



SCHOOL OF ECONOMICS
AND MANAGEMENT
Lund University

Department of Business Administration

Master thesis
Spring 2006

The Rationale behind Capital Structure Decisions

- Does Theory Explain Practice? -

Authors

Andreas Rademark
Anders Severin

Supervisor

Niclas Andréén

Abstract

Title: The Rationale Behind Capital Structure Decisions: Does Theory Explain Practice?

Seminar date: 5 June 2006

Course: Corporate Finance – Master Thesis, BUS860, 10 Swedish Credits (15 ECTS)

Authors: Anders Severin and Andreas Rademark

Advisor: Niclas Andrén, Assistant Professor

Key Words: Capital Structure, Trade-Off, Pecking-Order, Market Timing, Signalling, Product-Market Competition.

Purpose: The purpose of this thesis is to through the analysis of interviews with finance professionals in listed companies answer the question on what lies behind capital structure decisions, and to see how well the prevailing theories fit the answers.

Methodology: This article is an explorative and descriptive hypothesis creating study. We have used a qualitative method to analyse practice through theory. We have conducted telephone interviews with CFO:s and financial executives in Swedish listed companies on how they reason when they make capital structure decisions. We have then thoroughly reviewed the theory and empirical tests of the theories. Through the five theoretical perspectives; Trade-Off, Pecking-Order, Market Timing, Signalling and Product-Market Competition, we have analysed the answers. After that, we have created hypotheses that answer our purpose.

Conclusions: Our conclusions come in the form of hypotheses. There are eight hypotheses and a number of sub-hypotheses. In short, we essentially find that the theories on capital structure are too normative, and do not fit practice. We also find that companies mainly consider flexibility, covenants, cash-flow, credit rating, interest rates and strategy when making capital structure decisions.

Preface

Preface

This thesis was written during the second half of the spring semester 2006 and constitutes the final examination of the master year in corporate finance at the University of Lund, Sweden. The thesis work has been interesting and demanding and worked as a good measure of our abilities to collect, analyze and discuss financial theory and practice.

We would like to thank all of the nineteen companies that through their cooperation this thesis became a possibility. We especially want to thank each and every CFO or Executive, knowing that they highly value their time, for taking both the time and the opportunity to answer our questions.

Furthermore we would like to thank Niclas Andrén both as an advisor and a teacher. Our gratitude is twofold: first we are grateful for a job well done, regarding the lectures in corporate finance, structured finance and corporate valuation. Second we are grateful for the time spent helping us working on this thesis, both reasons has strongly motivated us which yielded the ability and the courage to press on our conclusions being more relevant than we initially thought.

Thank you!

Lund 2006-05-28

Andreas Rademark

Anders Severin

Table of Contents

1	INTRODUCTION	6
1.1	Background	6
1.2	Purpose.....	8
1.3	Limitations	8
1.4	Contribution.....	8
1.5	The Study's General Applicability	9
1.6	Paper design	9
2	METHOD.....	11
2.1	Choice of Perspective	11
2.2	Choice of Method.....	11
2.3	Discussion on the Use of Theory	13
2.4	Gathering of the Information Needed	13
2.4.1	How We Chose the Interview Respondents.....	13
2.4.2	Interview Method	15
2.5	Articles and Previous Studies	17
2.5.2	A Critical Discussion of the Method	17
2.5.3	Critique on the Empery.....	18
2.5.4	Critique on the Theory.....	19
3	THEORY	20
3.1	Trade-Off Theory.....	20
3.1.1	Empirical Tests of the Trade-Off Theory	22
3.2	The Pecking-Order Hypothesis	24
3.2.1	Empirical Tests of the Pecking-Order Model	25
3.3	The Market Timing Hypothesis	27
3.3.1	Empirical Tests of the Market Timing Hypothesis	27
3.4	Signalling with Capital Structure	29
3.5	Product-Market Competition Models	30
4	EMPERY	32
4.1	A Note on the Presentation of the Empery	32
4.1.1	What is The Most Important Consideration When You Decide to Take on New Debt in Your Company?	32
4.1.2	Do You Raise Debt Abroad?	35
4.1.3	Does Your Company Have an Optimal Leverage Ratio and If They Do, When Is It too high?	37
4.1.4	How Do You Finance New Projects And Acquisitions?	40
4.1.5	When Do You Issue Equity / Repurchase Stock, or Pay out Dividends?	42
4.1.6	Do You Take Your Investors' Tax Rate into Consideration When Changing The Capital Structure?.....	45
4.1.7	Does Your Company Use Their Capital Structure Or Leverage Ratio for Signalling Purposes?.....	47
4.1.8	Do You Consider The Management's Flexibility When Changing The Leverage Ratio within Your Company?	48
4.1.9	How does Competition Affect your Capital Structure and do you Use your Capital Structure as a Competitive Advantage?	50
5	ANALYSIS	54
5.1	The Trade-Off Theory Perspective	54
5.2	The Pecking Order Perspective.....	57

5.3	The Signalling Model Perspective	59
5.4	The Product-Market Competition Perspective	60
5.5	The Market Timing Perspective.....	61
6	DISCUSSION.....	63
6.1	Initial Findings	63
6.1.1	Hypothesis 1: “The capital structure theories are too normative, and do not accurately reflect how capital structure decisions are made in companies”.....	64
6.1.2	Hypothesis 2: “The capital structure theories address mere factors in capital structure decisions, and not the actual reasoning behind these factors”	64
6.1.3	Hypothesis 3: “When choosing a target capital structure, companies are concerned with covenants”	68
6.1.4	Hypothesis 4: “When choosing a target capital structure, companies are concerned with credit ratings and cash-flow measures”.....	68
6.1.5	Hypothesis 5: “Interest rates are important when companies decide to take on new debt”.....	68
6.1.6	Hypothesis 6: “Strategic considerations are important when taking on new financing”	69
6.1.7	Hypothesis 7: “The choice of financing, and therefore capital structure, follows the investment decision”	69
6.1.8	Hypothesis 8: “When choosing a capital structure, companies are concerned with flexibility”.....	69
7	CONCLUSIONS.....	70
8	REFERENCES	72
8.1	Published Sources	72
8.2	Oral Sources	76
	Appendix – Interview Questions	78

1 INTRODUCTION

In this first chapter we give an introduction to the subject and state the purpose of our thesis. Further we discuss our contribution, the limitations of the study and its applicability.

1.1 Background

No area of corporate finance has been debated, discussed, argued over and studied as much as capital structure. How firms determine the amount of debt it should have, or how to finance a new project, is something that researchers have occupied themselves with for nearly fifty years. The discussion took its start in the now almost legendary 1958 article by Modigliani and Miller, where they presented their proposition that in perfect markets, firm value is irrelevant to its capital structure. We now of course know that the markets are not perfect, but the irrelevance proposition is still today the starting point for almost all research into capital structure. When an area is studied as thoroughly and for as long time as capital structure has been, many competing and complementing theories will inevitably be conceived, and also in this case. Each of them offers plausible explanations and justifications of what determines the capital structure choice, and what an optimal capital structure is. As one study these theories, one can not help but to conclude that no theory seems to be wrong, but no one explains the whole picture, there is no complete theory. Every theory explains some part of the capital structure choice, some more and some less, but no one seems to cover the entire choice. We do not contend that several theories can exist alongside each other on the same subject; we do however think that there is room for improvement or at least synthesising of some of the theories, at least by the ones that do not contradict each other. Setting out to examine this, we read several studies on capital structure choice. But the more we read, the more we realised what was missing, at least what we were missing.

Numerous studies and theories have seen the light of day since Modigliani and Miller's "*The cost of capital, corporation finance, and the theory of investment*" was published in 1958. When reading articles and studying the area, we found that there are many articles discussing the theories, and there are even more testing

them, but most of the test are regressions with secondary data of past actions. Some of the more important include Robichek and Meyers (1966), Leland and Pyle (1977), Bradley, Jarrell and Kim (1984), Myers and Majluf (1984), Harris and Raviv (1991), Opler and Titman (1994), Bagley *et al* (1998), Ghosh and Cai (1999) and Baker and Wurgler (2002). Although very interesting and extremely important to form the groundwork for deeper analyses, we wanted to know more about the actual decisions, not only the actions. We then found a small number of articles with empirical research into factors that influence managers when they make capital structure decisions. These included Graham and Harvey (2001) and Brouen *et al* (2005). These two surveys are basically done the same way, that is, the latter build on the former, but have a European setting where the former is strictly American. It is especially from the former that we have been inspired to perform this study, but unlike Brouen *et al* (2005), we do not copy the survey, we just use the findings as a basis for our interviews. None of these had however used interviews to question practitioners, but rather questionnaires. Some of these were admittedly very detailed, but we felt that none of them came close enough to truly establishing how a manager thought when making decisions, and why the factor that they considered was important. To know this, a study with a moderate number of personal interviews has to be made, and that is where this thesis is positioned. To be able to do this, a rather thorough review of capital structure theories and recent tests has to be done, and that is an added way of looking at part o our thesis, as clarification of the current status.

What we want to do is to take a closer look into what lies behind capital structure decisions, how managers think before they make any decision regarding their companies' capital structure. We then want to create some hypotheses for future testing and examination. From this discussion, the questions we will try to answer are: *what are the most important factors that managers consider when making capital structure decisions; how does a manager reason when making capital structure decisions, that is, what is the underlying rationale behind the factors that they state as important; and how well do the major theories on capital structure fit these factors?*

Our overarching goal is to clarify and simplify competing capital structure theories, with the aim of examining their fit on reasoning behind capital structure decisions in firms. We will answer these questions by starting with a thorough examination of the literature that builds and tests theories regarding capital structure. We will then perform deep open interviews with representatives from Swedish listed companies. We have chosen to work with finance professionals high up in the hierarchy, as it is their thinking we wish to examine and analyse. These professionals and the choice of companies will be presented later in this paper. From these interviews, we will apply different perspectives and analyse them from the various theories that we have accounted for in the theory part of the

thesis. The ultimate goal is then to through a discussion of the analyses find common patterns than can shed a light on the reasoning behind capital structure decisions by answering the questions stated above.

1.2 Purpose

The purpose of this thesis is to through the analysis of interviews with finance professionals in listed companies answer the question on what lies behind capital structure decisions, and to see how well the prevailing theories fit the answers.

1.3 Limitations

In our discussion and statement of the prevailing theories we use authors and empirical tests from all over the world, be it mostly from the United States and Europe. The empirical part of our thesis, that is, the interviews and following discussion and analysis, is strictly done from a Swedish perspective, with Swedish representatives from firms listed on the Stockholm stock exchange. We are furthermore interested first and foremost in the reasoning behind the capital structure decisions, and not the actual actions, and will therefore not perform any investigations into if firms actually act in line with their reasoning. Since we focus on reasoning, we have not distinguished between firm size, profitability, industry, age or business cycle, something that is otherwise often done in analysis of capital structures in practice. Finally, we will not discuss the eventuality of gender differences in the answers, mainly for two reasons. Firstly, this is not an aspect we included when choosing respondents, and secondly because there is a clear majority of men in financial executive positions in Swedish listed companies. Although very interesting, sad and extremely thought provoking, this is a discussion and a topic for another thesis.

1.4 Contribution

We consider our main contribution to be threefold. Firstly, we will contribute by offering a current and up to date picture of where capital structure theory is today, which tests have been made and what the recent empery says about the field. Secondly, we will provide a deeper look into the minds of practitioners in the field, what the ones who daily make capital structure decisions think and consider

before making these decisions. Thirdly, we will hopefully provide some interesting hypotheses regarding the development of the theories on capital structure, and maybe bring forth some ideas on how to approach some sort of reconciliation of the sometimes contradictory theories on capital structure. This said, we do of course not aspire on being able to completely refute or discard of theories, or creating some new revolutionary theory that perfectly explain everything surrounding capital structure decision making. We do however hope to come to some conclusions and hypotheses that are interesting enough to be more closely examined and tested in future research.

1.5 The Study's General Applicability

The general applicability of our findings will be limited by various factors. First and foremost, the interviews are performed with a limited number of respondents in a limited time in a very limited geographical area in a small corner of the world. This alone makes the general applicability rather limited. We do however feel that the number of respondents is large enough to be able to generalise the answers to apply to large listed companies in Sweden or similar countries, or at least serve as a general idea of what are important factors and how capital structure decisions are made in Sweden or similar countries, with the special conditions that comes from being a large company in a rather small economy, and sometimes being forced to look abroad for financing because of the limited amount of capital domestically. It is however not our idea with this thesis that it should be able to be widely generalised. We want to arrive in and provide hypotheses that can be further explored and tested, and thereafter the applicability can be determined.

1.6 Paper design

The remainder of this thesis will look as follows. In chapter 2, we will present our method. We will discuss why we chose the subject we did and how we are to go about answering the questions we have set up. We will discuss our interview method as well as how and why we chose the persons we did for the interview. We will also discuss some issues regarding the theory and the empery, in terms of problems that might arise, and validity, reliability and relevance for both areas. In chapter 3, we will account for the theory we will be using in the analysis. We will present five theories on capital structure, the trade-off theory, the pecking-order model, the market timing hypothesis, signalling theory and product-market competition models. We will first explain the theories and their applications, then

tests and empirical findings. In chapter 4, we will present the empery. We will do this question by question, and account for what all the respondents have said, in an adapted and easy to follow form (a discussion on this format's impact on validity can be found in the next chapter). In chapter 5, we will perform our initial analyses. Theory by theory, we will analyse the answers from chapter 4, and arrive in five separate analyses, all focused from its own perspective. In the subsequent chapter 6, we will discuss and analyse the analyses from the previous chapter. It is here we hopefully will arrive in some greater insights regarding capital structure choice. Lastly, in chapter 7 we will make a brief summary and answer the questions posed above. This last chapter is however only to be seen as a compliment to chapter 6, not the actual conclusions. In a thesis as qualitative and also somewhat subjective as ours, the discussion and the conclusions can not be separated. See the model below for a clearer picture of the design of our thesis.

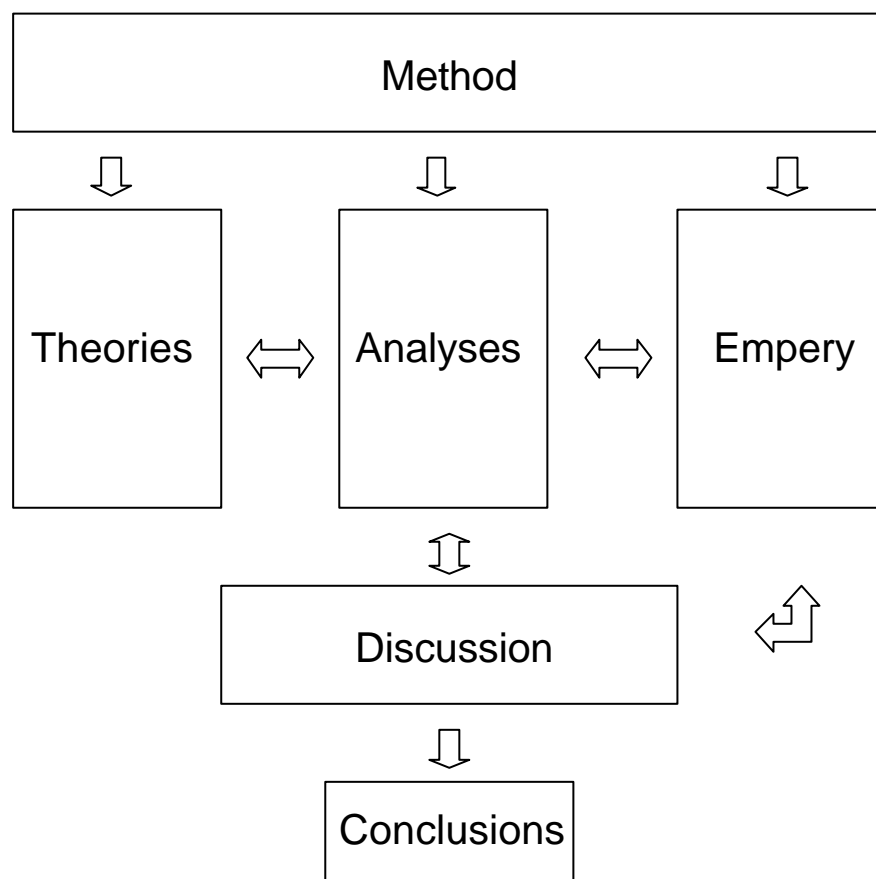


Fig.1 Illustrative design of thesis.

2 METHOD

In this second chapter we describe and evaluate our choice of method. We describe how we chose our interview respondents, how we gathered our empery and we discuss its validity both regarding the empery and the method.

2.1 Choice of Perspective

We want to examine and map out the most important and prevailing theories on capital structure. We then want to examine and understand how managers think when they make decisions that affect or alter the capital structure of their firms. We will then analyse these answers in the light of the theories to see if they fit any specific theory, or if it will be a mix of some or all. We finally want to see if there are any common traits and deeper meanings in the different analyses, and from these construct hypotheses that will answer our questions, and lay as groundwork for further testing. Since we will use the theories to analyse the interviews, we have assumed an individualistic perspective (Jacobsen 2002). From this perspective, individual interviews are the most important source of information, and we will therefore use as open interviews as possible to try and find the answers to our questions. This is the perspective we have chosen. As stated in the limitations section above, we will not examine differences in firm size, profitability, industry, age or business cycle. This is because of the individualistic perspective; we are interested in pure reasoning and considerations by practitioners, not the firms themselves.

2.2 Choice of Method

In corporate finance research, the method of choice is usually a quantitative one. We have however chosen to go about solving our problem a different way, for two major reasons. First of all, we want to examine reasoning and more subjective thinking surrounding capital structure decisions. Second, we feel that the research in capital structure theories through the testing of secondary material is quite sufficient for the time being. Therefore, our thesis will involve several methods;

all explained in this section combined to best fit our purpose. The initial theoretical part of our thesis will be a descriptive one (Patel & Davidson, 1994).

With all the thorough research by well renowned researchers in the field, we will not aspire to create any new break-through theory that will render all others obsolete, or even to significantly add to the existing ones. Instead, we will create hypotheses on how the future within the field might develop, leaving them open to future testing. Because we therefore do not set out to solve the problem at hand, a normative approach (*ibid.*) is not applicable on our questions.

