survive the risk assessment and thus be rejected. This will cut the losses, but may also cut the upsides. Linking back to Figure 1 in the introductory chapter, the level of risk management can be compared to the right amount of risk-taking. To find the sweet spot, the risk-taking should be sufficient but not excessive. The same logic goes for risk management where insufficiency may lead to trouble and excessive risk management may inhibit creativity. Finding the sweet spot in risk management is as important as finding the sweet spot in risk-taking.

One of the most traditional books on business strategy is *Blue Ocean Strategy*⁷⁰, which says that creativity is a key factor in developing the company. This view was shared by one of the most successful businessmen in Swedish history, Jan Stenbeck, who used a lot of creativity in his decisions and often trusted his instincts in decision making, as noted by one of the interviewees. Aspects like instinct, hunch and such have no say in an ERM-system, which is why it might be argued that ERM inhibits creativity.

6.3.5 Comparison to previous research

Regarding the obstacles mentioned in this chapter, most of them are not new impediments but rather classical issues in a new context. Culp discusses the importance of defining risk ownership in an ERM-system and claims that not addressing risk owners would “*be the equivalent of risk management suicide*”.⁷¹ Nocco and Stulz discuss the importance of spreading risk ownership throughout the company but do not mention it as a problem in the implementation process. They focus on a set of other issues however, including the aggregation of quantitative and qualitative risks.⁷² They state that risks have to be compared and assessed on an aggregated level, something that can be difficult with various types of risks, a statement similar to our findings.

⁷⁰ W.C Kim and R. Mauborgne *Blue Ocean Strategy* (Harvard Business School Press 2005).

⁷¹ Culp *The Risk Management Process*, 233.

⁷² Nocco and Stulz.

Some research on the field suggests that a scenario analysis of the qualitative risk can be done, but that they never can be totally accurate.⁷³

Referring to one of the articles mentioned in the literature review, Acharyya and Johnson discover that communication is a common challenge in ERM-implementation, much like our findings under the heading “old habits obstruct new designs” were we show that CROs from both a financial and operational background have trouble communicating. They also argue that having specialists as CROs is suboptimal since they are blinded by their previous knowledge in a certain field and will hence put more focus into this.⁷⁴ Taylor and Blaskovich who accomplished an experiment with the outcome that CROs from a financial background tend to focus more on financial risks in their evaluation of the enterprise-wide risks support this.⁷⁵ Another study in the same field is “Ten common misconceptions about enterprise risk management”⁷⁶ where one common misconception is that one set of skills is enough to implement ERM. The authors convey that if only financial managers observe the ERM process for instance, the holistic aspect will be slightly reduced. The implementation should instead be led by a team consisting of personnel from various departments in order to achieve a true ERM-system.

Regarding creativity, a study from 2003 argues that risk management stifles creativity by creating a culture where risks should be avoided to as large an extent as possible.⁷⁷ This is in a TRM firm where new ideas are assessed in silos with limited risks to evaluate. Bringing this concept to an ERM firm, there are a lot more risks to be assessed, which further stifles creative ideas.

⁷³ T. Barton, L. Shenkir and P. Walker “Managing the unthinkable Event” *Financial Executive* (December 24 2008).

⁷⁴ Acharyya and Johnson.

⁷⁵ J. Blaskovich and E. Taylor “By the Numbers: Individual Bias and Enterprise Risk Management” (Institute of Behavioral and Applied Management 2011).

⁷⁶ Fraser and Simkins.

⁷⁷ B. Eagleston and others, eds., “Intention and effect of IS solutions: Does Risk Management Stifle Creativity?” *Journal of Information Science* (July 1 2003).

7. IMPLICATIONS OF FINDINGS

This chapter discusses the implications of what we learned in the first four chapters combined with the results we found in the last section. No new responses from the interviews will be presented, but this is the result of our discussion of what we learned through this thesis. We are able to present three findings that we believe to be of importance to future researchers. We argue that it is difficult to identify a single reason for implementing ERM as the integration itself might be an incentive. Further, we claim that some of the obstacles identified in the results section can be reduced or even mitigated by thoroughly planning and communicating the transition to ERM before implementation. Lastly, we reason that the implementation process itself can be value adding as it is a process or learning.

