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A qualitative study on factors determining the capital structure choices in large cap Swedish real estate companies

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Abstract

Background: The goal with capital structure is to find the perfect balance between debt and equity, and in doing so maximize the value of the company. Determining this balance is a complex activity which impacts many aspects of the organization.

Problem: For decades scholars have been arguing about which capital structure that would be most suitable in order for a company to minimize their cost of capital and in doing so, maximize the value of the company. The extensive amount of quantitative data however is not able to evaluate the importance of various determinants from companies' perspectives regarding capital structures.

Purpose: To investigate why certain external and internal determinants are considered to be important for the capital structure in large-cap listed real estate companies in Sweden.

Method: An inductive and qualitative approach, with an exploratory and interpretivist approach view of the findings. The data collection was conducted through the use of semi-structured interviews.

Results: This study found that importance of the factors that determine the capital structure is similar across the sample. Furthermore, this study found that the modified pecking order theory is the most applicable for the Swedish real estate market.

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1. Introduction

The following chapter presents an overview of capital structure with application to the real estate sector. Problem discussion follows, after which research questions and purpose of the study are presented. Lastly, perspective, delimitation, and important definitions are shown.

1.1 Background

The history of modern capital structure theory dates back to 1958 when Miller and Modigliani published their seminal paper (Harris and Raviv, 1991). In this paper, the authors argued that different types of financing will not cause different medium- and long-term impact on valuations and cost of capital. As a result, they concluded that capital structure of a company is irrelevant in a perfect market. Since then, capital structure related activities have been extensively studied by scholars, however not a single theory has been identified that would be able to explain the extensive amount of empirical data (Frank and Goyal, 2009). However, a few theories have emerged to become considered as the most reliable, among them are Trade-off Theory and Pecking Order Theory (Myers, 2001). These two theories are reviewed thoroughly in the frame of reference.

1.2 Capital structure

Generally, for companies to grow and expand its aggregate output, capital is needed to make investments, and companies can use their generated free cash flow to finance these investments and its operations. However, internal cash flow tends to not reach adequate levels in order to be able to finance the total investment needed (Chorafas, 2005). Therefore, additional capital is needed and according to Marks and Robbins (2009), a company can raise two types of additional capital, either through debt or equity issuance. The first one, debt, can be defined as an obligation to repay something with interest at some time in the future (Marks and Robbins, 2009). Equity can be defined as an ownership stake in the company that allows the owner to participate in the growth of a company (Marks and Robbins, 2009). When it comes to capital structure, the subject of the thesis, it is concerned with the financial decisions regarding the structure of how much debt and equity to use when financing certain investments (Abeywardhana, 2017).

At the starting point, when founding a private limited liability company in Sweden, the founder or founders need at least 50,000 SEK (Bolagsverket.se, 2019). This amount will become the company's equity. Moving on, this company can choose to raise additional capital. This additional capital is considered to be external capital, for example, loan from a bank. When a company reaches this stage, that is when decisions regarding capital structure are taken into consideration. To determine a certain capital structure in a company is a complex activity which impacts many aspects of the organization. A few of these aspects that need to be taken into consideration are the expected return on investment, the degree of risk and the company's valuation. Moreover, the cost of capital for the company will be determined by their choice of capital structure (Allen, Brealey and Myers 2006). The overall goal of the capital structure is to find an optimal capital structure level. This optimal level is considered to be the level that gives a company the highest market value with the lowest cost of capital (Myers, 2001). Furthermore, changes in capital structure can positively impact the value of the firm, create wealth for shareholders and to decrease the firm's cost of capital (Abeywardhana, 2017).

1.3 Capital structure in Real Estate

There exist a few financial conditions in the real estate sector that makes the capital structure of these kind of companies significantly different compared to the majority of companies in other sectors. The first reason and the most important reason for this is because real estate companies need to borrow significant amount of money in order to finance their initial investments. Also, this kind of companies are generating a relatively small amount of income compared to the large amount of invested capital. For that reason, they have a high degree of debt compared to their income. In comparison with other sectors in Sweden, the ratio of debt to income in real estate companies is two to three times higher compared to companies in other sectors (Arvidsson and Fahlén, 2010).

Furthermore, companies within the same industry share many commonalities, such as various market risk and challenges associated with that. Moreover, they tend to have a similar degree of profitability and work under the same regulations which affect their financial decisions (Frank and Goyal, 2009). This indicates that companies operating in two separate sectors will use different capital structures. Therefore, the authors can conclude that it makes sense to study

different sectors separately. Accordingly, in this paper, the focus will be large cap listed real estate companies in Sweden.

1.4 Problem Discussion

For decades scholars have been arguing about what type of capital structure would enable companies to minimize their cost of capital and in doing so, maximize the value of the company. During this debate, scholars have presented various theories, aiming at finding an optimal capital structures and reasons behind certain financing decisions. Until now, no such theory has successfully been able to define an optimal level that is applicable for every company. However, trade-off theory and the pecking order theory are considered to be the most important theories within this area (Myers, 1984), while opinions on which one is more reliable in explaining capital structures vary.