As hinted in the beginning of this section, our main method is strictly qualitative. When looking for reasons and analysing thinking and reasoning, this method is the most fitting, and preferable to the more static quantitative one. Instead, we have studied a smaller number of respondents, but more closely, under an explorative approach. This is the only way to ensure that we will be able to go deeper and be flexible in the interviews, in order to obtain the more detailed answers that are needed under the explorative approach (Rienecker & Jørgensen, 2002). After advice from our thesis supervisor Niclas Andrén, and to ensure that we do not influence the answers more than we have to, we chose not to examine the theory in detail before conducting the interviews. Otherwise the risk of us influencing the respondents in a way of thinking that corresponds with the theories would be too great. Our entire thesis would then suffer the risk of being influenced too much by the already existing theories, and part of the contribution to the field would then be lost.

Instead, the explorative approach will allow us to relatively unbiased make deep interviews that really gets to the bottom of what the respondent wants to say (*ibid.*). This is the order in which we conducted the study. In this thesis however, you will notice that the theory precedes the empirical, and not the other way around, as we have stated here that we have done. Even though we have chosen to collect the empirical before we examine the theory, our method of analysis is deductive (Backman 1998). The fact that the empirical precedes the theory is for the methodological considerations stated above. When it comes to the actual analysis, the empirical is analysed through the theory. The inductive approach sets demands on new theory being created (*ibid.*), and we do not make that claim.

An important note that the reader has to be aware of is that throughout the analyses, we will use percentages and relative numbers to illustrate our findings. This is however not to be confused with a statistical study, and the numbers are to be seen as strictly illustrative, not statistically significant.

2.3 Discussion on the Use of Theory

The theories surrounding capital structure decisions lay the foundation for our analysis. There is a vast amount of literature and articles that treat these theories in different ways. The theories we have chosen to work with are the trade-off theory, the pecking-order model, the market timing model, signalling models and product-market models. In order to be able to efficiently analyse the empery we have collected, we first have to create an exhaustive easy-to-understand framework, or in this case, five different frameworks. We have done this by condensing and combining the works of numerous researchers in the field. The theory is explained thoroughly and then several tests and empirical evidence on the theories are presented. This exhaustive run through of theory might seem a bit over the top and overly clear to well informed and readers who are familiar with the different capital structure theories, but we feel that in order to get a clear framework to base the analyses on, and foremost to be able to critique and develop hypotheses on how to advance them, we have to be very thorough when examining the theory. Initially, we will use the theories for a rather naïve categorisation of which answers fit into which theory. This will be the use in the five analyses from the different theoretical perspectives. We will then use the theory more broadly as a foundation for the discussion on our findings, and also as the objects for the discussion themselves, as we have stated earlier.

2.4 Gathering of the Information Needed

The relevant data is vast on the subject of capital structure. In the approach we have chosen, quality data is of the utmost importance. This is important both in terms of the theory and the empery. We have therefore collected a large quantity of articles and studies and for being qualitative interviews, a large quantity of empirical data. We will in this section present how we have chosen the data, why we have chosen the data, and how it was collected. In the subsequent section, we will discuss the quality of the data, pros and cons with the data, and general critique. We will present the empery and the articles and previous studies separately, beginning with the primary.

2.4.1 How We Chose the Interview Respondents

When we chose what persons to interview, we set up criterions, and then decided on a list of possible respondents. The criterions regarding the persons were that

the person had to be involved in the capital structure decision making of the firm, preferably as high up in the hierarchy as possible. The criteria regarding the companies were firstly that the company needed to be large enough to be able to issue debt and equity, both domestically and internationally, that is, in short, it needed to be publicly listed on a stock exchange. For accessibility and comparability reasons, the companies also had to be listed in Sweden. To satisfy these reasons we only had a limited number of companies to choose from, and we decided that if the company was listed on the Stockholm stock exchange's A-list, the criteria would automatically be met. From contacts with the concerned companies we then created a list of possible candidates. The resulting interviews were then mostly an accessibility choice. That is, we contacted all the persons on our list, and the ones who had time to answer our questions made the study. One person opted not to answer the study for undisclosed reasons; the other who did not answer did not think that they had the time. We do not think that this will affect our study, because we did get answers from a big enough group anyway. As a result of this, the persons interviewed were (with the exception of one person who preferred to be anonymous, in the thesis referred to as Mr X of Company X):

1. Magnus Lindquist, CFO at Autoliv (telephone interview 5 May 2006).
2. Björn Andersson at the treasury department at Electrolux (telephone interview 3 May 2006)
3. Roland Hagman, concern controller and former deputy CEO at Ericsson (telephone interview 5 May 2006)
4. Lars Granlöv CFO at Gambro (telephone interview 9 May 2006)
5. Peter Hjalmarson works as CFO at Getinge (telephone interview 10 May 2006)
6. Torbjörn Olsson works as CFO at Gunnebo (telephone interview 8 May 2006),
7. Håkan Halén is CFO at Hexagon (telephone interview 8 May 2006),
8. Anders Almgren is deputy CEO at Holmen (telephone interview 3 May 2006),
9. Magnus Jacobson, CFO at Hufvudstaden (telephone interview 10 May 2006)
10. Klas Magnus Åkesson, CFO at JM (telephone interview 10 May 2006),
11. Peter Andersson CFO at Lindex (telephone interview 10 May 2006),
12. Johan Rydén, deputy CEO executive finance, SCA (telephone interview 3 May 2006),
13. Carlos Olsén, concern chief executive at Scribona (telephone interview 9 May 2006),
14. Anders Årling, executive at financial services Skanska (telephone interview 10 May 2006)
15. Tore Bertilsson concern chief executive at SKF (telephone interview 4 May 2006),

16. Björn Sandberg CFO and group controller at TietoEnator (telephone interview 9 May 2006)
17. Bo Jacobsson, CFO at concern Trelleborg (telephone interview 8 May 2006),
18. Rickard Petri, CFO at WM-data (telephone interview 8 May 2006),
19. Mr. X, CFO at company X (telephone interview 9 May 2006)

2.4.2 Interview Method

When interviewing the people listed above, we have used telephone interviews. The major reasons for this are time, geography and budget. First of all, it was hard enough to schedule a sufficient number of interviews over the telephone. We can only imagine the hardships we would have gone through had we tried to get personal meetings with all respondents. Factoring in the general reluctance to allocate time for university students we met from the companies, it is not sure we would have gotten even one single interview, *let alone* 19 as we did now. As we felt that we prioritised a larger number of respondents over conducting personal interviews, we concluded that telephone interviews best fitted our study. Adding to this problem is the general finance nature of the thesis; no company feels that they have anything to gain by participating.

The second and third problems work together. Since the interviewees are scattered throughout Sweden and sometimes abroad, we would have to travel all over to get the interviews, and the time and cost of this, together with the scheduling problem would have made this thesis impossible. We therefore settled for the telephone interview, and instead tried to do everything we could to make the most of that. The largest disadvantage of telephone interviews to personal interviews is that we were not able to observe the respondent's non-verbal response. However, for the non-verbal response to be of great importance the questions have to be of a sensitive character (Jacobsen 2002), which we do not feel that they are. For our study, that loss is minimised.

The questions have been open-ended and semi open-ended, and from the pre-defined nine questions (see appendix) we tried to create a discussion with the interviewees, and posed follow-up questions where necessary. As is with qualitative interviews, some are more fruitful than others, but even the ones with less information are important for our discussion and analyses. However, most of the interviews turned out as interesting conversations, and gave us plenty to work with and laid the foundation for a deeper understanding and a deeper analysis of our problem. When we constructed the interview questions, we tried not to pose

leading questions that would lead to certain reasoning or in a direction that would suit our analysis.

On recommendation by our thesis supervisor, we simply used our already existing knowledge on capital structure, in addition to some guidance by the questions used in Graham and Harvey's (2001) article "*The theory and practice of corporate finance: Evidence from the field*". Some questions were harder to construct than others, so for some of them we decided to pose a rather vague question and then to discuss the meaning with the respondents instead. To get a complete enough picture of the reasoning behind the capital structure decisions in the firm, we constructed some general and some specific questions. As already stated, they were however just suppose to act a basis for the discussion, and as the reader will see in the presentation of the empery, sometimes the questions where answered promptly and directly, and sometimes a discussion around the area was conducted instead. We let the interviewees take the lead if they did, and merely steered them if they strayed too far from the subjects that relate to capital structure. We also consciously tried to not spell out any theories when explaining and clarifying, to not bias the answers. What we noticed is that some executives were very well familiar with the theories (and rather enjoyed discussing our issues), while other did not seem to have any business education what so ever. Nevertheless, all interviews contributed to our study, regardless of formal schooling of the respondents, this thesis examines reasoning, not knowledge. The actual interviews were as earlier noted performed over the telephone, and in Swedish, being the native tongue of the respondents. A discussion on translation and validity can be found below.

The entire interview was recorded (after proper consent of course), which allowed us to catch everything from the interviews and pick up nuances afterwards. This also enabled us to concentrate on the entire interview, not just on jotting down the answers. After the interview was over, all answers and discussions were transcribed in Swedish (available at request from the authors of this thesis). The interviews were then translated, and irrelevant parts were taken out. By irrelevant parts we mean either answers where the question was misunderstood altogether or questions where the interviewees changed their minds after thinking for a while. Our questions, comments and follow-up questions were also taken out. Finally, all answers were written down question for question in a somewhat more easy-to-read manner, without of course changing anything the interviewees said.

2.5 Articles and Previous Studies

Our articles and previous studies consist of academic articles and books published by recognised researchers in the field. To first get a clear picture of the most important theories, we used the article database at the library at the University of Lund, and searched for articles on capital structure. We then started to sift through articles on each of the five models, and from them we could rather easily see who the major researchers on the different theories were. We then chose our articles based on the occurrence of the authors names and references to their work in the various articles. For each of the five theories, we started out by describing the theory and various adaptations of it. We then proceeded to discuss tests and studies made on the theory, and also presented the most important empirical findings that exist up until today. We used the larger and well quoted works regardless of year of publication, but concentrated on the tests and findings over the last five years, to make our discussion as current as possible. The theories we have examined will form the frameworks in which we will analyse the empery in our initial analysis, and also act as a basis for the discussion and resulting hypotheses.

2.5.2 A Critical Discussion of the Method

The main risk when working with a qualitative method such as this is that it is based on the subjective considerations and judgements of the authors. This is true for both the empery and the theory. For good or for bad, there is a lot of room for individual interpretation (Jacobsen 2002). The risk here is that the authors will bias all parts of the thesis. As the room for individual interpretation when performed well also is a major benefit of the qualitative method, one has to tread gently when analysing the data. There are two ways to come to terms with this risk. The first is on the authors. We will try to be as clear and succinct as possible in our reasoning, so that the readers themselves can follow our thoughts and decide when our analysis is reasonable, and when it is too subjective. The second is on the reader. We therefore ask the reader to assume a critical mindset when reading particularly the discussion section, as this will no doubt be the most vulnerable to author bias. This is the critique that is common to the empery and the theory. We will now critique these two separately, as they give rise to somewhat different problems. In general when conducting studies and writing theses articles there are three important categories of risks that a researcher has to take into account, and try to deal with. The first category is validity, that is does the data measure what it intends to measure? The second one is reliability, how

credible are the sources of data? The third and last is relevance, does the data add anything to the study? These are the risks that we will try to address below.

2.5.3 Critique on the Empery

The largest risk in the empery is the validity problem. And in this case, it actually is a double validity problem. The first risk is to influence the respondents with our questions. We have tried to handle this by posing rather open and sometimes even vague questions, and also tried to pose them in more of a relaxed discussion manner, steering the discussion only in the few instances that it got too far off track. We have also refrained from interpreting the answers in the empery section (we have of course done this in a structured manner in the analysis), but have rather just presented the answers as given by the interviewees. The risk here is of course also not only that we have interpreted the answers wrongly, but also that the interviewees have misinterpreted the questions. We have clarified when needed in the interviews, and we have also discussed eventual interpretational risks in the analysis. The second-layer validity risk in the empery is the translation part. The reason that this is a problem is a budget decision. The best way to handle it would have been to let an authorised translator do the translation, but it would have broken this thesis' budget. So we were left with two alternatives; conduct the interviews in English, or translate them ourselves. There are validity risks either way. We decided that we would rather face the translation problem than the risk of not getting deep enough answers due to insufficient language skills by either the interviewers or the interviewees. We have tried to translate as clearly and simply as possible, with fairness to the source first in mind, and proper English second. Should there be any doubts or questions on the translations, the Swedish transcripts are available from the authors of this thesis.

Regarding both reliability and relevance, there are no such risks with the empery, since there are no right-or-wrong answers, and the answers themselves are the entire purpose of this study. Another risk is that the interviewees have vested interests in answering the questions in a certain way. We do, however feel that since the answers often relates to how official policies are interpreted and carried through in the firms; the respondents do not have any interests either way. Furthermore, the questioning is rather general, and the general finance nature of the thesis makes for less personal interest on behalf of the interviewees. The last note here is on Mr. X. The fact that he opted to be anonymous is due to that he felt that he maybe had revealed too much regarding his company's current standing, and that he might be in breach of the Stockholm stock Exchange's rules for official listing by revealing too much. This can mean one of two things. Either the other respondents have not thought about this, or they have not answered as freely

as Mr. X. We do however feel that we have gotten thorough answers from most of the respondents, and do not feel that this is the case. We further can not see how the answers have revealed sensitive information, so we do not think this will pose a problem for the companies' listing agreement.

2.5.4 Critique on the Theory

There are a vast amount of literature on the subject of capital structure, and many theories by many highly renowned researchers. We have tried to minimise the risk of invalidity by concentrating on the most pertinent theories and tests, conducted by the most cited and referred authors and researchers in the field. Apart from this action, it is very hard for us to individually critique any of the articles. To secure a high level of reliability, we have only used articles published in academic journals, as we then can be sure that they have been thoroughly examined by other researchers already. As for the relevance, all articles that added anything new, be it in terms of applications of the theories or tests in different time periods or geographies, if they were reliable, we deemed them relevant.

3 THEORY

In this third section we present the theories that we will use to analyze the empery gathered from the interviews. We base our thesis on five major theories treating the choice of capital structure.

3.1 Trade-Off Theory

The trade-off theory of capital structure is the most common explanation to firms' capital structure. It is widely built upon and tested. We will start in the traditional trade-off theory, and move on to explain some modulations to it. In the traditional trade-off theory, a firm chooses its capital structure by weighing the tax benefits of debt against the expected costs of future financial distress. From this an optimal target debt ratio is specified. The optimal capital structure is found at the point where the costs of future financial distress exactly outweigh the marginal tax benefit of debt (Ogden *et al* 2002). In the theory, it is at this point that the firm value is maximised.

For the initial explanation of the model, we have used the work of Ogden *et al* (2002), who have compiled and tested the theories. The theory suggests that for every firm, an optimal structure exist, and that that structure differs across firms (*ibid.*). How do we then see what effect tax benefits have on firm value? Ogden *et al* (2002) uses a fictional firm as an example. Suppose the firm earns normal earnings. This means that the NPV is zero for all projects, should the firm finance with all equity. If the firm takes on leverage, the value increases with the interest deductibility on the debt (the tax shield). At the same time, the equity base becomes smaller in relation to the capital structure, and thus the increasing tax benefit of debt is concentrated on a decreasing equity base, rendering the firm with a positive NPV. If expected costs for future financial distress are not weighed in, a firm's value then increases with leverage in infinity (*ibid.*).

So why does not firms use all debt, or at least close to all debt? The answer is financial distress costs. What are then these costs? In short, they are all costs related to a firm moving towards bankruptcy. A firm can move toward bankruptcy in a number of ways, all stemming from the inability, or expected inability, to fulfil its obligations. If the cash flows generated by the firm are not enough to fulfil its obligations, one says that the firm is experiencing first-stage financial distress. Second-stage is when the firm tries to rectify the situation, usually by

cutting costs through lay-offs and plant closings (*ibid.*). If the problem is not solved by this, and the firm begins falling behind on its payments and tries to refinance, the firm is in third-stage financial distress. If all fails, end-stage financial distress is bankruptcy (*ibid.*).

What more exactly are the costs of financial distress then? Well, a firm in financial distress will have several so called deadweight costs. These include any loss of competitiveness in the offering, concessions to stakeholders for increased risk, and loss of value in the tax shield (*ibid.*). Adding to these there are bankruptcy costs which include legal, administrative and accounting costs, and also liquidation costs at lower value, the so called fire sale. There are however benefits of financial distress, should the firm survive that is. These stem from the management having to focus on what creates value, and eliminate financial and production slack, as well as from cutting costs (*ibid.*). The final component to be addressed is what financial distress does to a firm's value and its capital structure. Ogden *et al* (2002) suggest a simple model, where the expected costs of future financial distress is a function of the probability of financial distress times the distress costs. Adding time and an appropriate hurdle rate, while calculating the costs to the present, we get the present value of the expected costs of future financial distress. Financial distress costs will then rise with leverage because the increased debt means larger fixed payments, and because these periodic payments may shorten the time to financial distress (*ibid.*). The optimal leverage is again where the marginal tax benefit of debt is perfectly offset by the marginal present value of the expected costs of future financial distress, according to the traditional trade-off theory.

Ogden *et al* (2002) test the traditional trade-off theory by regressing market-to-book ratios against debt ratios, current debt ratios against past debt ratios, and a multiple regression with thirteen independent variables, to test the theory. The first regression should suggest a positive relationship between market-to-book ratios and leverage, but does not. These results are inconsistent with the traditional trade-off theory (*ibid.*). The second regression should prove mean reversion, and does so in favour of the theory. The multiple regressions find that most of the coefficients are highly significant, and that the trade-off model explains two thirds of firms' capital structure.

A modulation of the traditional trade-off theory is presented by Miller (1977). He suggests that personal taxes offset the tax benefit of debt, since taxes are usually higher at the personal level than the corporate. He constructs a model which incorporates both corporate and personal taxes, known as the Miller equilibrium (Ogden *et al*, 2002). The rationale behind this is that investors have different personal tax rates, which leads them to seek different investment opportunities. The firm should cater to the investors who prefer debt to equity first, and then to

investors who are indifferent between debt and equity, until the investor who has a personal tax rate equal to the corporate tax is reached. No more debt will be taken on since it is not beneficial, and the optimal capital structure is set at the *Miller equilibrium* (*ibid.*).