7.1 Integration as an incentive

Looking back at the results in the framework, it shows that some aspects are more central than others. This is in a world where one would have to decide what the most important incentives are. But one must not be fooled by the framework and think that the cells with lower scores are not important. It might be that the combination of all factors is the actual key value driver in the matter.

Implementing an ERM-system in order to make better investment decisions might be the most obvious factor, but the side effects that come with it can be just as important to many companies. It could be argued that the most important reason to why companies chose to have an ERM-system is that they wanted a broader understanding of all their risks. Not from a corporate governance perspective or from a decision making perspective but from a risk management perspective. Some incentives are more closely connected to value creation, such as identifying natural hedges, while some are more demanded from regulators, such as corporate governance, but the fact that the incentives do not cancel each other out but are integrated is a central benefit in ERM. Managing risks on an enterprise-wide level and integrating all sorts of personnel creates many varying benefits to the company: it makes the control more effective, it generates better decision making and lowers costs; on both an internal and external level. It could thus be argued that the incentive to integration is the integration itself.

7.2 Plan, communicate, implement

Initially, this study focused on the implementation process, but looking at the responses we came to understand that there were a lot more to it than this. We believe that a significant difference between a successful implementation and an unsuccessful one lays in the work before ERM is actually implemented, more specifically in planning and communication.

7.2.1 *Planning*

There is a distinct difference between companies who choose to implement ERM and companies where it grows naturally into the company. The growing type might be good since it does not come as a sudden change, but the downside is that it is not systematically planned. Making an active decision to implement ERM gives the decision makers the opportunity to plan the implementation before it is executed, something that might be of great importance in later stages.

When we described the COSO-cube in chapter 2, we found that COSO argues that planning is of great importance to succeed with the implementation. The core team should be prepared and the implementation plan should be developed and linked to the vision of ERM and the current state of the company. The plan could be seen as a budget in the sense that it is a way of setting up a strategy and use it during the process to see that everything proceeds as planned. Not having a plan would be like running a company without a budget, without any idea of where it is heading.

In the planning phase, it is also crucial to adapt the ERM-system to the specific company. In the results section, we discovered that unsecure risk managers took advice from consultants on how to use ERM. The COSO-cube for instance, is a standardized framework for ERM. A company should not copy the COSO-cube directly, but use it as guidance and customize it to its own needs and situation. Without planning, this could not be done and using a standardized tool in an unstandardized environment would be suboptimal.

7.2.2 *Communication*

After planning the implementation, the new design has to be communicated thoroughly to everyone within the company. If the new risk management system should really be enterprise-wide with all personnel included, everyone must know what is happening and why. Getting everyone to understand the implementation is a difficult task, which needs a great deal of work to be successful.

The COSO-cube mentions information and communication as features that can aid in the process of getting everyone to understand the purpose of ERM. One of the problems revealed in the results section, was that risk managers with a financial background tried to speed up the implementation process and consequently disregarded the communication part while risk managers with a background in operations did not fully understand the benefits of ERM and could thus not communicate it well enough. This led to confusion in the company and ERM became something negative. Companies who on the other hand actually did communicate the change experienced that ERM was something positive. Due to this, we believe that first changing the culture within the company and then implement the ERM-system is a more efficient way to

go. By doing this, everyone in the company will be on board with the change when it arrives and the implementation will run smoothly.

When communicating with various departments within the company, we claim that a successful way is to adapt the message to the receiver. When communicating with the legal department, ERM can be an important way for the company to follow new regulations such as SOX, the Swedish code of corporate governance, and KonTraG. When communicating with the finance department, ERM can add value by reducing the risk premium and lower the WACC. When communication with mid-management and production departments, ERM can be a way to identify risks just like they do in operations but on an enterprise-wide level. There are in other words a lot of various ways to communicate ERM within the company. Using the same language will increase the integration within the company, but changing the legitimizing incentives is a way to get everyone on board before the actual implementation is initiated.