Another modulation is brought forward by Jung, Kim and Stultz (1996), which focuses on agency costs of debt and the disciplining role of debt for managers. The result is a trade-off between these two factors. Firstly, the disciplining role that debt has on managers, it decreases their tendency to over invest for personal purposes and thereby decreasing firm value. Secondly, the agency cost of debt that can lead to underinvestment, and decrease in firm value. Optimum is reached when marginal agency cost of debt is equal to marginal disciplining debt level (or agency cost of equity) (Ogden *et al* 2002).

Lastly, a model proposed by Stulz (1990) means dealing with both agency and information asymmetry problems. Managers have personal reasons to overinvest. The investors know this, but can not distinguish between good proposals and overinvestment proposals from the managers, thus they limit the equity resources available to the managers. This can potentially lead to underinvestment. Stultz therefore argue that the capital structure should consist of a well thought-out mix of debt and equity, and by that mitigating both overinvestment and underinvestment (Ogden *et al* 2002).

3.1.1 Empirical Tests of the Trade-Off Theory

When it comes to empirical testing, the various components of the trade-off theory is very well documented. We will after our rather thorough declaration of the theory try to concentrate on the more important and recent work. For the trade-off theory to exist, an optimal capital structure must be set by firms. If this is so, empirical time-series tests should show mean reversion. Several researchers have shown this, including Taggart (1977), Marsh (1982), Javiland and Harris (1984), Auerbach (1985), Opler and Titman (1994) and the above mentioned Ogden, Jen and O'Connor (2002) (Ogden *et al* 2002).

Ghosh and Cai (1999) performed a study on a large number of industries with the objective of testing for mean reversion to see whether capital structure was best explained through optimality or pecking order. They found for almost all companies in all industries, an optimal capital structure was present, thus favouring of the trade-off theory (*ibid.*).

Shyam-Sunder and Myers (1999) test the trade-off theory against the pecking order model, as contending ones, through a time series test. They find that the pecking order model very well explains the financing behaviour of firms, while the target structure does not. When tested jointly, the explanatory power of the latter decreases even more, while the former retains its power (*ibid.*).

In 2000, Graham tries to estimate how big tax benefits of debt generally are. He finds that on average, the tax benefit of debt is 9.7 percent of firm value (Graham 2000). In their exhaustive 2001 article, Graham and Harvey (2001) draw several conclusions regarding the trade-off theory. The consideration of tax benefit of debt is found to be an only marginally important factor when CFO:s set capital structure. What is more important is the consideration when foreign tax treatment is more favourable than domestic. Firms will then choose to issue foreign debt (*ibid.*). They find very little evidence that firms consider personal taxes a factor when determining whether to issue debt or equity, and they therefore conclude that firms do not target specific investor clienteles when issuing different classes of securities. Expected costs of future financial distress are not found to be an important factor when firms choose to raise their leverage, but concerns about credit rating is all the more important (*ibid.*). Almost four fifths of firms have target debt ratios, or optimal capital structure ratios. Some more strict, and some more loose, but only nineteen percent states that they do not have a target what so ever. Generally, the findings speak in favour of the traditional trade-off theory (*ibid.*).

Sarkar and Zapatero (2003) find evidence that firms' capital structures are mean reverting within industries, a finding in favour of the trade-off theory. With this, they reconcile the theory with empirical finding that there is a negative relationship between earnings and optimal leverage (*ibid.*).

In a recent study, Brouen, Jong and Koedijk (2005) examine capital structure choices by European firms. Along the lines of the traditional trade-off theory, they find that two thirds maintain a target debt ratio (*ibid.*). Further, they find that tax benefits of debt are the fourth most important factor, after financial flexibility, credit rating and earnings volatility. The factors that speak in favour of the traditional trade-off theory are tax benefit of debt and credit rating (through the cost of financial distress argument). Direct bankruptcy costs are however not considered an important factor when determining leverage (*ibid.*). They also find that issuing foreign debt in response to tax benefits is a moderately important factor, and that personal tax is not a consideration when deciding between debt and equity (*ibid.*).

Tests of the existence of costs of future financial distress has also been done, and Andrade and Kaplan (1998) shows that in highly levered transactions, costs of

future financial distress could be as much as 10 to 20 percent of the firm's value (*ibid.*). Other costs, for example for outside professionals and internal resources range from 0.7 to 4.3 percent of firm value, as shown by Warner (1977), Altman (1984), Weiss (1990), Betker (1997), Tashjian (2000) and Branch (2002) (Andrén 2006).

3.2 The Pecking-Order Hypothesis

According to the pecking order model by Myers and Majluf (1984), a firm prefer internal financing to external, and within external, it prefer debt to equity. The cost of each financing source is determined by its relative degree of asymmetric information. Since the ordering determines the source of financing, and thereby the capital structure, these firms should not have a target debt ratio, and an optimal capital structure should not exist (Ogden *et al* 2002).

However, Quan (2002) suggests that even though the traditional pecking order model states that an optimal capital structure does not exist, the various tradeoffs made in deciding on financing means that at least a range of optimality can be observed. The rationale behind the theory is that investors are uninformed of the true value of the firm's investments, which in turn creates two sets of related problems. Firstly, the information asymmetries means that the investors are at an information disadvantage relative to the management. This creates adverse selection costs to the different means of financing. Since the managers have the best information, internal funds have the lowest premium. Second are the creditors and lastly the investors. The second problem is that managers use this private information to issue securities when they are overpriced, whereby the investors discount the value of the securities in the market. This can also lead to underinvestment by the firm (Andrén 2006). The logic behind this is since the securities are underpriced, new shareholders will capture part of the NPV from new projects at the expense of the old shareholders. The old shareholders can therefore be forced to forego positive NPV projects. This is also because of, for the stated reasons, an equity issue will convey information to the market that the firm's securities are overvalued in the market (Myers *et al* 1984). The pecking order model was actually first presented as a way to mitigate this underinvestment problem (Quan 2002).

How to eliminate the information asymmetry costs in equity issues is the area of the signalling models (Klein 2002), which is explored in a separate section below. Equity issues are instead incorporated in the dynamic pecking order model by Lucas and McDonald (1990), where managers can choose to issue equity following above average market performance, which in turn implies that debt

levels are expected to decline when the market performs above average (Hovakimian *et al* 2004). In the pecking order model, tax shield of debt and financial distress costs are of second order (Ogden *et al* 2002).

Since internal funds are preferred, and the firm wants flexibility to not be dependent on external financing, managers view financial slack as desirable, as it makes the firm less dependant in times of need. This supports the pecking order model, but is in itself not enough to establish evidence of the model, since flexibility is important in several other models, such as Opler *et al* (1999).

In the pecking order model by Myers and Majluf, if a firm only use internal funds to finance its operations ad strategy, the informational asymmetry problem can be totally resolved (Meyers *et al* 1984). This in turn implies that profitable firms will retain earnings and less profitable firms will have to borrow, so there is a negative relationship between leverage and profitability, and a positive relationship between profitability and the probability that the firm will need to seek external financing (Hovakimian *et al* 2004).

According to an article by Graham *et al* (2001), financial flexibility is the most important consideration that a financial executive takes into account when deciding on debt policies. However, consistent with the observation above, they find that the flexibility desire is not driven by the pecking order rationale (*ibid.*). However, he also finds evidence in favour of the model. Consistent with the pecking order model, firms tend to turn to debt financing when internal funds are insufficient. Graham also finds that firms are reluctant to issue equity, and prefer convertible debt instead. This is usually because they feel that their equity is undervalued in the market, and generally consistent with the pecking order model (*ibid.*). However, for the pecking order model to be truly explaining, it should be information asymmetry that causes the financing decisions, but in this study, they only seem to be second order (*ibid.*). With the costs of information asymmetries in mind, an important implication of the model is the role that financial intermediaries play in reducing the same. They conduct a thorough analysis of the firm before a debt issue, and constantly monitor the state of the company, thus reducing the agency costs of debt, and increasing the attractiveness of debt over equity (Quan 2002).

3.2.1 Empirical Tests of the Pecking-Order Model

Empirical testing of the model has been done several times. Shyam-Sunder and Myers (1999) found that between the traditional trade-off theory and the pecking order model, the results favours the latter. Their contribution was to construct a

testable model of the pecking order model based on the assumption that when a financing deficit presented itself, this deficit should be matched dollar-for-dollar by a change in the firm's debt, something that they find strong evidence for (*ibid.*).

Frank and Goyal (2003) observe the same thing; however they also find that even though debt is more frequently used than equity, the equity issues tend to be much larger when they are used. They use the same testable regression model as Shyam and Myers, but on a larger and longer sample. In addition, they also find that internal financing almost never is enough, and so external financing is heavily used, and that the support they find for the pecking order hypothesis declines over time, supported by the fact that equity financing becomes more important (Frank & Goyal, 2003).

Fama and French (2002) also find evidence for the pecking order model. They observe that profitable firms are less levered than less profitable firms, and short term cash flow variation is usually absorbed by debt.

In an article by Tong and Green (2005), the authors find evidence for the pecking order model in two instances. First, they find a significant negative correlation between profitability and leverage in firms and secondly, they find a positive correlation between large dividends and leverage, which both favours the pecking order model over the traditional trade-off model.

More empirical support for the pecking order model comes from a study by Narayanan (1988) that shows that if a firm stands before a project, and has both debt and equity financing to choose from, it generally either finances with debt or foregoes the project (Quan 2002).

In an article by Brouen, Jong and Koedijk (2005), 313 CFO:s are surveyed on their capital structure choices. They find strong evidence for the pecking order model, except for that companies usually have target debt levels, and that agency problems not is a big issue when determining capital structure (*ibid.*). Also they find that financial flexibility is the most important factor for managers when determining debt levels. Although this initially can be interpreted as evidence in favour of the pecking order model, the desire for financial flexibility is as we have seen earlier not necessarily based on pecking order (Opler 1999). The second most important thing is target debt ratio, negating the pecking order model (Brouen *et al* 2005).

Finally, a study by Flannery and Rangan (2006) examine whether pecking order or trade-off theory explain capital structure decisions by testing if firms have target leverage ratios and if so, how quickly they adjust towards them. They find

that the typical firm does have a leverage ratio, and typically closes the gap between actual and target leverage with one third of the gap each year. Even though they find evidence for the pecking order model, they conclude that the overarching leverage target dilutes the effect of the pecking order model (Flannery & Rangan 2006). The main critique against the pecking order model is the model's inability to explain how taxes, bankruptcy costs, issuance costs and investment choice affect the capital structure choice (Quan 2002). The model also fails to recognise the added informational asymmetry costs that stems from all other stakeholders and claimants of the firm (Baskin 1989). This leads the model to be “*empirically motivated, but lacking the compelling rational theoretical justifications*” (*ibid.*).

3.3 The Market Timing Hypothesis

The market timing hypothesis state that a firm issues debt and equity when the market conditions are most favourable. The theory dictates how a manager should react to over or undervaluation of his firm's shares, that is, essentially to issue when overvalued and repurchase when undervalued. This requires what the theory calls market timing ability (Andr n 2006). History has shown us that managers are most successful at timing the market in bull markets, and less successful in bear markets.

However, Lucas and McDonald (1990), find that no matter what the market, managers have information one period ahead of the investors, and try to use this information to time the market. They will issue equity directly if they need financing and think that they are overvalued, and delay issuing equity if they feel they are undervalued. This means that periods of positive abnormal returns will usually be followed by an equity issue (*ibid.*). On building on that research, Korajczyk, Lucas and Donaldson (1992), also show that managers can control the informational disadvantage of the market by timing issues, and that therefore, managers tend to issue equity close after the release of information from the firm (Klein *et al* 2002).

3.3.1 Empirical Tests of the Market Timing Hypothesis

Rajan and Zingales find support for the market timing hypothesis in a 1995 survey (Rajan *et al* 1995). They find that leverage and market-to-book ratios are negatively correlated, which supports that equity issues are made when the firm is highly valued in the market. However, Jung, Kim and Stulz (1996), concludes in

their survey that market timing is not a factor when issuing equity (Klein *et al* 2002).

In a survey by Graham and Harvey (2001), a majority of financial managers consider under or overvaluation an important factor when issuing equity. Furthermore, they find that managers try to time the market by issuing debt when they feel that interest rates are particularly low. This is especially true for large firms (*ibid.*). There is also some evidence that firms tend to issue debt abroad if they feel that interest rates are lower there. Graham and Harvey notes that this behaviour is illogic, should covered interest rate parity hold (2001).

In an article by Jeremy Stein (1996), the author advocates discontinuing the use of the CAPM in favour of a new model that determines hurdle rates based on the specific market conditions at a point in time, that is, a market timing model (*ibid.*). The fundamental idea underlying the model is that the market is irrational, and managers should know that. Stein state that when determining an investment and financing mix, one has to take three things into consideration; the NPV of the investment, market timing gains or losses, and the costs for deviating from the optimal capital structure (*ibid.*).

The most compelling advocates for the market timing theory are Baker and Wurgler (2002), who argue that a firm's capital structure is "*the cumulative outcome of past attempts to time the equity market*" (*ibid.*). All equity and debt issues are made to time the market, which therefore have large and persistent effects on capital structure. They test this empirically, and arrive at the conclusion that the firm's valuation in the market (measured by market-to-book ratio) is a reliable predictor of the firm's equity portion in its capital structure (*ibid.*). With regards to capital structure, they are considered to be the first to state that market timing best explains firm's capital structure. They feel that their theory builds on the same logic as Myers and Majluf's pecking order model, where information asymmetry and adverse selection costs vary over time, and thereby determine the capital structure. Likewise, information asymmetry makes the firm over or undervalued which also varies over time, and also determines capital structure (Baker & Wurgler 2002).

Hovakimian, Hovakimian and Tehranian concurs that the models are based on the same assumptions regarding adverse selection costs, and also concludes that the market timing theory is thoroughly empirically motivated (Hovakimian *et al* 2004). Butler, Grullon and Weston (2005) argue that even though managers tries to time the market, and the market timing theory therefore holds, the predictive power of managers stems from pseudo-market timing, and not from superior timing abilities and information about the market (Butler *et al* 2005). Their argument is as follows (see also Schultz 2003 for this pseudo-market timing

argument). Managers' ability to time the market and issue equity when it is overpriced in the market is measured with the stock's performance following the issue. If the price falls, that is seen as proof that the market was timed accurately. Since firms issue equity following a rise in the price of their equity, there exists a spurious ex post relation between the firm's equity issue and its equity price. What then seems as an ability by the manager to time the market is simply a reaction by firms to the current market conditions (Butler *et al* 2005). This is the efficient market hypothesis explanation to the market timing theory.

On the subject of issuing foreign debt, Brouen, Jong and Koedijk (2005) find that managers do to some extent try to time the market by issuing debt in foreign countries when they feel that it is interest rate wise profitable to do so. Again, this contradicts interest rate parity (*ibid.*). Finally, in 2006, Flannery and Rangan test the 2002 Baker and Wurgler timing theory with a regression, and find that the results are significant in favour of the theory, both with regards to debt and to equity (Flannery & Rangan 2006).

3.4 Signalling with Capital Structure

According to signalling models, a firm can convey private information to its investors through its capital structure and choice of financing. The underlying issue is the informational asymmetries that exist between the firm and the market. The firm has information that it wants to disclose to the market, and uses its capital structure to do so. For instance, a sound firm can finance with debt, and usually issues shares when they think that their stock is overvalued in the market. The market will then incorporate this signal into the valuation of the firm's shares. Issuing overvalued shares also maximizes shareholder value, besides signalling the true value of the firm (Ogden *et al* 2002).

In a pooling equilibrium, there are good and bad firms. The firms know which are good and bad, but the market and investors do not. For a good firm to reveal to the market that it is good, it can send a costly signal. The signal has to be costly enough so that bad firms cannot mimic the signal. This is the classic Lemons problem, as devised by Akerlof in 1970. It can for instance issue debt, thereby showing that it has a strong enough cash flow to make regular and timely payments to the creditors (Ross 1977). It can also take on restrictive covenants that the bad firms cannot.

In an article about entrepreneurial finance and signalling, Leland and Pyle (1977) shows two ways for entrepreneurs to signal the true value of their project. The first is to take a stake in the project, which is by financing part of the project with

their own money. The other is to use costly underwritten debt to show that it is a sound project. Both findings are conditional on the fact that information asymmetries exist. The reason for signalling instead of disclosing the information directly is addressed in an article by Bernhardt and LeBlanc (1995). They find that when a firm is sensitive to competition, or stand to loose on new entrants, they only convey information though signalling. For a firm that is not subject to competition or in industries with large barriers to entry, direct revelation is more attractive and likely to be used. Finally, a firm can use dividends as signalling. A manager of a good firm can distinguish his firm from the bad firms by committing to dividends at a just enough high level too keep the bad firms from mimicking the behaviour (Bhattacharya 1979). According to Miller and Rock (1985), this is true for all types of cash payouts, including dividends, share repurchases and debt retirement. All methods are means to separate good firms from bad, thus signalling the quality of the firm's cash flows, and ultimately the firm value.

3.5 Product-Market Competition Models

Early evidence of firms using their capital structure for competition purposes is the deep pocket argument by McGee and Telser (Poitevin 1989). This is based on evidence that young firms are more vulnerable to distress and bankruptcy than older firms, as well as subject to greater informational asymmetries. Poitevin (1989) says that a firm enters an industry with a more vulnerable financial structure than the already established firms. The firms within the industry can then engage in predatory actions such as price wars, and effectively force the new entrant out of the industry. This is of course only true when the market is not strong form efficient, since the entrant would be able to finance the price war completely then (*ibid.*).

In a competitive industry, a firm should tailor its capital structure to fit their desired competitive position. The more flexible a firm is the more it can fight its competition, and the more it has to rely on external financing, the less flexible it is. If a firm relies on internal financing, it can compete more aggressively with price, and the other way around. It is also more likely to exploit its creditors by risk shifting. This will naturally be met with covenants and similar measures on the part of the creditors. On the other hand, the leverage aggressiveness hypothesis states that taking on debt is a commitment to aggressive competitive behaviour, which should decrease the optimal output of the competitors, so the competitive use of capital strategy works in both ways, with more leverage, and with less leverage (Andrén 2006).

In an event study by Chevalier (1995), it was shown that increased leverage dampened the competition within the industry. This is an integral part of the theories, and a very important effect, since it actually means that for a strong, financially sound firm, capital structure and increased leverage can be an effective way of competing, by providing proof that product-market competition decreases when leverage increases.

Connected to the product-market competition models are usually the industry models. We will not use these models, since our empiric data does not discriminate within industries, and an analysis therefore would be futile.

4 EMPERY

In this fourth section we present our empery, which is the statements from the telephone interviews with key financial personnel in 19 companies listed at the Swedish stock exchange, A-list.

4.1 A Note on the Presentation of the Empery

We have chosen to present all the empery in this separate section of the thesis. The empery is presented with all interviewees' answers to each question together compiled into a text, on a question by question basis. This might seem overzealous, but in a qualitative thesis, where the discussion and a major part of the analysis is based on the subjective considerations of the authors, it is imperative that the readers can follow our reasoning and make up their own mind on if they agree with us or not. That is why decided to present what can seem as a very long section which can sometimes be tedious to read. For an interested reader, it will definitely be worth it, and will make for much better understanding of our analysis. That said, it is possible to skip ahead to the initial analyses, and use the empery section for reference and clarifying purposes.

4.1.1 What is The Most Important Consideration When You Decide to Take on New Debt in Your Company?

Magnus Lindquist is Chief Financial Officer, CFO, at Autoliv (telephone interview, 5 May 2006), he believes that some of the most important factors when deciding to raise new debt are the price of the debt, the capital structure and the financial leverage that they have. Björn Andersson Head of Treasury Support and Administration at Electrolux (telephone interview, 3 May 2006) believes that their maturity profile on their debt portfolio is one of the major considerations when taking on new debt. He says that Electrolux have certain targets for their portfolio design, but also believes that it is a question of the cost of debt and the financial counterparty. Roland Hagman, Concern Controller and former Deputy CEO at Ericsson (telephone interview, 5 May 2006) says that they first consider what

terms apply for the loans, especially regarding the interest rates. The interest rate is dependent on the currency of the loans, Roland continues, and they correct for changes over time against the Swedish krona. The largest concern is the interest cost; the transaction cost is a one time cost, thus a part of the total cost of raising debt. At Gambro they reason that if they did not have the large cash position that they have at the moment, they would have raised new debt through loans to cover new investments, acquisitions, and to cover fluctuations in working capital, says Lars Granlöv, CFO (telephone interview, 9 May 2006). Gambro is not limited to the credit market; they can raise financing through both debt and equity, depending on the situation. If they are about to make a big acquisition that is not realistic to be completely financed with loans, or that the cost of debt is too high, or that they can not obtain an optimal capital structure, they then use a mix of equity and debt. Gambro has a treasury department that is active in the market, and they do not raise debt if they can not see any use for the money. After that, they look at how they can optimize their capital structure, what instrument they will use, and what currency is suitable to obtain a balance between bank loans, bonds, certificates and other types of debt financing. Gambro has not considered issuing new equity since 1999.

Getinge's most important factor when taking on new debt is to be able to fulfil their growth strategy, says Peter Hjalmarson, CFO (telephone interview, 10 May 2006). They need guarantees from creditors that they will get the means needed to complete the acquisitions they are pursuing. Of course they also look at the cost of debt, but it is not the most important factor, Hjalmarson says. At Getinge they have a solidity goal of at least 25 percent, which they consider to be a good balance, depending on type of business and variations in the results etcetera. From an outsiders point of view it is their required liquidity that controls their ability to raise new debt, according to Torbjörn Olsson, CFO at Gunnebo (telephone interview, 8 May 2006). According to Håkan Halén, CFO at Hexagon (telephone interview, 8 May 2006) the most important factor is what they intend to do with the raised funds, questions regarding cost of capital and so forth lays within the calculations for the acquisition, if it can bear its own cost of capital or not. At Holmen, the cost of debt is the most important factor when raising new debt, says Anders Almgren, Deputy CEO (telephone interview, 3 May 2006). At Hufvudstaden, if they decided to make a deal, they look at financing costs, such as interest rates, but it is really their solidity goal of 40 percent that is the most crucial matter, says Magnus Jacobson, CFO (telephone interview, 10 May 2006).

JM do not raise new debt due to the fact that they have a net cash position, says Klas Magnus Åkesson, CFO (telephone interview, 10 May 2006). It also depends on whether they need to finance new projects, operations, or acquisitions, so the answer differs depending on what needs to be financed, explains Åkesson. The actual financing that JM does, says Åkesson, is standardized for running projects.

If they do so to their balance sheet, they borrow with the perspective that they continuously will finance their asset mass, together with the criteria that they will have an optimal capital structure. Lindex has two requirements, explains Peter Andersson, CFO (telephone interview, 10 May 2006), first a requirement of working credit, and second the required cash to finance their growth and new stores. After deciding on their demands, they conduct a standard purchase of debt, were they try do get as much benefit possible for the cost. They often chose to borrow from their house banks, resulting in a stronger negotiating position over the price. The decision whether SCA is going to raise debt or not, follows a policy of the average duration of their portfolio. Furthermore, they conduct an evaluation of the credit market condition, the various costs of the financing alternatives together with the different types of current financing, explains Johan Rydin, Deputy Executive Finance (telephone interview, 3 May 2006). In order not to be too dependent of a specific capital source SCA uses a mix of bank financing, capital market financing and short financing, Rydin continues.

Scribona works in a very cyclical business, where it is important that their financing follows their level of business activity, believes Carlos Olsén, Concern Chief Executive (telephone interview, 9 May 2006). They have a big equity stake at the base, but the depending on the situation, they can not always freely choose their financing means exactly as they would like, says Olsén. Anders Årling, Executive at Financial Services at Skanska (telephone interview, 10 May 2006) believes that the major factors that are considered when taking on new loans are the maturity and the price. To raise debt efficiently, they look at the market conditions, “*one shall borrow money when one do not need them*” (Årling 10 May 2006). Tore Bertilsson, Concern Chief Executive at SKF (telephone interview, 4 May 2006) thinks that the cost is the most important factor when raising new debt. According to Björn Sandberg, CFO and Group Controller at TietoEnator (telephone interview, 9 May 2006) the key factor is what leverage they want on their return. They raise debt under favourable conditions and when they want to affect their leverage, also with bigger acquisitions, Sandberg adds. Bo Jacobsson, CFO at Trelleborg (telephone interview, 8 May 2006) primarily looks at how the debt affects their capital structure. They consider their optimal capital structure as being a trade-off between risk and pay-off. They look at their future financial plans and their ability to handle their net debt with regards to amortizations, interest rates and so on, says Bo Jacobsson. Rickard Petri, CFO at WM-data (telephone interview, 8 May 2006) thinks that it is a question of if there is an optimal or effective capital structure. To finance through loans instead of equity gives a higher payoff on equity, he continues. They have taken up loans in situations with acquisitions, and there are limitations on how much debt they can raise, but they felt like they were in the right interval at the moment of the acquisition, Petri continues.

The anonymous company X has a treasury policy concerning the maturity risk and interest rate risk. They also look at the duration of their loan portfolio, says CFO Mr. X (telephone interview, 9 May 2006). They have decided on the turnover ratio of the portfolio of loans, and what risk they face on every possible change in interest rate, and also how long it will take before it impacts the long term debt portfolio. Sometimes they go long, sometimes short and sometimes a mix, it depends on the situation, says Mr. X. This structure is only two years old so they have not made any real evaluations yet. They do not think about if they are going to raise debt or not, says Mr. X, they do not have a choice. If they do not have the money they have to finance through debt, says Mr. X. As long as they have a positive debt / equity ratio, they are never in the position so that they can choose. They have always had big cash position, but through an rather long project, they have worked their way towards a more structured balance sheet, with a better leverage of about 0.3 to 0.6, explains Mr. X. Automatically, they always have a debt portfolio which increase and decrease over the year, to reach its highest level the day after paying out the dividend, and thereafter they work it down to a reasonable level. They do not use equity financing before they end up at leverage in the region of 1, so basically they do not use equity financing unless they are going to make a big acquisition, says Mr. X. He adds that equity is expensive so they do not want to deal with that if they do not have to, cash is cheaper.

4.1.2 Do You Raise Debt Abroad?

Autoliv is a non-Swedish company and therefore raises most of its debt outside of Sweden, says Magnus Lindquist. They try to match their debt with the location of their assets, thus creating a hedge for fluctuations in the exchange rate, he continues. Electrolux does not really take up loans outside Sweden, says Björn Andersson. But they raise debt bilaterally from banks, and also through different programs, where one is a euro-program and the rest are Swedish certificate-programs, Björn continues. Ericsson raises debt outside of Sweden, and the reason for this is that it is hard to raise the amount they need solitarily on the Swedish market, Roland says. Ericsson takes up debt mainly in EUR and USD. Gambro issues debt abroad, says Lars Granlöv. They work with a group of banks, whereof many foreign ones. Getinge takes up loans in foreign currencies, and the main reason for this is that they try to match their debt with the countries currency where they have their assets, says Hjalmarson. Gunnebo works with syndicated loans, from a combination of nine banks, were some are foreign. Further they have raised a secondary debenture loan of 300 million SEK, and there are also some bilateral credit lines, both with Swedish and foreign creditors, says Olsson.

Hexagon does not take up loans directly outside Sweden but they use syndicated loans, built up in cooperation several banks, whereof some are foreign. They also have a currency revolver, where they can use nine billion SEK in credit. They usually finance by way of introduction with some sort of bridge financing, followed by refinancing with further bank syndicates. Holmen raises debt outside of Sweden, but Almgren thinks that the Swedish credit market is well priced and can compete internationally, so the choice is a matter of price. Hufvudstaden does not take up loans outside of Sweden, they do however look at everything that makes them competitive, but they think that right now the Swedish credit market is satisfying, says Jacobson. JM have 80 percent of their business in Sweden and therefore do not raise debt abroad, says Åkesson. Their foreign subsidiaries can raise debt abroad, but they do not borrow centrally. The reason for this is that it is not cheaper to borrow centrally, and they do not want to face any exchange rate risks, says Åkesson.

Lindex raises debt abroad, but only to finance their foreign production, and only from Swedish banks, says Andersson. The Swedish banks are more competitive than the international banks, Andersson continues. SCA raises debt outside of Sweden, with the underlying reason being that the Swedish credit market simply can not cover the amounts that SCA needs, says Rydin. Scribona does not raise capital abroad. This is however a matter of definition, because their subsidiaries abroad also use securitization of their accounts receivables as financing, says Olsén. Skanska raises debt abroad in situations when it is most price effective, says Årling. SKF takes on debt internationally because it is a larger credit market with better pricing and liquidity, says Bertilsson. For TietoEnator, it is a matter of definition. They have subsidiaries in 35 countries, and some local financing exists, but all financing decisions are taken centrally. The financing of the concern structure is made by loans raised from Sweden and Finland. Trelleborg uses a syndicated loan structure when raising new debt. It consists of 10 to 15 banks, both domestic and international, says Jacobsson. WM-data do not raise debt internationally; this due to the fact that Sweden is their biggest market, and that they are totally focused on the Nordic countries, so there are no reasons for exposing themselves to those kinds of exchange rate risks, says Petri. Company X raises debt abroad when they are investing very heavily. They raise debt in countries where they make their investments, as a hedge against equity, says Mr. X.

4.1.3 Does Your Company Have an Optimal Leverage Ratio and If They Do, When Is It too high?

Magnus Lindquist refers to their annual report when asked about optimal capital structure. He says that Autoliv wants to be investment graded. In order to fulfil investment grade status, they calculate their capital structure implicitly on the specific credit rating that the leading CRA (credit rating agency) provides. They look at numbers like net debt over EBITDA and interest coverage ratios. A net debt over EBITDA well below 3 is considered investment grade, says Lindquist. Furthermore he believes that they are too highly leveraged if the net debt / EBITDA is over 3. Björn Andersson at Electrolux says that they used to have an optimal leverage around 0.8, but that they do not use the capital structure in that way, and that measure anymore. Instead they look at measurements as net debt over EBITDA, measurements used by the CRA, and look at how they correlate with their ambition of acquiring a rating of BBB+. They try to adjust their capital structure towards the rating level they desire.

Ericsson does not have an optimal capital structure target, but today they have a very low leverage ratio, says Roland Hagman. If they deduct business related debt and equity, they arrive at a leverage of approximately 20 percent, he continues. Roland says that they aim to amortize the debt, resulting in an even lower leverage ratio. Furthermore Roland Hagman says that after the amortization it is up to the owners to decide if they want to change the leverage ratio through repurchases. That does not really change the leverage, rather the firm value, or they can decide if they want to raise more debt and adjust the equity. Ericsson has not ever had any optimal capital structure target, he continues. They had a crisis a couple of years ago were they needed capital, and the market had closed down on them, and any discussion about leverage ratios or optimal capital structure did not take place. Right now they make good profits together with a strong cash situation and a lot of equity. Ericsson discusses the possibility to use the assets to buy companies, repurchase stocks or pay out the means as dividends. Roland's opinion is that today it is common that a company that acquire a lot of companies also have a very high leverage, whereby they hope that the companies raise in value and thereby yield a large payoff on their invested capital. Roland thinks that this can affect the way that one wants to finance the company, resulting in a demand for higher leverage.

Lars Granlöv at Gambro says that they do not use any debt leverage ratio; rather they use solidity as a measure. The long term solidity, beyond 3 years, shall be maximum 50 percent. They have looked at how they want to develop their product portfolio, the mix of the mature part of the portfolio, start-ups and the growth part, and they then decide on how they wanted to see the mix in the long

run. He further describes that what really regulates solidity and capital structure are covenants from their creditors. If they break these covenants, they must renegotiate their facilities. Covenants are the final limit, but Gambro also have internal safety nets that will capture any problems before they create a potentially serious situation. Getinge's main concern when deciding on their leverage ratio are their restrictive covenants, says Hjalmarson. Their gearing, net debt to equity, can be at the greatest 1.75, but it is not their explicit goal to always stay within that gearing, Hjalmarson continues. If they end up with a too high gearing, above 1.75, Getinge acts to lower it. Getinge is also able to increase their gearing above their covenants, *"we then just have to renegotiate our covenants with our creditors"* (Hjalmarson 10 May 2006). They think that if they have a leverage below one, they have a strong balance sheet, resulting in manoeuvrability for possible future acquisitions. Gunnebo's leverage is regulated in their credit arrangements as one of their covenants. They have a limiting leverage of 1.5, as the highest level, but they also have a secondary debenture loan, which is treated as equity, says Olsson. So a leverage ratio above 1.5 is above their limiting covenants, and thereby too high, Olsson continues.

According to Håkan Halén at Hexagon, the covenants decide. Net debt over EBITDA has to be below 3.5 and their solidity can not fall below 25 percent. At Holmen, they have an optimal capital structure, says Almgren, it has to be between 0.3 and 0.8. That is where they want to be, not having a too low or too high leverage. They base this ratio on earlier experiences and on the risk profile that they have chosen. A leverage above 0.8 is too high, but it is also depends on how the business is going at the moment, says Almgren, *"if we do not make any money, the leverage must be lower"* (Almgren 3 May 2006). Jacobson at Hufvudstaden says that what determines the optimality is what targets they want in the long term. They want to have solidity above 40 percent, and the reason for this is that they want to have the ability, as well in the long run; to conduct business in times were it might not be easy to raise new capital. Solidity below 40 percent is not something that they wish for, says Jacobson. JM strives for, with the present asset structure, a solidity of 35 percent. It is really a simplification, and he explains that they use a capital allocation model, where they derive risk capital, really equity, and residual values on their assets. This risk capital they then divide among their operational risk and different asset types. Due to the fact that they use a risk capital model, the leverage is a bit lowered, says Åkesson. JM has many types of assets, so the reasoning is much too simplified to describe what the actual structure looks like, say Åkesson, but their core business, the real estate business, shall have a net debt of zero. Lindex does not have an optimal capital structure or leverage ratio. But they think that their present situation, with 100 percent equity finance, is a very expensive form of finance. Andersson explains that they intend to change their present situation in some way, but that they do not have any stated destination at the present. On the question of when they think that they have too

high of a leverage, Andersson says that they have an extremely to low present leverage, and the question is not valid due to their lack of debt.

SCA's optimal leverage is 0.7 which is a result from a theoretical analysis of their optimal leverage ratio, with their current business risk, and including a buffer for financial emergencies or cost of financial distress. Rydin argues that they do not want to be too close to their optimal capital structure; due to that it is rather high. Their leverage is definitely too high if it is above one. This is mainly because they then would get a lower credit rating than they aim for, says Rydin. Scribona does not have an optimal capital structure. They have solidity between 2 to 30 percent, depending on season, but they do not discuss it right now, says Olsén. Skanska have a net cash position, so at the moment their gross debt is zero, says Årling. They do not have optimal leverage as a financial target, but there are certain numbers that they do not feel comfortable with ending up around, explains Årling. Instead they look at other profitability ratios like total equity in relation to the balance sheet and approximately five other ratios. A net leverage of 50 percent of equity is not something that they are pleased with. Not that there are any problems for the company, says Årling, but it is not what they want. Furthermore, Årling explains that in their line of business it is crucial to have a strong balance sheet, so they have a program to lever up the balance sheet, highly. Årling explain that they look at it from two perspectives, the stock market perspective and the creditor perspective. The stock market wants as high leverage as possible, Årling says, when the creditors strive to retain a lower leverage. Skanska believes that it is important to show credibility against their creditors and towards the industry they are active in, so they prioritize a strong balance sheet. Then they try to find an equilibrium to please the stock market as well, says Årling.

SKF has an optimal leverage of 0.5, based on their operational sensitivity and their attachment to a desirable credit rating. Leverage above 50 percent will be too high, as it exceeds their optional leverage. TietoEnator's optimal capital structure is connected to what leverage they want. The present optimal leverage is approximately 40 percent, which is a decision for the long term, says Sandberg. What matters is the amount of risk that TietoEnator is willing to expose their investors to, but they also look at the competition and their competitors' positions in the market. Sandberg does not think that their leverage deviates from their competitors, since it would negatively affect their risk profile and thus their share price.