7.2.3 *Implementation*

If the planning and communication were done correctly and carefully, the implementation process would be considerably easier, according to us. Employees would not be surprised that a new system was implemented, but rather positive about the change since they understood why it had to be done. This would speed up the implementation phase which could save both time and money.

Another benefit is that some of the, by the respondents identified, obstacles may no longer be present. A clear and honest communication could reduce the conflict of risk ownership in the sense that the two involved parties would have a greater understanding of each other. The mid-manager would understand the whole picture and the CRO would see what issues the mid-manager was struggling with. This would reduce both the bureaucracy part and the window-dressing connected to the problem as well as improving everyone's knowledge of risk. The problem of old habits could also be reduced since the planning phase would define how the implementation process should prolong. This way, the implementation would no longer be executed by unsecure risk managers with a consulting agency framework, but rather by well informed, integrated risk managers who plan, communicate and implement an ERM-system suitable to the specific company. For this reason, we argue that the implementation should be preceded by a planning and communication phase.

7.3 A process of learning

Within ERM research, one of the most common issues has been whether the system is value adding or not once it has been implemented. We believe however that the implementation process itself can actually add value to the company and to shareholders.

As mentioned in the previous section, we believe that a successful implementation should be both planned and communicated before executed and during these planning and communication phases, the company, more specifically the personnel, can learn a lot. They can learn about the company's objectives, about the riskiness of the environment and to see the company in other contexts than their own. We argued earlier in this chapter that the integration itself can be a key driver for implementing ERM, and by planning and communicating the implementation the personnel will be integrated. This can create a better understanding of the company and teach all personnel to work as a united team towards a common goal. When everyone focuses on what is best for the company, it can add value by reducing internal problems such as agency costs and asymmetric information.

When personnel are more integrated and understanding, the obstacles previously mentioned may also be reduced or even mitigated. A deeper understanding of the holistic company objectives will remove the conflict of risk ownership as all risk owners own the company's risks and not the specific departments'. Old habits might not stand in the way of new designs as the implementation is planned correctly. When all personnel are integrated and there are easy ways to communicate, new creative ideas might actually appear in more parts of the company. Problems occurring can also be more effectively managed as the integration opens up for a lot of collaborations over the department borders. The aggregated knowledge of risks is probably larger than the sum of individual knowledge and can thus aid in problem solving and risk managing activities.

Of course not all problems can be mitigated. It is important to understand that ERM is not a solution to the downside of risk but rather a way to work with it. Problems like aggregating qualitative and quantitative risks may still exist, but when all personnel are aware of the various risks and are prepared to take action if something happens, the preparedness itself can be seen as a risk management tool.

It is essential not to overestimate the benefits of ERM. Merely stating that the company works with ERM on the website will not add value through these parameters. It is an ongoing process that has no end. It does indeed require a lot of time and money, but we argue that making the decision and applying an ERM-system can add value in many dimensions, some more difficult to quantify than others. ERM will aid the company in complying with laws and regulations of corporate governance at the same time as value is added by improved rating, reduced costs and improved decision making. This comes with the benefit that all personnel

might be more integrated and work together towards the same goal with reduced internal conflicts. For this reason it is very difficult to calculate whether ERM is value adding or not. A net present value calculation would simply not be sufficient as there is so much more to it. We therefore argue that the people responsible for the implementation should not rush it, but let it take time as the implementation itself can be value adding.

8. CONCLUSION

Looking back at the introduction, the objectives of this thesis were to:

1. Identify the incentives to implement ERM.
2. Identify the main obstacles faced in the implementation process.

The reason for doing this was that we identified a gap in the research on whether ERM is value creating. Most studies on this topic examines whether ERM is value creating by evaluating a set of parameters and observe how these parameters move with a measurement of firm value. We however wanted to examine *why* firms chose to implement ERM and what the main incentives were. This can help future research on value creation by making it possible to see if value can be created in the way managers think it can be.

In order to not only focus on the upsides of ERM, we decided to also discuss the impediments in the implementation process. If future research intend to examine whether ERM creates value or not, both upsides and downsides should be taken into account.