At Trelleborg they have an optimal capital structure between 75 to 125 percent of debt in relation to their equity. They reason that there is equilibrium between risk and pay-off. Their return on equity will rise with higher leverage, says Bo Jacobsson. They look at ratios like net debt in relation to EBITDA which is the same ratio as S&P and Moody's use at when they evaluate companies' credit

standing. Even if Trelleborg does not have a stated rating target, they still adjust slightly to the CRA measures, says Jacobsson. They look at how they can handle changes on the credit market and what the future interest rates and their cash flows will be. It is important that they feel secure, that they can handle future changes of interest rates and cash flow. At WM-data they do not have any outspoken goals regarding this issue, but Rickard Petri feel, together with the board, that the current capital structure of 40 percent is rather optimal. A leverage of 60 to 70 percent would be too high. Company X does not have a specific optimal capital structure. Today they have a leverage of 0.6 together with a very high profitability and strong cash flow, but if it will rise above 1 it will be too high, and they will be forced to take actions to bring it down, says Mr. X.

4.1.4 How Do You Finance New Projects And Acquisitions?

Magnus Lindquist explains that Autoliv finances new projects and acquisitions in different ways, depending on their size. Smaller investments are financed through retained earnings or internal cash flows and larger investments are financed through loans. The financing is tailored so that it will fit their capital structure, he continues. At the moment, Magnus says, they have a too strong rather than too weak balance sheet, resulting in that they can acquire a lot, and finance it through debt at a different levels than if the situation was different. Björn Andersson at Electrolux says that due to a very strong balance sheet, the question has not been raised, but if it is necessary, they will finance through loans. Due to their vast amount of cash, the end of the fiscal year 2005 approximately 70 billion SEK, Ericsson uses cash to as far as possible to finance new projects and acquisitions, says Roland Hagman. Gambro is also in a situation where they have a lot of cash, so they use that cash to finance their subsidiaries. They also look at the capital structure of their subsidiaries, and at a combination of financing by equity and loans, which can be a mix of capital contribution and internal loans to their subsidiaries. It works in the same way for the parent company. If they need more capital they are not afraid to issue new equity.

Lars Hjalmarson and Getinge financed most of its latest acquisitions through bank financing. Getinge's cash position is not used to finance investments or acquisitions, they only hold the amount of cash that the corporation needs for running its business, explains Hjalmarson. Normally, they do not have any cash, except very temporarily, and if they receive a lot of cash they use it to amortize on their loans. Hjalmarson says that they address the stock market if and when they need capital, and over last ten years, with their acquisitions, they have issued new stock of approximately 500 millions SEK. Before, they had a leverage of 1.9 to

2.0 that they geared down with an equity issue in order to reach numbers below 1.75, Hjalmarson says. Gunnebo has an unused long term credit of nearly a billion SEK and that is what is mainly used for investments and smaller acquisitions, says Torbjörn Olsson. But above that, financing has to be realized together with their equity side, so that they raise more equity and also use some kind of bridge financing, say Olsson. Hexagon mainly finances through retained earnings and loans. When they expand they start out from their covenants, net debt over EBITDA, and it is crucial to have the space to be able to absorb new investments, says Halén.

Almgren describes his firms financing strategy as one where they separate the project from its financing. First they decide if the project is good or bad, the financing decision comes second. If business is good they finance with internal funds as far as possible. With the debt policy they have, they are always able to find financing, says Almgren. Hufvudstaden finance their bigger projects through bank loans, but they also look at their solidity. A couple of years ago they did an equity issue, and the reason was because they wanted to have a certain debt/equity ratio, says Jacobson. JM finances with running financing. They have an unusually strong balance sheet, Åkesson explains. They have redemption in June, so all the questions are concentrated on tenure, he continues. Lindex finance acquisitions and projects through retained earnings or their cash position, they do not raise new debt. If they are going to give their owners a decent pay off on invested capital, the way that Lindex finances, is a very expensive way of financing says Magnus Andersson. They have had a dividend yield of 8-10 percent the last years, and they naturally do not have any objections, says Andersson, to pay out cash to the owners, but in the long run, " *to finance the business, it is better to pay 3 percent to creditors than 10 percent to their owners*" (Andersson 10 May 2006). It is in the business culture of Lindex to have zero liabilities. This is due to that Lindex, together with other merchant companies, only have had organic growth. Many corporations have huge goodwill posts on their asset side that turns into equity on their debt side of the balance sheet, Andersson continues. Lindex can only pay out their free capital. One thought could be to raise a billion SEK and divide it to the owners, but this can only be done if Lindex have the same amount of free capital, says Andersson. A consequence of organic growth is that it is hard to accumulate free capital. This is a dilemma for the company, Andersson explains, due to that retained earnings can be used to gain free capital, but some of the means must be paid out as dividends. Lindex is the kind of firms that private equity firms acquire and refinance through high leverage.

SCA uses normal company financing and they never had any earmarked capital to finance acquisition. They start from their cash flow and for the time actual credit guarantees. They then finance through loans, not through equity, Rydin says. Skanska uses primarily existing credit structure or cash. In general terms they use

their cash position to pay off debt and to make minor acquisitions. Skanska does not make as big acquisitions so that the company will double in size over night, says Årling. They have not thought much about it, but five to six years ago they bought a lot of medium size companies, and then they worked with a type of external loan financing. SKF primarily uses cash or loans to finance new projects and acquisitions. TietoEnator normally finance through internal cash flow, and the reason for this, explains Sandberg, is that it is cheaper than external financing, which is cheaper than equity. Trelleborg first uses the credit arrangements that they have. Often they use bridge financing, were they take on a temporary loan which is then refinanced later with a long term financing. The advantage of this, explains Jacobsson, is that they can get a faster and simpler financing, not involving many banks in the process. Often in an acquisition, they have to act fast, and this is where bridge financing comes in handy, Bo Jacobsson believes. For certain situations an equity issue is possible, but with today's low interest rates they usually finance through loans. They do however also look at what capital structure the acquisition results in, and then choose action depending on the situation, says Jacobsson.

WM-data finance through debt with the underlying reason that they lay below their defined optimal leverage, so the alternative is more expensive and less effective, says Petri. Company X finances mainly with cash or debt. They do not want to finance too much with equity, due to its higher cost. But as mentioned before, an equity issue can be feasible when they are financing very big acquisitions. Scribona finance mainly through securitization of their accounts receivables. They also have a very cyclical business, wherein it is very important that their financing follow their level of business activity, believes Olsén. Olsén mean that when Scribona has a high level of business activity with high sale and invoicing, then they also need higher financing, which the securitization program can help them with. They have a big equity piece at the bottom, but the situation is not always so that they can choose financing. That is another reason for the securitization, says Olsén. Their bank connection provides the means outside the securitization program, should they need any.

4.1.5 When Do You Issue Equity / Repurchase Stock, or Pay out Dividends?

Magnus Lindquist says that an issue of new stock is not on the agenda and repurchases and dividends are made yearly, for further information he refers to the annual report. They have never made any larger one-time dividends, he continues. Electrolux has sold parts of its business, resulting in high cash flows, says Björn Andersson. An equity issue is not at the agenda due to the strong balance sheet.

Normally they issue equity only when a big acquisition needs to be financed. Dividends are something that takes place yearly and repurchases has been made on numerous occasions to lower the leverage ratio. Ericsson does not have any expressed policy on when they issue equity, repurchase stocks or payout dividends. There are no such ideas at the moment, except possibly among some of the members of the board, and they choose to discuss it when the matter arises, according to Roland Hagman. Further he says that if the situation arises, they have to do what is best for the owners; it has to do with tax considerations for the owners. But he also thinks that due to their earlier crisis with the following equity issue, it would be very strange if they decided to return the money when the market has changed and the crisis is over. Gambro in October sold half of their concern business, resulting in a change from having net debt to having a big net cash position, says Granlöv. They also shifted out 10 billion SEK through a stock redemption program last year. They still have a large cash position and the reason for this is that they, within a year, plan to use the means for strategic investments, says Granlöv. Gambro also, if the strong balance sheet is sustained, intends to shift out more cash to the owners, and Granlöv can not say if it will be through dividends, stock repurchases or redemption. The reason that Gambro chooses ordinary redemption is that it treats all investors alike, targeted repurchases and dividends is not as tax effective as redemption, Granlöv continues.

For Getinge, stock repurchases is not an alternative, they would rather keep their capital within their company to finance upcoming acquisitions and to develop company projects, thinks Hjalmarson. Getinge has a dividend policy that states that they will distribute one third of the net revenues each year. Gunnebo shift out some part of their capital to their investors as dividends every year. Above that they have the long term goal of a liquidity of 25 percent, and together with their covenants that is what decides what action is to be chosen. For Hexagon, according to Halén, an equity issue only occurs when they can explain what the money is for; they never do an equity issue just for raising cash. What Håkan Halén means with this is that they first finance an investment or an acquisition with a bridge financing, and then they possibly refinance with an equity issue. Hexagon's focus is on expansion, so they will never have enough cash to repurchase stock. They pay out yearly dividends, and occasionally they have shifted out non core business stocks and then the ordinary dividend on top. Holmen uses those kinds of capital structure adjustments when they end up outside of their optimal capital structure range, says Almgren.

Hufvudstaden pays yearly dividends. They also have a mandate from their annual general meeting to repurchase stocks if and when it will be a good investment, says Jacobson. The size of dividend and or repurchase of stocks is all means to adjust the capital structure, Jacobson, continues. JM has a policy that states that if they have a stronger and more durable capital structure then they need, they shall,

at a suitable moment, and in a suitable form distribute the means to their owners, says Åkesson. If it is through dividends, repurchases or redemption depends on the situation. They have not issued new equity in many years, but if they are facing a larger acquisition or similar, it is possible, says Åkesson. Furthermore they have sold real estate, since the end of the 90s for approximately 16 billion SEK, which they have reinvested in land and housing, and they have also initiated two dividend programs and one redemption program, so they are more likely to have too much capital than the other way around, says Åkesson. These programs have enabled them to have a more optimal capital structure. Redemption, repurchases and dividends or other transfers of means to Lindex's owners is used when there is overcapitalization, and it is allowed for with enough free capital, says Andersson. An equity issue can be expected that day when Lindex has a decent leverage together with an attractive investment opportunity. Lindex this February decided on a redemption program of 550 million SEK.

For SCA, an equity issue can be close at hand when they are about to make a big acquisition that can not solitarily be financed through loans. Stock repurchases can be an option when they are overcapitalized and when they do not see any, for strategic acquisition or operational investments, use for the capital within a reasonable time, Rydin continues. The same considerations apply for larger extra dividends. Scribona is about to distribute one of their subsidiaries and they do not make much money at the moment, so any ordinary dividend or repurchase is not feasible. They think that they manage with their securitization program. An equity issue, for the same reason, is neither at hand. Skanska start out by looking at the company's long term need, and the target of a strong balance sheet, and thereafter they look at these kinds of issues, Årling says. If they have a strong balance sheet and still can please their investors demand for not holding too much cash, then they shift out money. An equity issue has not been done in years, and is not on the table. Tore Bertilsson says that SKF issue equity only when facing a very large investment. Repurchases can be realized when their financial situation, in the long term, is too strong. They pay yearly dividends and in terms of larger extra dividends, the same consideration is made as for repurchases, says Bertilsson.

It also applies to the leverage at TietoEnator, says Sandberg. They continuously repurchase in order to adjust their capital structure and the leverage that they have in the market. They also repurchase for the moment, due to a bonus program, Sandberg continues. They pay out yearly dividends, larger extra dividends is not an issue with their present strategy and what they want to communicate to the market. An equity issue is possible when they are facing a large acquisition, says Sandberg. Trelleborg has a dividend policy that they will shift out 30 percent of their net result, so they have a rather high dividend yield, thinks Jacobsson. They repurchase in order to obtain a more optimal capital structure, if they think that they have too low leverage and too much equity, and if they do not, in a

reasonable period of time, see that they can change it. An equity issue, for WM-data, would be feasible if and when they would get a too high financial risk and financial cost for a potential acquisition, or exceed earlier mentioned limits, says Petri. A repurchase would be interesting when they have a leverage that is so low that it would be inefficient, however this is very hypothetical, says Rickard Petri, because there exist so many interesting possibilities within their market.

Company X pays yearly dividends, and they have paid larger extra dividends five times over the last ten years, says Mr. X. They have a very strong balance sheet together with a very strict policy that tells them not to diversify their business, so they have a balance sheet and means to handle all the financing, acquisitions or loans that they need to do. If they end up with excess cash, which happens time and time again, their owners have decided that they will pay it back to them for the owners to diversify with themselves instead of doing it within the company. They do not repurchase or redeem stock. They have a special investor situation, where one owner has 60 percent of the company, and they can not and will not change that. They also have a problem with bad liquidity, so they have a rather small free float, thus they will minimize any action that will lower the free float. That factor results in that the only alternative they are left with is extra dividends, says Mr. X. Mr. X is aware of the problem and that it is not the most optimal, but on the other hand they do not have that big portion of international investors to create the problems you get with extra dividends instead of other actions, says Mr. X.

4.1.6 Do You Take Your Investors' Tax Rate into Consideration When Changing The Capital Structure?

Due to the fact that Autoliv makes yearly dividends and repurchases, Magnus Lindquist believes that they take into consideration the taxation of their investors when changing their leverage. Electrolux reflects over what effect a certain adjustment of the capital structure will have on their investors, says Björn Andersson. Roland Hagman thinks that Ericsson has so many different investors, many which do not pay tax on dividend and 50 percent are foreign investors, so it will be very difficult for them to make such judgments. At Ericsson they rather look for what is good for the company. Gambro does not explicitly consider their owners tax rate when changing their capital structure, but Granlöv means that they did it in their last situation when they used a redemption program instead of dividends, in order to shift out cash. It is not a big question for Getinge, says Hjalmarson. This type of decision is made with concern for their creditors, their growth plans, and their connection with their core banks, resulting in the present

covenants. Gunnebo has not made any dramatic changes in their leverage, so it has never been necessary to look at it from that perspective, thinks Torbjörn Olsson.

Hexagon does not consider the investors tax rate when changing their capital structure. Holmen has a wide spread of different investor classes, Almgren describes their current owners to be pension funds, institutions, both international and domestic, foundations, investment companies and private investors. The taxation of their owners varies and thus they have to look at the average investor, Almgren continues. They look at how their capital structure affects their owners in total, and if some specific owner is affected more unfavourably than others they have to take that into consideration, says Almgren. Normally it does not matter if they emit or repurchase stocks, or other similar adjustments, says Almgren. Hufvudstaden does not consider the investors tax rate when changing their capital structure. JM looks at their existing owner base and uses the appropriate method when they adjust their capital structure, according to Åkesson. Lindex uses the method that they think is the most tax effective for their owners, when transferring money to them. Andersson explains that with the recent redemption, they chose the specific payout method; due to that it was a winning situation for all of their investors. They take consideration to the investors' interests, collectively, says Andersson.

At SCA they do not consider their investors tax rate, according to Rydin. Scribona does not either consider their investors tax rate, according to Olsén. Skanska do not look at the leverage ratio per se, but they do to some extent discuss the tax situation of their owners when they plan on how to distribute means. That is however not what decides if they are going to pay out cash or not, but there are techniques that makes it as comfortable as possible for all involved, says Årling. One possibility is to issue a new type of equity followed by redemption, but they do not do it as advanced tax planning, Årling emphasize, they just use common sense. SKF believes that their consideration taken to their investor's taxation is only marginal. TietoEnator carries the discussion, but do not make any consideration of the tax rate of their investors in that situation. Bo Jacobsson can not remember that they made any such considerations. But if they pay any large extra dividends, then maybe, says Jacobsson. That is however not anything that they have done in the past or think about today. Rickard Petri at WM-data says that they do not make any such considerations explicitly, but it lies within the theoretical model. Mr. X at company X does not consider this topic, but they would if their owner situation were different. Then a program with a split, together with an extra redemption, is something that they would use, says Mr. X. They would let the stock trade a little, and let the redemption take place so and so, giving the foreign investors the ability to solve their tax problem. But it is not a

situation for company X at the moment, and they have asked their current foreign owners and they have not objected, say Mr. X.

4.1.7 Does Your Company Use Their Capital Structure Or Leverage Ratio for Signalling Purposes?

Magnus Lindquist is not familiar with the term signalling, but when explained to him he refers to a policy presented in the annual report. Electrolux do not use their capital structure for signalling purposes, says Björn Andersson. Ericsson has not had any signalling discussion. Gambro do not use their capital structure for signalling purposes, says Granlöv. Getinge do not actively signal anything with their leverage, but Hjalmarson thinks that they implicitly signal an attempt to return to normal and functional levels, if they increase their leverage. Torbjörn Olsson at Gunnebo thinks that it is something they look at continuously, due to their covenants and credit arrangement towards their banks. Håkan Halén at Hexagon does not use the leverage ratio for signalling purposes. Holmen does not use their capital structure for signalling, except the goals earlier mentioned, they work with the wide financial targets and do not adjust them very often, says Almgren. Magnus Jacobson at Hufvudstaden is not aware of the term “signalling” and they have not made any such considerations. JM do not use their capital structure for signalling purposes, they continuously work with optimization of their balance sheet, says Åkesson. If they find that they have a too strong balance sheet they shift out more money to their owners, they do not raise more debt.

Lindex do not use their capital structure or leverage for signalling, but Andersson talks about that the signalling effect, that they can honour their commitments, lays in their cash flow. At SCA, Rydin explains that they use their capital structure in their communication with the credit market, but he thinks that measures like cash flow in relation to debt are much more important measures. Measures as retained cash flow and funds operations divided by net debt are measures that the CRA uses when they apply their rating. Those measures are more important, Rydin thinks, because the leverage per se does not reveal any information about how much money they make in order to amortize and pay the interest cost on their loans. Olsén at Scribona is not familiar with the term signalling, “*It sounds like Morse code to me*” (Olsén 9 May 2006). Skanska does not work with the leverage ratio as a primary instrument for communicating with the market, says Årling, there are other factors that they look at, such as cash flow, equity and profitability targets. “*It is not the tail that wags the dog, but the opposite*” (Årling 10 May 2006). Årling however also says that they are very concerned about that their long term goals are clear and straightforwardly communicated to all stakeholders, to the stock market and to their creditors. SKF does not use their capital structure for

signalling purposes. TietoEnator does not use their capital structure for signalling purposes. Trelleborg does not use their capital structure for signalling purposes, it is a matter of how they look at their cash flows and their return ratios, says Jacobsson. They can not have a leverage that is too low, because then it is hard to reach their goal of return, says Jacobsson, so a certain leverage is necessary for them to reach their pay off ratios.

WM-data do not use their capital structure for signalling purposes, says Petri. At Company X they try to avoid talking about what leverage ratio they have, and if it is good or bad. The reason for this is that they do not want to raise any expectations of extra dividends. If analysts discount enormous dividends to their stock price, it will fall like a rock if they are not able to fulfil the expectations. This creates irregularities in their stock price, so they do not want the market to connect their capital structure or leverage ratio to their dividend policy, says Mr. X.

4.1.8 Do You Consider The Management's Flexibility When Changing The Leverage Ratio within Your Company?

Magnus Lindquist believes that they consider the manoeuvrability of the management when changing the capital structure, though a good investment can always be motivated. "*A good deal stands on its own merits*" (Lindquist 5 May 2006). Electrolux's strong balance sheet results in a greater flexibility for acquisitions, says Björn Andersson. An acquisition financed by external financing as bank loans etcetera takes longer time to raise than internal financing, therefore the stronger flexibility, says Björn. Ericsson definitely accounts for the manoeuvrability of the management when adjusting the capital structure, says Roland Hagman. Further Roland says that all the questions regarding their capital structure is handled in a finance committee, which is a sub-committee to the BoD. The corporate management only acts within the boundaries they get from the finance committee, Roland continues. Ericsson has boundaries for everything, and if they want to change the framework they must run that through the committee. This happens now and then, due to changes in business criteria.

Lars Granlöv at Gambro says that everything must be evaluated when it comes to investments and acquisitions, and within Gambro there is a policy on how much the management or CEO can decide upon, without asking the BoD. The limit, before a decision has to go through the BoD, is relatively low for Gambro. There are regulations on what documentation, what minimum pay off an investment must yield and so forth. The investment is then continuously reviewed, in order to

control the progress and results, and if it does not develop as expected they decide on which corrective action is necessary, Granlöv explains. Getinge believes that if they gear up the company, the manoeuvrability of the management, in the sense of trying to move the company in a certain direction, changes. But at the same time; *“one never gets the leverage you get if you do not have the board and the owners behind you”* (Hjalmarson 10 May 2006). At Gunnebo all investments have to be approved by the board, so they have an awareness of the issue, thinks Olsson. Even if the means are there, the management can not make any investments without the approval of the board, Olsson continues. Beyond that, they want big manoeuvrability for their board, to do medium size business, and that is what they are signalling by their one billion SEK of credit, says Olsson. According to Halén at Hexagon, they do not consider it, except that they need a big head room to continue expanding. They performed an equity issue of 2.7 billion SEK, which gave them bigger flexibility to expand, says Halén. The manoeuvrability of the management is considered and lays within Holmen’s choice of capital structure, says Almgren. At Hufvudstaden, there is a continuous discussion with the BoD on the financing and if they are about to sell, invest or acquire. It goes for all financing decisions, thinks Jacobson, and all larger investments have to be approved by the board.

JM is aware of the problem, and they think that they should have a moderate capital structure so they do not risk any stupid choices on behalf of the management. At the same time they say that it is always important to have an offensive balance sheet, even if they shift out money to the owners, so that they are able to make acquisitions if they have to, says Åkesson. At Lindex they consider the manoeuvrability of the management, but they do not think of it as a big problem, thinks Andersson. Andersson explains that his job as a CFO is to sustain enough cash for the CEO to be able to go through with the plans he desires. He continues to say that these plans are also presented to the BoD and the general annual meeting. Independent on if the form of the capital is cash or unused credit, the CEO always can make value destroying decisions. However the CEO has some limitations in his power of attorney, plus that they have internal regulations on how big investments the CEO can decide on without first running them through the board. Lindex has a restrictive governance system to prevent adverse situations, says Andersson. Rydin at SCA believes that their headroom is a part of their buffer against financial distress earlier mentioned. They want flexibility for the management to make loan financed acquisitions without asking the stock market to finance it with new equity, says Rydin.

At Scribona they have never taken the manoeuvrability of the management in consideration, in that sense, says Olsén. Skanska reasons in a similar way, that they want the management to be able to lead a functioning business. One strategic cornerstone, according to Årling, is that they have a sound balance sheet, with

different satisfying financial ratios. With its help they can then act in a professional way with manoeuvrability for the management. They gladly satisfy all their claimholders, but preferably over time, and that is why they need the manoeuvrability that a sound balance sheet will yield, together with a solid diversification and good business portfolio. Bertilsson at SKF believes that they do not consider the manoeuvrability of the management but rather the manoeuvrability for the company as a whole.

According to Björn Sandberg at TietoEnator this is something that they look at. He thinks that, due to the fact that they have had high growth and are still growing strongly through acquisitions, it is important that they have manoeuvrability. Due to that a major part of Trelleborg's growth is non organic, they reason around expansion possibilities, and their possibilities to finance such an expansion. This and their capital structure affects their manoeuvrability, so that is something that they consider, says Bo Jacobsson. WM-data thinks about these issues, it is never good to have an overcapitalized company, says Petri, just the opposite, it is always dangerous due to the fact that the management can destroy the money. Mr. X representing company X does not take that into consideration. With their marginal, their return on equity and working capital they have to be extremely careful not to purchase or do anything that will dilute their EBIT marginal. They are very careful, so management's flexibility is not an issue at X, says Mr. X.

4.1.9 How does Competition Affect your Capital Structure and do you Use your Capital Structure as a Competitive Advantage?

The business that they are in, believes Magnus Lindquist, affects their capital structure. They must be careful, especially in bad times, not to take on too much debt. On the second question he answers that in their industry they have a better capital structure and less financial problem than their competitors, therefore they can say that they use their capital structure as a competitive advantage. At Electrolux they do not consider how competition affect their capital structure, neither do they think that their own capital structure is used as a competitive advantage, says Björn Andersson. Roland Hagman at Ericsson does not think that competition affect Ericsson's capital structure, he rather thinks that it is their total capital binding that is affected. He describes a situation were due to the tough competition they must hold an investment or a project in the balance sheet longer than necessary. Ericsson does not use their capital structure as a competitive advantage but Roland Hagman adds that it might have an effect indirectly, due to that their relationship with their customers reaches over long time and it is positive for them that Ericsson has a solidity of nearly 50 percent and strong

finance. Gambro has, compared to their competitors, one of the strongest balance sheets in their business, giving them the manoeuvrability they need, so they have not really felt the need to discuss the topic, according to Granlöv. In the short term, if they feel like it, they could compete with other companies, but it is not how they work, according to Granlöv. *“We compete on operational terms”* (Granlöv 9 May 2006).

At Getinge they do not think that competitors, in the meaning that they exist, affect their capital structure. Hjalmarson says that they focus more on their achievements, generally more on their income statement, than on their balance sheet. He continues to say that if they feel like, and have the opportunity, they acquire other companies, and that fact is a competitive advantage against their competitors. Gunnebo does not look at competitors in that aspect; the most important thing for them is that they have sound enough finances to maintain their business. Furthermore, Olsson thinks that they do not use their own capital structure as a competitive advantage, besides that *“one has to be a solid company to be able to compete on the market”* (Olsson 8 May 2006). Hexagon does not look at how their competitors affect their capital structure, neither do they use their own capital structure as a competitive advantage, except maybe for the fact that their subsidiaries are not allowed to raise debt by themselves. The subsidiaries debt is raised centrally by Håkan Halén, and that will possibly give them a better bargaining position vis-à-vis their creditors than their competitors, says Halén. Almgren thinks that they are aware of how their competitors are financed, but they do not think that the choice of capital structure is a solid competitive advantage, *“everyone can mimic it”* (Almgren 2005-05-03).

At Hufvudstaden they do not look at their competitors' capital structure. They also think that due to their own financial stability, especially their real estates, and when looking over a longer period of time, they have an ability to do better business and thereby have a competitive advantage. JM does some benchmarking against their competitors, but Åkesson explains that they conduct such a thoroughly analyze of their own business that they do not think that it effects their capital structure. On the other hand, their strong balance sheet has worked as a competitive advantage against competition, think Åkesson. Lindex mostly look at their own figures, but occasionally they can benchmark against their competitors to see what capital structure is average for the merchant business, says Andersson. But due to their present situation, they do not do that often. They further do not use their own capital structure as a competitive advantage, except from the fact that they are financially strong, thinks Andersson. If there were to be a general decline in the business cycle, then they think that they, due to their non-existing leverage, would cope with it better than their competitors, Andersson continues. But they do not use it to compete through pricing etcetera.

At SCA they do not look at their competitors, they are of minor importance, says Rydin. Likewise they do not use their capital structure to compete. Scribona does not look at their competitors' capital structure, and they do not understand how it has anything to do with financing decisions, according to Olsén. Neither do they use their own capital structure as a competitive advantage. Anders Årling at Skanska says that they look very little at competing companies; he describes Skanska's competitive advantage to be their structured business policy, connected with their financial ratios and very strong financial resources. This is a very clear competitive advantage, both domestically and internationally, that they communicate to their customers, says Årling. They are uninterested in price competition because they do not work in volumes. A key factor to get the contracts that Skanska gets is to have the competence and to have endurance as a company, there seldom are any competitors that can compete and deliver the kind of deals that Skanska can, says Årling. Anders Årling gives an example involving a gigantic construction of a bridge, in these situations the customer must know that Skanska can first build a complicated project and second that they will exist as a company during the whole project. Endurance is something that they communicate more than their competitors, Årling sums up.

At SKF they do not consider competition to be of great importance when deciding on alterations of the capital structure, but it affects their operative leverage says Bertilsson. The degree of competition can worsen, and then also with worsened results, and this can, indirectly, affect the capital structure, believes Bertilsson. Further he does not believe that SKF uses their own capital structure in that way, but a strong financial position is a competitive advantage, through the fact that customers strive to do business with stable and financial strong companies. At TietoEnator they think that their competitors' balance sheets indirectly affect their capital structure, they expose their owners to more risk, as long as they are active in an industry as homogenous as the one they are in, says Sandberg. Furthermore he thinks that they indirectly use their capital structure as a mean to compete, this because they have a strong cash flow and a strong balance sheet, which results in the ability to make acquisitions continuously. Bo Jacobsson believes that the competition for Trelleborg is when they compete about acquisitions, and then it is more with private equity competitors than industrial. Private equity competitors, due to their much higher leverage possibilities, can be much more aggressive in their pricing than Trelleborg, says Jacobsson. Often Trelleborg has synergies with their industrial business, but the private equity firms has a much higher leverage, but also a higher risk. He also believes that Trelleborg have a somewhat higher leverage than the Swedish average, but compared to international actors, they still have a very reasonable capital structure. *"An optimal capital structure is still a competitive advantage towards the ones that do not have one"* (Jacobsson 8 May 2006).

There is a possible indirect affect on their capital structure, thinks Petri at WM-data. They have discussed it occasionally in the board, but only occasionally, he emphases. They do not use their own capital structure as a competitive advantage. Company X does not take it into consideration. Neither do they consider the second part of the question, except that a strong balance sheet gives them the position so that they can act almost as they like. They do not suffer from any financial restrictions, which further emphases the last sentence, so from that perspective it is a competitive advantage, says Mr. X.

5 ANALYSIS

In this fifth section we evaluate the theories based on the information from the empery. We will analyze each theory against the complete empery material, respectively. Furthermore we will examine if the empery can explain some of the five theories and if there are patterns that will help us in answer our question.

5.1 The Trade-Off Theory Perspective

In order for the trade-off theory to be applicable firms must have an optimal capital structure target, or at least a target ratio (Ogden *et al* 2002). Almost four fifths of the companies we have observed shows evidence of having an optimal capital structure target. This is in accordance with the results from the study by Ghosh and Cai (1999) where they showed that almost all of their examined companies, in all industries, had an optimal capital structure target. The majority of the companies do not look at capital structure as an explicit measurement; rather they use measures that they consider better reveal their current financial position, as certain solidity ratios and net debt over EBITDA, measures that CRA:s uses in there evaluation of companies.

The fact that not one of the CFO:s or Executives mentioned tax benefit of debt or the value of the tax shields when talking about their leverage, is something that strongly speaks against the trade-off theory. This is however also in accordance with the survey by Graham and Harvey (2001), where they found that the CFO:s consideration of the tax benefit of debt only is marginally important when deciding on capital structure. This is remarkable for several reasons, the main being that the value of the tax benefit of debt is on average 9.7 percent of firm value (*ibid.*). The simple logic behind the trade-off theory is finding the equilibrium between the marginal tax benefit of debt and the cost of financial future distress (Ogden *et al* 2002). When one of the factors, in this case the tax benefit of debt, is not factored into the equation, the empirical evidence in favour of the trade-off theory drastically lessens.

What we have seen is that the companies' opinion of optimal capital structure differs among the companies, which is in accordance with the results from a study of Ogden *et al* (2002), showing that for every firm there exist an optimal capital structure, and that it differs across firms.

The study by Graham and Harvey (2001) implies that firms will issue foreign debt when the foreign tax treatment is more favourable than the domestic, is not what we can deduct from the answers in the interviews. Our survey rather supports the report made by Brouen *et al*, (2006), where they show that issuing foreign debt in response to tax benefits is of minor importance. Instead the reason for raising foreign debt seems to be rather that the domestic market does not contain enough money that the companies need, or that they want to create a sort of hedge against exchange rate risks from the cash flows yielded from foreign assets. Some say that the international credit market is more effective, some say that is not.

Approximately half of the companies stated that they take the manoeuvrability of the management into consideration when altering their capital structure. We did however not find anything that confirms the modulation by Jung, Kim and Stultz (1996) that focuses on agency cost of debt and the disciplining role of debt for managers. It seems as though the CFO:s, if they take the managers manoeuvrability into consideration, they use internal regulations, such as approval from the BoD, instead of debt to prevent the managers from value destroying activities towards the owners. The impression we got is that they interpreted the question so that they will act in favour of the management in order for them to gain more flexibility. They are more focused on the importance of a strong balance sheet than restrictive actions towards the management. This further emphasises the fact that they do not consider the leverage decision as being a way to protect corporate value.

When it comes to financing decisions it is hard to see any real connection to the trade-off theory, many of the companies that does not have a large cash position are forced to use debt, and lastly they will chose equity, evidence supporting the pecking order model (Myers & Majluf 1984) rather than the trade-off theory. Only a limited number of our companies are concerned with how the financing of the investment or acquisition affect their capital structure, which is remarkable when the majority actually have an optimal capital structure target or target ratio.

Approximately one third of the companies which explicitly or implicitly stated that they had an optimal leverage ratio, mentioned risk profile as a concern when changing their leverage, and one respondent mentioned cost of financial distress. This is in line with what Graham and Harvey (2001) found in their study, where they found that managers were concerned about credit ratings. This finding is also in line with the trade-off theory, with regards to the firms considering financial distress costs. Not one of the managers do however mention the financial distress costs as an important factor when altering their capital structure, the credit rating issue is more of a general consideration throughout the companies. And a majority does not mention them at all.

Furthermore, approximately 35 percent of the companies that had an optimal capital structure ratio said that the target was set due to restrictive covenants from their creditors. It is worth noticing that covenants are the final security limit for these companies, they can of course have internal governance systems that guide their action within the limit range.

Explicitly we can not say that the majority of the companies do not consider financial distress, because many respondents describe that they use earnings and cash flow based numbers to measure their financial status. This can possibly be seen as a way to be observant of the signs of the first stage of financial distress, which is when cash flows from the firm are not sufficient to fulfil its obligations (Ogden *et al*, 2002).

Many of the managers also speak of their strong balance sheet as a way of doing business and that it is a competitive advantage due to the fact that customers prefer to do business with financially stable companies. This can be interpreted as the firms' awareness of deadweight costs; not by its actual name but it still has the same pattern. What it does not have is the reasoning about the loss of the value of the tax shield (*ibid.*).

Despite that many of the interviewed CFO:s does not think that they have an optimal target range or optimal capital structure, their answers point in the opposite direction. When the managers describe their reasons for paying dividends, repurchasing shares etcetera, more than a few state that they make these adjustments in order to maintain their capital structure. Furthermore, approximately two fifths of the companies consider their investors' tax situation when adjusting their leverage and deciding on how they shall distribute means to investors, something that could be interpreted as signs pointing in the direction of the Miller equilibrium.

In summary, what is revealed in this survey with regards to the trade-off theory is that a majority of the respondents do not recognize all of the issues underlying the theory; we do however find empirical evidence both for and against the theory. Approximately 80 percent of the companies have some kind of optimal capital structure target, or at least a target ratio. Not one of the companies seems to consider the tax benefit of debt or the value of the tax shield, or even mentions anything that points in that direction. We found that the companies do not issue foreign debt in order to benefit from favourable tax treatment. Awareness of financial distress is evident; though the factor is of minor importance when determining capital structure.

5.2 The Pecking Order Perspective

When deciding on if to take on new debt, the most important consideration is the price of the debt, which in the case of the respondents seem to be the interest rate. One thing that speaks in favour of the pecking order model here is that several respondents say that they raise debt when their cash position is not sufficient, or answer that they do not raise debt because they have enough cash to do business.

One of the theoretical underpinnings of the pecking order model is that for the model to work, the firm cannot have target ratio for its capital structure (Ogden *et al.*, 2002). This is because the financing hierarchy will determine the capital structure when new financing is needed. This means that our finding that four fifths of the respondents have some sort of optimal capital structure target ratio speaks to the models disadvantage. However, as Quan (2002) suggests, a target ratio does not necessarily have to discredit the pecking order model altogether. As we will see further down in the analysis, this is to be observed in the empirical data of this study. Also, the fact that four fifths have a target ratio is something we learned from the deeper discussions with the respondent, far less actually answered that they had a target. Many of the interviewed companies said that they do not have an optimal target, but obey by the guidelines issued by the CRA:s to fit their desired rating, which effectively is more or less the same thing. It is also evident that most of the interviewees in the companies with stated capital structure targets simply look at the income statement when deciding on financing. This is because they seem to consider debt more costly than equity. No matter how you reason, this means that they do not consider any costs besides the actual interest rate, and that clearly speaks against the pecking order model. There is however other examples, when the respondents consider equity to be much more costly than debt, so we can not say that the model falls with this reasoning, almost half of the interviewees seem to consider not just the explicit costs, and that speaks for the pecking order model. Furthermore, some of the respondents say that they have ceilings for their leverage, but below that, they do not have an optimal point. This leaves room for a financial ordering based on the total cost of the mean, including informational asymmetry costs.