We chose to interview a sample of Swedish non-financial companies who explicitly state that they have ERM. The responses received were recorded in a framework we created and analyzed from different angles.

8.1 Research Objectives: Summary of Findings

1. Identify the incentives to implement ERM.

Regarding the first objective, we found that all respondents said that either corporate governance or investment decisions were one of the most important drivers behind the implementation. CROs with a financial background were more familiar with the possible benefits of ERM, while CROs with a background in operations almost explicitly responded that their incentives were corporate governance and investment decisions. We also noticed that it was difficult to pinpoint one key driver as many CROs described various possible benefits of ERM.

2. Identify the main obstacles faced in the implementation process.

The other objective was a bit more difficult to analyze due to the many various responses, however a few obstacles were more common than others. We found that ERM introduced a conflict of risk ownership since both the mid-management and the CRO were interested in the same risks, mid-management from a department perspective and the CRO from a holistic point of view.

We found that ERM could imply excessive risk management and through that inhibit the creativity within a company. By rejecting new ideas that might have been accepted before ERM an underinvestment problem was introduced.

We could also identify that most CROs had a hard time comparing qualitative risks to quantitative risks. This implied that a total risk could not be calculated and could thus not be compared to the company's risk tolerance, a central aspect of ERM.

Another impediment we came across was a lack in communication. CROs from a financial background were eager to speed up the process and therefore ignored to communicate the implementation, whereas operational CROs had too little information about the benefits of ERM to thoroughly communicate the upsides. This led to ERM being seen as something negative by the employees.

8.2 Contribution to Knowledge

Discussing the results in comparison to previous research, we made a few additional findings. The first one was that the incentives were integrated by nature and that the integration itself could be the main driver behind the implementation. Managing risks on an enterprise-wide level and integrating a wide array of personnel creates several benefits to the company: it makes the control more effective, it generates better decision making and lowers costs on the internal as well as on the external level. If integration itself actually is the most important incentive to ERM-implementation, this is what should be assessed when evaluating if ERM is value creating.

Another important finding was that the implementation process should be preceded by planning and communication phases. This might seem obvious but our empirical findings show that this is not the case. The planning and communication phases could improve the quality of the implementation, make it more cost effective and help mitigate the identified impediments of risk ownership, inhibited creativity, and falling into old habits.

Our last finding is that the implementation process on its own can be value adding by integrating various departments within the company and creating a deeper understanding of the company's objectives. When risks are dealt with on an enterprise-wide level, it opens up for new communication lines vertically, horizontally and diagonally. This can improve the creativity within the company as all personnel starts understanding each other's risks. This can also make all personnel work more integrated towards the same goal, improving the overall company performance. This way of creating value through the implementation process has never been identified before and is something we believe can aid in future research on ERM value creation as well as help companies taking the step to implement ERM.

8.3 Recommendations

This thesis leaves several questions unanswered and we believe that there are many ways to continue the research.

Do ERM firms make better investment decisions?

We have found that one of the most important incentives for ERM-implementation is better investment decision making. This could be examined by identifying a set of ERM firms and compare their investment decisions to non-ERM firms. This could be done by looking at acquisition prices, synergy effects in mergers or by assessing projects that are rejected by the firms.

Comparison of qualitative and quantitative risks

We have found that a major obstacle in the ERM-implementation process is aggregating risks to a holistic portfolio. Quantitative risks can be identified and measured, but qualitative ones are more difficult. There are ways to work around the problem, but no optimal way is yet identified. A model for this could therefore be very useful, both to other researchers and to implementation managers. This is a classical issue, which has been mentioned in articles since the beginning of ERM.

Do planning and communication improve the implementation?

In Chapter 7 we argued that the implementation could be improved by thoroughly planning and communicating the change before it is implemented instead of simply letting ERM develop on its own. This could be examined by comparing a sample of ERM-firms where some let the system grow on its own and some actively decide to implement the system starting by planning and communicating the change.

Can the implementation process be value adding?