When it comes to the firms' financing, just over half of the respondents say that they prefer to finance new projects with cash. With larger projects, almost all finances with some sort of debt. Only in cases when the leverage is too high do they turn to equity financing. These results speak strongly in favour of the financing hierarchy of the pecking order model. It is not clear from an initial look what the reasons for this ordering are. The reasons seem to vary. Some say that they tailor their financing to fit their capital structure and current leverage. There are however examples of respondents discussing the relative costs of financing

sources as a hierarchy that fits the model. Since most of the respondents claim to have very strong balance sheets at the moment, this can then be an explanation for the overwhelming support for cash and debt financing. Maybe the answers would have been different in times when their leverage was higher. Some say however that they prefer to use cash as far as possible, due to its easy accessibility. This flexibility argument is one that also favours the pecking order model. The fact that the ordering may be determined by the companies' current leverage speaks against. What further speak against the model is that no company seems to have any problems with turning to the stock market when needing to raise financing.

When discussing dividends and equity issues, it is clear that most respondents prefer to have some financial slack, and would rather keep cash in the company for future investments than to pay it out to the owners or the creditors. This is perfectly in line with the reasoning in the pecking order model. Some do this more just in case they will find interesting investments; some companies have some sort of liquidity measure. In both cases, we interpret that as a way to mitigate any potential underinvestment problems or in line with the fundamentals of the model in any case. Almost half of the respondents mention that the investment decision comes before the financing decision, that is, the financing is contingent on attractive investment opportunities. This is something that the model does not recognise, and therefore has no explanation within the pecking order model.

The question of management's flexibility in being able to make decisions is one of the most important factors underlying the pecking order model. Even though most of the respondents say that it is important with flexibility, thus strengthening the pecking order explanation, the most important factor seems to be the actual investments that the company needs the flexibility to finance. There seems to be a strong belief that management always makes the right choice for the company and its owners, it is almost assumed in the respondents' answers. There is however an overwhelming support that cash is more flexible than debt, which is in turn more flexible than equity, also in line with the financing hierarchy of the pecking order model. Furthermore, the respondents seem to view the restrictions on flexibility to come from decisions that has to go through a finance committee or the BoD, rather than relative cost of financing alternative. The companies do however aim for the most flexibility when the decision has been approved by the BoD or committee. The financial slack for flexibility, as coherent with the pecking order model, is also sometimes in some companies used as a cushion for future costs of financial distress, so the financial slack can speak both for and against the model, depending on the underlying reason for keeping it.

In summary, the thing in the interviews that mostly speaks against the pecking order model is the fact that most respondents have some sort of optimal leverage ratio that they try to adjust to in the long run, something that is irreconcilable with

the rationale that the relative financing cost decides the capital structure. Another thing is that the investment decision often comes before the financing decision, and is governed by it, something that the model does not treat. The strongest evidence for the pecking order model we found is that almost all companies adhere to the financing hierarchy. However, the reason for this may not be the relative costs of informational asymmetries, as the theories state. Another support for the model is that firms prefer to keep some financial slack, and consider their flexibility to be of great importance, something that is in line with the model.

5.3 The Signalling Model Perspective

To start with we must recognise, based on the interviews we have conducted, that there seems to be a widespread misunderstanding regarding how the term signalling is understood by the respondents. Actually, about 15 percent of the interviewees had not heard the term signalling. This in turn begs the question if the others knew the term, or gave us general answers on what they thought it meant. The risk here is that they have answered not the actual question, but their understanding of it. In retrospect we have concluded that it would have been more appropriate to talk about communication rather than signalling with the respondents. The reader is hereby advised to have this in mind when reading the analysis.

According to our results, only one tenth of the respondents say that they use their capital structure as a signalling tool. A tendency that we have seen is that the companies, rather than using their leverage as a mean of signalling, signals their financial strength and true value through bottom line measurements such as net debt to EBITDA. No matter what the interviewees actually respond, we found patterns here that at least partially support the signalling theories.

Nearly four fifths of the respondents finance new projects and acquisitions through internal cash or retained earnings. These results are in accordance with the study by Leland and Pyle (1977), and their findings on how a company can signal its true value. By financing projects and investments with retained earnings the companies stand to lose its own capital. The fact that they are willing to bear this risk speaks to the fact that they strongly believe in the investment, and that is then also the signal that they will send to their stakeholders.

Approximately one third of the firms repurchase equity, and they do this at times when they feel their leverage is too low. This is in line with Miller and Rock (1985), who concludes that the ability to repurchase or pay dividends is a way to signal the firms' strong financial standing.

A promise to continuously pay dividends signals that the company will have a strong enough cash flow to uphold the yearly payouts. Almost all companies in the study pay yearly dividends, with the exception of one, who responds that they do not have a strong enough bottom line to finance dividends. This is also in accordance with Miller and Rock (1985), and their theories on signalling through dividends and repurchases.

There is a possibility though for bad firms to mimic the actions of good ones and their dividend policy thereby signalling a false value that is higher than the actual. This can be mitigated by paying a high enough dividend so that the bad companies can not afford to mimic them (Bhattacharya 1979). This is however hard for us to distinguish, and we can therefore not judge the fairness in each companies dividend level.

Furthermore, nearly half of the respondents say that they look at restrictive covenants and the evaluations by CRA:s when they set their capital structure. This can be interpreted in line with the signalling reasoning, as a sound company can adhere to strict covenants, and a worse can not.

5.4 The Product-Market Competition Perspective

Regarding the interviewed financial executives' views on if they use their companies' capital structure for competitive purposes, about two fifths said that they do not do that. Furthermore, one fourth of these respondents could not see the relevance in the question, and added that capital structure could not be used in such a way. This possible speaks against McGee and Telser, who argued that companies do use their capital structures as means of competition (Poitevin 1989).

The other three fifths argued that they do use it for competitive purposes in some sense, mainly through having sound finances and a strong balance sheet. This is possibly a factor that can support the product-market competition models, that a company with a strong balance sheet, and a high degree of internal financing, is more flexible, and therefore more adept to competition.

A few of the interviewees argue that they through their low leverage better could handle a cyclical downturn than their competition. This is in line with Poitevin's (1989) findings that companies with high leverage are more sensitive to cyclical downturns and therefore worse of in terms of competitive position. We do however not find any evidence that the companies use their lower leverage to compete with their competitors, even though this may be the case in worse times.

It is hard to draw the analysis deeper than that at this point without too much subjective reasoning. This is because the theories presuppose a more thorough analysis of the competitive situation in and between all companies and their industries. It is therefore also difficult to show if established companies push out new entrants from industries.

Approximately half of the respondents did not have any opinion on how and if competition was mirrored in their capital structure. Around one fifth said that it did not affect their capital structure at all, and one fourth of these did not think that they had any real competition within their industry. The rest of the interviewees said that competition had affect on their capital structure, but were rather vague on how, and for different reasons.

Through the question on the flexibility of the management we found that half of the companies weighed in the management's ability to do business, its general flexibility and in some instances the presence of means when making capital structure decisions. This, in combination with the fact that most companies in this study finance their investment and projects through internal means, are in line with the reasoning behind product-market competition models.

5.5 The Market Timing Perspective

Not one of the respondents says that they finance new investments and projects through equity issues if they are overvalued in the market. This is rather remarkable and contradictory to the findings of Lucas and McDonald (1990) who concludes that companies aided by private information, issue equity when they feel that they are overvalued in the market.

Five percent of the companies say that the repurchase when they are overvalued. This also speaks against the market timing hypothesis, which states that is should be the other way around, that is, repurchases are maid when the firms feels that its shares are valued too low in the market. This is also what common sense leads us to believe. One third of the respondents do however state that they repurchase, but not because they want to time a low valuation in the market, but because they want to adjust their capital structure. This reasoning is however nothing we will connect to the theory due to its logical inconsistency, but we add it to the discussion because it is very much worth noticing.

When the interviewees take on new loans, around 60 percent state that the price of debt and the total borrowing cost is the most important factor. This means that for them, the market conditions are the most important consideration through how

high the interest rates are at the moment. This is in line with the market timing hypothesis, that a company takes on new loans when the timing is most favourable. This conclusion is however very naïve, because it should be obvious that a firm chooses to take on new debt when debt is least costly. One of the respondents said that his company tried to time the market, in the sense that they choose the financing based on what is most favourable at the time, debt or equity.

6 DISCUSSION

In the sixth section of the thesis we will present our findings from the analysis and discuss what is the purpose of this study, namely what reasoning lies behind the capital structure decisions in firms.

6.1 Initial Findings

The first thing we notice when analysing the answers through the different theoretical perspectives is that none of the theories explain capital structure decisions. There are of course some pieces of the theories that fit some part of the interviewees' answers, but then there are even more that does not fit. If you look at the different theories, you will soon see a pattern evolving. All theories claim to explain capital structure decisions making, and if used as a guidebook on how to set an optimal capital structure, they probably will. But herein lays the fundamental flaw with the five prevailing theories we have covered. They are normative in nature. Each theory claim to have found the key that opens the secret of creating the best possible capital structure in any given situation. But they do not explain why companies make capital structure decisions in the way that they do, at least not completely.

There are however a lot of useful information and concepts in the theories. Companies think about cost of future financial distress in some way, they consider internal means to provide flexibility they try to take on debt when interest rates are down, they use their strong balance sheets to convey reliability to its stakeholders, and in adverse times they can use a strong capital structure for competitive purposes. All theories fit, but there are two fundamental flaws with this theoretical fit. The first is that only parts of the theories are used and proven, and the second is that the theories do still not explain why the capital structure decisions are made in the manner they are. We therefore conclude that the key to understanding what lays behind capital structure decisions is to use the parts of the theories that do fit in conjunction with the interviewees' answers and determine a set of factors that are common to most respondents, because this was also a problem. When we concluded our analyses we had a lot of information left, a lot of answers that did not fit any of the theories. According to us, this information is part of the key to answering our questions, along with the theories.

For the above stated reasons, we have constructed a set of hypotheses, based on the analyses in the previous chapter and the empirical material. For each hypothesis, we provide reasons and rationales. The hypotheses will be rather general in nature, and tests have to be constructed for each hypothesis separately. For the hypotheses that critique the theories, we have chosen to go into rather great detail. This renders a large number of sub-hypotheses to the main theory-critiquing hypothesis, and can seem overzealous to the reader. We have opted to do this anyway, because it highlights the shortcomings of the theories' ability to explain practice. Another reason is that the vast theoretical portion of this thesis enables and compels us to state all these hypotheses.

6.1.1 Hypothesis 1: “The capital structure theories are too normative, and do not accurately reflect how capital structure decisions are made in companies”

As we stated in the beginning of this chapter, the theories' major concern is how a company optimally should choose its target capital structure. Even before making an analysis of discussing our findings, we can conclude that five different and sometimes mutually exclusive theories can not accomplish this. Our conclusion is therefore that no single theory does this.

As we can observe from the interviewees responses to our questions, there is not one manager who follows one of the theories presented in our paper. Bits and pieces of the theories fit the factors that the managers describe as being important when making capital structure decisions, but they do not explain the choices fully, nor do they address the underlying reasoning behind the choices. This does not mean that there is no use for the theories, but it does mean that they fit practice so poorly so that they according to us do not say much about how decisions are made in companies.

6.1.2 Hypothesis 2: “The capital structure theories address mere factors in capital structure decisions, and not the actual reasoning behind these factors”

The shortcomings of the theories explaining the reasoning is best expressed through examples of when theory does not match practice, and when theory can be outright misleading. This hypothesis is therefore broken down into sub-hypotheses.

6.1.2.1 Hypothesis 2a: “Firms do not use their capital structure mainly for signalling purposes, the conveyance of information is more of a by-product”

If we take the signalling model as an example, the theory states that a company can signal its true values through different actions that affect the company's capital structure. If a company feels that it is overvalued in the market, it can issue new equity, and this will convey the information to the stock market. Even though our respondents say that they issue equity under favourable conditions, the reason is that it is favourable to do so at that point in time, not that they wish their share price to fall. The subtle difference here is that even though the issue might be interpreted by the market as overvaluation, and the response will be a lowered price, the rationale behind the actual decisions is slightly another. The theory does therefore explain what happens in the market, and how the signal is interpreted, but not why the capital structure decisions are made. This hypothesis of course favours the market timing hypothesis over the signalling model.

6.1.2.2 Hypothesis 2b: “Companies do try to time the market, but the capital structure is not explained by market timing”

As we brought forward in the previous hypothesis, companies issue equity and debt when the market conditions are the most favourable. There are however several factors that limit the amount of debt and equity the companies can take on, such as covenants and credit ratings, but also the decision to take on new financing is not governed by market conditions. A company will not take on debt just because the interest rate is low, or issue equity because the market conditions are more favourable at that point in time. At least not in the companies we have surveyed. The investment decision comes first, and then most of the companies use internal means or existing lines of credit. First thereafter can the decision to take on alternate financing be discussed.

6.1.2.3 Hypothesis 2c: “The financing hierarchy costs in the pecking-order model is not based on relative costs of informational asymmetries”

Another example is from the financial hierarchy in the pecking-order model. From our interviews we can safely conclude that the hierarchy as an order holds. Managers consider internal means to be cheaper and easier to use than external, and debt to be cheaper and easier to use as financing than equity. The theory, however, states that the reason for the cost differences is the degree of informational asymmetry in the financing source. This is something that the interviewed managers do not consider. They instead think of the costs in terms of hurdle rates that they have to pay to the stakeholders, that include both the interest rate costs, dividends, and one-time costs for facilitating the financing.

6.1.2.4 Hypothesis 2d: “Companies are concerned very little or not at all with tax benefits of debt when deciding on altering their capital structure”

According to us, this is one of the more remarkable findings in this survey. We do not say that tax benefits of debt is not important in companies, but since we are interested in reasoning and rationale, we have to state this hypothesis, since not one of the financial executives we interviewed mentioned this at any point in the interview. If it is so, and tax benefit of debt is weighed in elsewhere in the company than in the capital structure decisions, the entire theoretical base for the traditional trade-off theory disappears. We are however not willing to go so far as to deem the theory useless, but instead leave it up to future tests to examine the hypothesis.

6.1.2.5 Hypothesis 2e: “Companies do not intentionally use their capital structure as a mean to compete”

Almost all of the respondents say that they do not use their capital structure for competitive or predatory actions, and many have never thought about it. The ones who do state that they do it seem to think of a strong balance sheet as a deterrent for the competition, rather than direct competition. We argue that the answers might have been slightly different if we had conducted this study in a downturn in the economy, maybe then companies with very low leverage would engage in predatory actions, but they do not consider that now, and they state that if they do

have a strong balance sheet, it will enable them to prevail in a downturn, not pray on the competition. Since it once again is the reasoning behind capital structure decisions we are interested in, we must conclude that from this perspective and in today's market, the theory fails to explain why capital structure decisions are made, and what it results in.

6.1.2.6 Hypothesis 2f: "Companies do take on foreign debt, but not because tax conditions are favourable"

When asked if they take on foreign debt, many of the managers answer yes. This is however not for the tax benefit reason that the theory states, but for several other reasons. Some say that they take on foreign debt for hedging purposes, some to match assets, and still some because they use it for strategic business purposes. Some also do it because the Swedish credit market is too small for their financing needs. A few respondents state that they take on foreign debt because the interest rates are lower. The violation of international interest rate parity would be interesting to explore, but we have chosen not to do that in this thesis.

6.1.2.7 Hypothesis 2g: "The managers' manoeuvrability is not limited through capital structure decisions"

The respondents state that they are concerned with the flexibility and manoeuvrability of the management, but they do not use the capital structure to limit and control it. Instead, they either have to take large investments through the BoD or through a financing committee for approval. The headroom is therefore unaffected by the capital structure, and more debt will not further limit the managers' flexibility.

6.1.2.8 Hypothesis 2h: "Companies consider their investors' tax situation, but do not cater to different investor groups"

When paying dividends or repurchasing shares, the companies consider their investors tax rates, but they do not think about what investor groups to target with different types of securities. Instead they consider it in the context of what is the most tax beneficial way to distribute money to the investors. Because of the ex post nature of this, it is not really a capital structure decision, and therefore not relevant as a capital structure theory.

6.1.3 Hypothesis 3: “When choosing a target capital structure, companies are concerned with covenants”

This hypothesis comes from our discussions with the respondents and from the financial distress cost thinking in the traditional trade-off theory. There is also the question of optimality, which prevails through these considerations. When asked if there exist target capital structure ratios within the firms, many managers answer that they do not reason that way anymore. They instead say that the leverage is too high when the covenants say it is. There is a maximum limit, and the question of leveraging up therefore becomes obsolete above this limit.

6.1.4 Hypothesis 4: “When choosing a target capital structure, companies are concerned with credit ratings and cash-flow measures”

The managers furthermore state that they are less concerned with the traditional debt to equity measure and more concerned with cash-flow based measures. The reason behind this is that these are the measures that credit rating agencies look at when determining the companies’ credit rating. And credit rating seems to be the thing that companies’ look at and tries to benchmark against. This is therefore the reason behind many of the capital structure decisions made in companies today. The ultimate rationale is to provide a stable company that minimises the interest rates and becomes attractive to investors.

6.1.5 Hypothesis 5: “Interest rates are important when companies decide to take on new debt”

Almost all of the respondents state that interest rates and the conditions for the rates are the most important factor when deciding on if to finance with debt or not. This specific cost is not directly mirrored in any of the theories, but seems to be very important when companies make capital structure decisions.

6.1.6 Hypothesis 6: “Strategic considerations are important when taking on new financing”

Many of the respondents say that they want the capital structure to fit the strategy. They want to be able to fulfil the strategy and the projects that they have taken on, and therefore have access to as much capital as they think that they will need to support the strategic direction or project at conception.

6.1.7 Hypothesis 7: “The choice of financing, and therefore capital structure, follows the investment decision”

Many of the interviewees say that they firstly decide on an investment, and then decide on the mean of financing. The financing then depends on if it is a large or small investment, what the interest rates are at the moment, and how much cash the company has internally. Should it be an interesting enough investment, many respondents state they do not have any problems with turning to the stock market for money in an equity issue.

6.1.8 Hypothesis 8: “When choosing a capital structure, companies are concerned with flexibility”

This hypothesis has already been analysed somewhat, but it is such an important one that it has to stand on its own as well. Both the flexibility of the management to make decisions and the flexibility of the entire company to be able to fulfil its strategy and started projects are very important considerations when making capital structure decisions. That is why companies try to maintain financial slack and have credit arrangements made in advance.

These nine hypotheses are the ones that we deem to be the most important ones. There are others that could be deducted from the empirical material, but mostly ones that are in line with the reasoning of the ones already stated. In the next section, we will briefly summarise these conclusions answer the question on what lies behind capital structure decisions, and to see how well the prevailing theories fit the answers.

7 CONCLUSIONS

In this the seventh and final chapter, we will present our conclusions.

From our analysis and discussion we can clearly see that the theories fit practice rather poorly. Although some points are made by each and every theory, the most parts of the theories state normative factors that do not accurately describe how capital structure decisions are made. We have arrived in a number of hypotheses and sub-hypotheses, which are explained in the last section. These hypotheses provide the answers to our questions and purpose. More precisely, they answer the question on what lies behind capital structure decisions, and how well the prevailing theories fit the answers. The hypotheses are:

Hypothesis 1: “The capital structure theories are too normative, and do not accurately reflect how capital structure decisions are made in companies”

Hypothesis 2: “The capital structure theories address mere factors in capital structure decisions, and not the actual reasoning behind these factors”

Hypothesis 2a: “Firms do not use their capital structure mainly for signalling purposes, the conveyance of information is more of a by-product”

Hypothesis 2b: “Companies do try to time the market, but the capital structure is not explained by market timing”

Hypothesis 2c: “The financing hierarchy costs in the pecking-order model is not based on relative costs of informational asymmetries”

Hypothesis 2d: “Companies are concerned very little or not at all with tax benefits of debt when deciding on altering their capital structure”

Hypothesis 2e: “Companies do not intentionally use their capital structure as a mean to compete”

Hypothesis 2f: “Companies do take on foreign debt, but not because tax conditions are favourable”

Hypothesis 2g: “The managers’ manoeuvrability is not limited through capital structure decisions”

Hypothesis 2h: “Companies consider their investors’ tax situation, but do not cater to different investor groups

Hypothesis 3: “When choosing a target capital structure, companies are concerned with covenants”

Hypothesis 4: “When choosing a target capital structure, companies are concerned with credit ratings and cash-flow measures”

Hypothesis 5: “Interest rates are important when companies decide to take on new debt”

Hypothesis 6: “Strategic considerations are important when taking on new financing”

Hypothesis 7: “The choice of financing, and therefore capital structure, follows the investment decision”

Hypothesis 8: “When choosing a capital structure, companies are concerned with flexibility”

It would be very interesting to see further tests on these hypotheses, either combined or separately, and hope that they will contribute to the evolution of the research field in capital structure decisions from a normative one to an explaining one.

8 REFERENCES

8.1 Published Sources

- Andersson, Ib (1998) "Den uppenbara verkligheten – Val av samhällsvetenskaplig metod", *Studentlitteratur*.
- Andrade, Gregor & Kaplan, Steven N. (1998) "How Costly is Financial (not Economic) distress? Evidence from Highly Levered Transactions that Became Distressed". *The Journal of Finance*. Vol. 53 (5).
- Bagle, C. N. & Ghosh D. K. & Yaari, U. (1998) "Pecking Order as a Dynamic Leverage Theory". *The European Journal of Finance*. Vol. 4.
- Baker, Malcolm & Wurgler, Jeffrey (2002) "Market Timing and Capital Structure". *The Journal of Finance*. Vol. 57 (1).
- Baskin, Jonathan (1989) "An Empirical Investigation of the Pecking-Order Hypothesis". *Financial Management*. Vol. 18 (1)
- Baumol, William J. & Malkiel, Burton G (1967) "The Firm's Optimal Debt-Equity Combination and the Cost of Capital". *The Quarterly Journal of Economics*. Vol. 81 (4).
- Baumol, William J. & Tobin, James (1989) "The Optimal Cash Balance Proposition: Maurice Allais' priority". *Journal of Economic Literature*. Vol. 27 (3).
- Bernhardt, Dan & Leblanc, Greg (1995) "Direct Revelation versus Signalling". *The Canadian Journal of Economics*. Vol. 28 (4a).
- Bhattacharya, Sudipto (1979) "Imperfect Information, Dividend Policy, and The Bird in the Hand Fallacy". *The Bell Journal of Economics*. Vol. 10 (1)
- Bolton, Patrick & Sharfstein, David S. (1996) "Optimal Debt Structure and the Number of Creditors". *The Journal of Political Economy*. Vol. 104 (1).
- Bradley, Michael & Jarrell, Gregg A. & Kim, Han (1984) "On the Existence of an Optimal Capital Structure: Theory and Evidence". *The Journal of Finance*. Vol. 39 (3).
- Branch, Ben (2002) "The Costs of Bankruptcy: A Review". *International Review of Financial Analysis*. Vol. 11 (2).
- Brennan, Michael J. & Schwartz, Eduardo S. (1984) "Optimal Financial Policy and Firm Valuation". *The Journal of Finance*. Vol. 39 (3).
- Brouen, Dirk & de Jong, Abe & Koedijk Kees (2005) "Capital Structure Policies in Europe: Survey Evidence". *Journal of Banking and Finance*. Vol. 30.

- Butler, Alexander W. & Grullon, Gustavo & Weston, James P. (2005) "Can Managers Forecast Aggregate Market Returns? ". *The Journal of Finance*. Vol. 60 (2).
- Cai, Francis & Ghosh, Arvin (2003) "Tests of Capital Structure Theory: A Binomial Approach". *Journal of Business and Economic Studies*. Vol. 9 (2).
- Chevalier, Judith A. (1995) "Capital Structure and Product-Market Competition: Empirical Evidence from the Super Market Industry". *The American Economic Review*. Vol. 85 (3).
- Chu, Franklin J. (1996) "Optimal Capital Structure Revisited". *Bankers Magazine*. September/October Issue.
- Clements, Alan W. (1999) "The Cost of Capital – The Practitioner's View". *The European Journal of Finance*. Vol. 5.
- Cumming, Douglas (2006) "Adverse Selection and Capital Structure: Evidence from Venture Capital". *Entrepreneurship Theory and Practice*. March.
- Fama, Eugene F. & French, Kenneth R. (1998) "Tax, Financing Decisions, and Firm Value". *The Journal of Finance*. Vol. 53 (3).
- Fama, Eugene F. & French, Kenneth R. (2002) "Testing Trade-Off and Pecking-Order Predictions about Dividends and Debt". *Review of Financial Studies*. Vol. 15 (1)
- Flannery, Mark J. & Rangan, Kasturi P. (2006) "Partial Adjustment Toward Target Capital Structures". *Journal of Financial Economics*. Vol. 79.
- Frank, Murray Z. & Goyal, Vidhan K. (2003) "Testing the Pecking Order Theory of Capital Structure". *Journal of Financial Economics*. Vol. 67.
- Ghosh, Arvin & Cai, Francis (1999) "Capital Structure: New Evidence of Optimality and Pecking Order Theory". *American Business Review*. Vol. 17 (1).
- Ghosh, Dilip K. (1992) "Optimum Capital Structure Redefined". *The Financial Review*. Vol. 27 (3).
- Giner, Begoña & Reverte, Camelo (2001) "Valuation Implications of Capital Structure: A Contextual Approach". *The European Accounting Review*. Vol. 10 (2).
- Goldstein, Robert & Ju, Nengjiu & Leland, Hayne (2001) "An EBIT-based Model of Dynamic Capital Structure". *The Journal of Business*. Vol. 74 (4).
- Graham, John R. & Harvey, Campbell R. (2001) "The Theory and Practice of Corporate Finance: Evidence from the Field". *Journal of Financial Economics*. Vol. 60.
- Graham, John R. (2000) "How Big are the Tax Benefits of Debt? ". *The Journal of Finance*. Vol. 55 (5).
- Green, Richard C. & Hollifield, Burton (2003) "The Personal-Tax Advantages of Equity". *Journal of Financial Economics*. Vol. 67.
- Harris, Milton & Raviv, Arthur (1991) "The Theory of Capital Structure". *The Journal of Finance*. Vol. 46 (1).

- Harris, Milton & Raviv, Arthur (1996) "The Capital Budgeting Process: Incentives and Information". *The Journal of Finance*. Vol. 51 (4).
- Hilberink, Bianca & Rogers, L. C. G. (2002) "Optimal Capital Structure and Endogenous Default". *Finance and Stochastics*. Spring..
- Hovakimian, Armen & Hovakimian, Gayane & Tehranian, Hassan (2004) "Determinants of Target Capital Structure: The Case of Dual Debt and Equity Issues". *Journal of Financial Economics*. Vol. 71.
- Jacobsen, Dag I. (2002) "Vad, Hur och Varför? Om metodval i företagsekonomi och andra samhällsvetenskapliga ämnen". *Studentlitteratur*, Lund
- Johnson, Shane A. (1998) "The Effect of Bank Debt on Optimal Capital Structure". *Financial Management*. Vol.26 (4).
- Killian, Thomas W. (2005) "Designing an Optimal Capital Structure". *US Banker*. September.
- Klein, Lisa Schmid & O'Brien, Thomas J. & Peters, Stephen R. (2002) "Debt vs. Equity and Asymmetric Information: A Review". *The Financial Review*. Vol. 37.
- Koller, Timothy & Goedhart, Marc H. & Rehm, Werner (2006) "Making Capital Structure Support Strategy". *McKinsey on Finance*. Vol. 18 Winter.
- Kovenock, Dan & Philips, Gordon (1995) "Capital Structure and Product-Market Rivalry: How do we Reconcile Theory and Evidence? ". *The American Economic Review*. Vol. 85 (2).
- Lang, Larry & Ofek, Eli & Stultz, René M. (1996) "Leverage, Investment, and Firm Growth". *Journal of Financial Economics*. Vol 40 (1).
- Leland, Hayne E. & Pyle, David H. (1977) "Informational Asymmetries, Financial Structure and Financial Intermediation". *The Journal of Finance*. Vol. 32 (2).
- Leland, Hayne E. (1994) "Corporate Debt Value, Bond Covenants, and Optimal Capital Structure". *The Journal of Finance*. Vol. 49 (4).
- Leland, Hayne E. (1998) "Agency Costs, Risk Management, and Capital Structure". *The Journal of Finance*. Vol. 53 (4).
- Lewis, Tracy R. & Sappington, David E. M. (1995) "Optimal Capital Structure in Agency Relationships". *The RAND Journal of Economics*. Vol. 26 (3).
- Lucas, Deborah J. & McDonald, Robert L. (1990) "Equity Issues and Stock Price Dynamics". *Journal of Finance*. Vol. 45 (4)
- Lööf, Hans (2003) "Dynamic Optimal Capital Structure and Technical Change". *Structural Change an Economic Dynamics*. Vol. 15, 2004.
- MacKay, Peter & Philips, Gordon M. (2005) "How Does Firm Industry Affect Firm Financial Structure". *Advance Access Publication*. August 31.
- Maksimovic, Vojislav & Zechner, Josef (1991) "Debt, Agency Costs, and Industry Equilibrium". *The Journal of Finance*. Vol. 46 (5).
- Mauer, David C. & Sarkar, Sudipto (2005) "Real Options, Agency Conflicts, and Optimal Capital Structure". *Journal of Banking and Finance*. Vol. 29.

- Miao, JianJun (2005) "Optimal Capital Structure and Industry Dynamics". *The Journal of Finance*. Vol. 60 (6).
- Miller, Merton H. (1977) "Debt and Taxes". *The Journal of Finance*. Vol. 32 (2)
- Miller, Merton H. & Rock, Kevin (1985) "Dividend Policy and Asymmetric Information". *Journal of Finance*. Vol. 40 (4)
- Modigliani, Franco & Miller, Merton H. (1958) "The Cost of Capital, Corporation Finance and the Theory of Investment". *The American Economic Review*. Vol. 48 (3).
- Myers, Stewart C. & Majluf Nicholas S. (1984) "Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have". *Journal of Financial Economics*. Vol. 13 (2).
- Ogden, Joseph P. & Jen, Frank C. & O'Connor, Philip F (2002) "Advanced Corporate Finance – Policies and Strategies". *Prentice Hall*, New Jersey.
- Opler, Tim & Pinkowitz, Lee & Stultz, René & Williamson, Rohan (1999) "The Determinants and Implications of Corporate Cash Holdings". *Journal of Financial Economics*. Vol 52 (1).
- Opler, Tim C. & Titman, Sheridan (1994) "Financial Distress and corporate performance". *Journal of Finance*. Vol. 49 (3)
- Patel, R & Davidsson B. (1994) "Forskningsmetodikens grunder – Att planera, genomföra och rapportera en undersökning", *Studentlitteratur*.
- Poitevin, Michel (1989) "Financial Signalling and the "Deep-Pocket" argument". *The RAND Journal of Economics*. Vol. 20 (1).
- Quan, Vuong Duc Hoang (2002) "A Rational Justification of the Pecking Order Hypothesis to the Choice of Sources of Financing". *Management Research News*. Vol. 25 (12).
- Rajan, Raghuram G. & Zingales, Luigi (1995) "What Do We Know About Capital Structure? Some Evidence From International Data". *The Journal of Finance*. Vol. 50 (5).
- Riddiough, Timothy, J. (2004) "Optimal Capital Structure and the Market for Outside Finance in Commercial Real Estate". *Real Estate Finance*. Vol. 21 (3).
- Rienecker, Lotte & Jørgensen, Peter (2002) "Att Skriva en bra Uppsats". *Liber*
- Robichek, Alexander A. & Myers, Stewart C. (1966) "Problems in the Theory of Optimal Capital Structure". *The Journal of Financial and Quantitative Analysis*. Vol. 1 (2).
- Ross, Stephen A. (1977) "The Determinants of Financial Structure: The Incentive-Signalling Approach". *The Bell Journal of Economics*. Vol. 8 (1)
- Ross, Stephen A. (2005) "Capital Structure and the Cost of Capital". *Journal of Applied Finance*. Vol. Spring.
- Ryen, Glen T. & Vasconcellos, Geraldo M. & Kish, Richard J. (1997) "Capital Structure Decisions: What Have we learned? *Business Horizons*". September-October Issue.

- Sarkar, Sudipto & Zapatero, Fernando (2003) "The Trade-Off Model with Mean-Reverting Earnings: Theory and Empirical Tests". *The Economic Journal*. Vol. 113.
- Shefrin, Hersh (2001) "Behavioural Corporate Finance". *Journal of Applied Corporate Finance*. Fall.
- Shyam-Sunder, Lakshmi & Myers, Stewart C. (1999) "Testing Static Tradeoff against Pecking Order Models of Capital Structure". *Journal of Financial Economics*. Vol. 51.
- Singh, Kuljot & Hodder, James E. (2000) "Multinational Capital Structure and Financial Flexibility". *Journal of International Money and Finance*. Vol. 19.
- Stein, Jeremy C (1996) "Rational Capital Budgeting in an Irrational World". *The Journal of Business*. Vol. 69 (4).
- Titman, Sheridan & Wessels, Roberto (1988) "The Determinants of Capital Structure Choice". *The Journal of Finance*. Vol. 43 (1).
- Tong, Guanqun & Green, Christopher J (2005) "Pecking-Order or Trade-Off Hypothesis? Evidence on the Capital Structure of Chinese Companies". *Applied Economics*. Vol. 37.
- Vilasuso, Jon & Minkler, Alanson (2000) "Agency Costs, Asset Specificity, and the Capital Structure of the Firm". *Journal of Economic Behaviour and Organisation*. Vol. 44.
- Williams, Joseph T. (1995) "Financial and Industrial Structure with Agency". *The Review of Financial Studies*. Vol. 8 (2).
- Williamson, Oliver E. (1998) "Corporate Finance and Corporate Governance". *The Journal of Finance*. Vol. 43 (3).
- Zanibbi, Louis & Pike, Richard (1996) "Behaviour Congruence in Capital Budgeting Judgements". *Management review*.

8.2 Oral Sources

- Almgren, Anders, Deputy CEO at Holmen. Telephone interview, 3 May 2006.
- Andersson, Björn, Treasury department at Electrolux. Telephone interview, 3 May 2006 .
- Andersson, Peter, CFO at Lindex. Telephone interview, 10 May 2006 .
- Andrén, Niclas, Assistant Professor at Lund University School of Business and Economics. Class lecture, 27 September 2005.
- Arling, Anders, Executive at financial services Skanska. Telephone interview, 10 May 2006.
- Bertilsson, Tore, Concern Chief Executive at SKF. Telephone interview, 4 May 2006.
- Granlöv, Lars, CFO at Gambro. Telephone interview, 9 May 2006 .
- Hagman, Roland, Concern Controller and former Deputy CEO at Ericsson. Telephone interview, 5 May 2006 .

- Halén, Håkan, CFO at Hexagon. Telephone interview, 8 May 2006.
- Hjalmarson, Peter, CFO at Getinge. Telephone interview, 10 May 2006 .
- Jacobson, Magnus, CFO at Hufvudstaden. Telephone interview, 10 May 2006 .
- Jacobsson, Bo, CFO at concern Trelleborg. Telephone interview, 8 May 2006 .
- Lindquist, Magnus, CFO at Autoliv. Telephone interview, 5 May 2006.
- Olsén, Carlos, Concern Chief Executive at Scribona. Telephone interview, 9 May 2006 .
- Olsson, Torbjörn, CFO at Gunnebo. Telephone interview, 8 May 2006 .
- Petri, Rickard, CFO at WM-data. Telephone interview, 8 May 2006.
- Rydin, Johan, Deputy CEO executive finance at SCA. Telephone interview, 3 May 2006.
- Sandberg, Björn, CFO and Group Controller at TietoEnator. Telephone interview, 9 May 2006 .
- Åkesson, Klas Magnus, CFO at JM. Telephone interview, 10 May 2006.

Appendix – Interview Questions

1. What is the most important consideration when you decide to take in new debt in your company?
2. Do you raise debt abroad?
3. Does your company have an optimal leverage ratio and if they do, when is it too high?
4. How do you finance new projects and acquisitions?
5. When do you issue equity / repurchase stock, or pay out dividend?
6. Do you take your investors' tax rate into consideration when changing the capital structure?
7. Does your company use their capital structure or leverage ratio for signalling purposes?
8. Do you consider the management's flexibility when changing the leverage ratio within your company?
9. How does competition affect your capital structure and do you use your capital structure as a competitive advantage?