One of our findings suggests that the implementation process itself can be value adding since new communication lines are introduced and a deeper understanding of the company's objectives and various risks arises. This can be assessed by comparing an ERM firm to a non-ERM firm and evaluating the lines of communication, how well the personnel understands other departments besides their own in the company, how well the personnel understands the risks and the environment the company is situated in and whether there is a connection between the duration of the implementation and for instance Tobin's Q.

8.4 Limitations

Finally, we would like to acknowledge a number of limitations of our research. As described in the method chapter, we have identified 3 potential limitations: (1) the sample size, (2) the fact that only one person was interviewed and (3) our interpretation of the responses. In addition to these we have realized that there might be another aspect of our research that could be

considered a limitation (4). Below are comments on the original three limitations as well as the one we have identified over the course of writing this thesis.

(1) The sample size was an initial concern of ours but as we received similar responses from many interviewees, we do not think that the results would be much different if additional companies were interviewed.

(2) Another concern was that the interviewee should not have full information about the ERM process. We found however that the respondents were very familiar with the process and could answer our questions in great detail.

(3) The interpretation of the responses was a rather evident process as we looked for specific key words in the interviews such as “natural hedges”, “portfolio effect” and “corporate governance” for instance. This does however not mean that the interpretation is fully correct. What we mean by natural hedges might not be the same as a certain CRO’s interpretation, which means that our interpretation could be discarded. Yet, we believe that even a slightly wrong definition will fit in the same category, as they are rather broad. If this study was to be replicated, an idea could be to ask the interviewees to more in-depth explain what they mean by the various expressions.

(4) In addition to these three limitations, we would like to recognize that the chapter on implications is to a large extent based on our understanding of the results combined with previous research in the field. It is not something explicitly communicated by the respondents and it is not something found in previous research, whereas other researchers might not come to the same conclusion.

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10. APPENDIX A – INTERVIEW GUIDE

INFORMATION

Date:

Company:

Employee:

Title and responsibility:

INTRODUCTION

1. Greet
2. Verify information above
3. Background info – Who we are, what this study is about and what the objectives are.
5. Verify that our perception of ERM is in line with the interviewee's.
6. Ensure confidentiality – results aggregation and anonymization
7. Ask if s/he has any questions for us.

OPENING

Tell us about your role in the company. What do you do?

BODY

Why has the company chosen to implement ERM?

Who was the driver? Title? Board member? Management position?

What were the main drivers?

How was the decision to implement ERM received by the firm and its employees?

To what extent were employees involved in the process?

How has the transition to ERM affected the employees?

Was it difficult? More difficult than expected?

Which were the biggest obstacles you faced in the implementation stage?

Would you say it was a success?

Do you think ERM has created value in the company? If so, how?

Does ERM permeate the organization? Are people more aware of risk now?

How far are you in the process?

CLOSING

Summarize and conclude. Straighten out any uncertainties.

Any questions?

Ask for permission for follow-up interviews if needed.

Thank the interviewee

Features of ERM-implementation

LINDNÉR AND WENDT KNOW BOTH SIDES OF THE ENTERPRISE RISK MANAGEMENT GAME.

Enterprise risk management (ERM) is a relatively new phenomenon within the world of Corporate Finance and something widely discussed by researchers and those who practice it all over the world. HBR has had the pleasure of interviewing ERM-researchers Axel Lindnér and Jonas Wendt regarding their latest findings on ERM-implementation.

HBR: Why should companies implement an ERM-system?

Wendt: There are many reasons why a company should implement ERM, but the most important is that it may be a way to create value to the shareholders. Sometimes the effects can be difficult to identify but in our latest research, we found that there are a lot of various reasons for companies to implement ERM.

Lindnér: The two most common reasons for ERM implementation are regulations on corporate governance and improved investment decision making. By interviewing CRO's of Swedish non-financial companies, we have identified that many chose to implement ERM as it is considered a suitable response to new regulations on corporate governance such as the Swedish code of corporate governance and the Sarbanes-Oxley Act. It can also improve the company's investment decision making by aiding in the delivery of

a substantial risk assessment of new projects.

Are there any other incentives?

Wendt: In our research we have found four other incentives which together with the two already mentioned constitute the 6 reasons of incentives for ERM-implementation. They are corporate governance, investment decision, risk portfolio, natural hedges, improved rating, and reduced costs.

It sounds like ERM comes with a lot of benefits. Are there any impediments in the implementation process?

Lindnér: Few innovative ideas come without obstacles and of course there are issues with ERM as well. One of the most common problems according to our research is that it is difficult to define who owns the risks.



As mid-management owns the goals of that specific department they should also be able to decide on the level of risk-taking. But as the risks are integrated on an enterprise-wide level, the CRO is the risk owner of all the risks within the company and may have other ideas than mid-management regarding how much risk to take on in the specific department.

Wendt: This creates a situation where there are two owners of the same risk and a conflict is likely to arise. ERM also can inhibit creativity within the company. If new ideas are to be assessed from an ERM perspective, they have to be planned thoroughly before assessed in order to survive. To be taken on, they have to be fit the company objectives from a financial point of view as well as from a strategic, operating and business point of view. This way of assessing new projects from all angles may kill the creativity.

So what is important to consider when implementing ERM?

Wendt: One of the most essential things is to create an ERM-framework suitable to the company. There are a lot of standardized frameworks for ERM such as the COSO-cube for instance that looks good in theory. However, as they are general and standardized, it is not optimal to copy the framework and implement it directly. It has to be adapted to the specific company in order to be efficient.

Lindnér: Using a standardized framework in an unstandardized environment is not a good idea. It is also important to actively decide to implement ERM and not just let it happen on its own. When ERM develops on its own in the company, it is easy to forget to plan and communicate the change before it is done. The implementation should be preceded by a planning phase and a communication phase in order to be successful.

Wendt: When planned and communicated thoroughly, the implementation can be done smoothly and the problems of creativity and risk ownership previously mentioned can be reduced.

This all seems rather intuitive, but are there any hidden benefits of ERM?

Lindnér: Absolutely. Our research has shown that ERM might actually be value adding in more ways than the 6 incentives Jonas mentioned before. ERM opens up new communication lines which can lead to improved communication within the company regarding more than risks. When various departments start communicating risks in an enterprise-wide manner, they can also communicate other topics. This way, new ideas can be generated and the creativity within the company can actually be improved rather than inhibited as previously argued.

Wendt: When everyone understands each other's risks in a broader sense, they also understand the overall company better.

Lindnér: As all personnel understands the company better, they will no longer see themselves as a part of the specific department, but rather a part in the larger company. All personnel will start working together towards the same goal which indeed can be value adding to the company.

Wendt: The implementation of ERM, perceived by a planning and communication phase, can improve the knowledge of the company's risks as well as its objectives among the personnel and hence improve the internal cooperation. Of course, this does not happen by merely mentioning ERM on a website, but it is an extensive and long process which takes a lot of time and money.

Lindnér: It is difficult to calculate the value of ERM as it can add value in a lot of dimensions. It can help the company to follow laws and regulations of corporate governance and at the same time improve the rating, reduce costs and improve the decision making process. This comes with the effect of all personnel working together towards the same goal. For this reason, managers responsible for the implementation should not rush it, but rather let it take time as the implementation process itself can indeed be value adding.

Fact - ERM definition and history

Enterprise risk management is an evolution of traditional risk management where risks are managed in a holistic, enterprise-wide manner instead of in separate silos. It was introduced in the late 90's but started growing in popularity after a lot of new regulations were announced in the early 00's. One of the most central frameworks, the COSO-Cube, states that personnel of all levels should be included, that risk management should be applied across the entire enterprise and that the aggregated risks should be matched to the company's risk appetite and objectives.

About the researchers

Axel Lindnér is born in Gothenburg but studied his high school years in the US. This research paper is the final step in his Master's degree from Lund University. He is currently employed as a strategic management consultant at Deloitte.

Jonas Wendt is originally from Malmö where he is also employed by PwC as a Business Risk Management Consultant. This research paper is his final step to a Master's degree from Lund University.