This leads to another important implication to take into account, that optimal capital structure can be defined differently from company to company. Hence, empirical results might confirm a certain theory even though financing decisions are based on other factors. For some, debt to equity ratio might be the most significant determinant, while for others ratio (Loan to Value ratio) might be, and these are only examples. The general perspective of optimal capital structure is about finding the right balance for the debt to equity ratio. This definition however only holds true for the trade-off theory. On the other hand, as there is no definition or calculation of optimal structure as such, companies can define optimal capital structure in a way that works for them. However, the extensive amount of quantitative data is not able to explain different definitions companies use for their optimal capital structures. This is confirmed by previous quantitative studies on capital structures in Swedish listed real estate firms, and as suggested by (Schmidt and Schmidt, 2009), who mentions the need for a qualitative study that would eliminate the need for a single definition of optimal capital structure. Taking all of this into account, authors identified the need for a qualitative study on this topic, where the company's perspectives are taken into consideration and analyzed carefully.

Finally, by analyzing the determinants that affect the capital structure of the firms in the sample, as well as by identifying patterns, the authors can also compare the significance of the trade-off theory and pecking order theory based on the determinants mentioned by interviewees.

Comparison of these two theories based on a qualitative study in listed real estate companies in Sweden is also suggested by (Schmidt and Schmidt, 2009), and no qualitative study on the comparison between these two theories in real estate industry has been found by the authors. As a result, these problems collectively allow the authors to formulate two different research questions, as knowing the most important determinants allows for comparison between the theories to be drawn upon.

1.5 Research Questions

Based on the presented background and our discussion above, the following two research questions have been formed:

- (1) To what degree do different determinants affect the choice for a certain capital structure in large-cap listed Swedish real estate companies?
- (2) Are effects of determinants on capital structures of large cap listed real estate companies in Sweden in accordance with what trade-off theory or pecking order theory suggest?

1.6 Purpose

The purpose of this thesis is to investigate which external and internal determinants are considered to be important for the capital structure in real estate firms while elaborating on factors that are less important. Furthermore, to fill the previously mentioned gap that quantitative data is not able to explain when it comes to understanding the reasoning behind why certain factors have varying importance.

1.7 Perspective

This thesis will take a managerial perspective on capital structure determinants and decision making behind it. This means that employees responsible for finances within the company are our main target for empirical data gathering. Only data from these managers and executives will be included in the empirical data part and the conclusion part.

1.8 Delimitation

In this thesis, in order to have a narrower focus and a greater sense of direction, some delimitations were made. One of them is that only listed real estate companies with a market capitalization of at least SEK 1 billion will be included in the sample. The reason for this is because companies within the same sector and with similar market capitalization, are more

likely to have external and internal similarities, therefore enabling the authors to compare the empirical data in a more meaningful way. Additionally, situations such as medium or small-cap companies having more expensive debt compared to a larger company, could impact the choice for certain capital structures and in doing so making a comparison less meaningful. Furthermore, the qualitative data gathered was delimited to include only Swedish real estate companies for two reasons: the lower barrier to get access to data; country differences with regards to regulations could make a cross-country comparison less meaningful.

1.9 Definitions

Debt-to-Equity ratio (D/E) ratio: Formula: $(short-term\ debt + long-term\ debt + other\ fixed\ payment) / (shareholders\ equity)$
(Kenton and Hayes, 2019).

Tax Shield = A reduction in taxable income for a firm, through deductions on for example mortgage interest. This shield lower the total amount of taxes that a firm owns (Kenton and Hayes, 2019).

EBITDA: Earnings before interest, taxes, depreciation and amortization. Formula = $net\ income + interest + taxes + depreciation + amortization$
(Kenton and Hayes, 2019).

Equity to Assets: Formula = $equity / total\ assets$ (Kenton and Hayes, 2019).

Loan-to-Value ratio (LTV): The amount of loan divided by the price the firm payed for that particular asset. Formula = $loan / asset$ (Kenton and Hayes, 2019)

Interest Coverage ratio (ICR): This ratio determine the degree to which a firm can pay their interest expenses on a loan. Formula: $EBIT / interest\ expenses$ (Kenton and Hayes, 2019).

Weighted Average Cost of Capital (WACC): cost of capital of each category of capital, proportionately based, $E/V * Re + D/V * Rd * (1 - Tc)$ (Kenton and Hayes, 2019).

2. Frame of Reference

The following chapter presents previous research on capital structure. The chapter begins by providing two contrasting views on capital structure. Then it moves on to describe theories that are used in this thesis, after which, various determinants that affect capital structure one way or another are discussed. Lastly, application of theories within the real estate industry is presented.

2.1 Capital Structure Main Theories

To understand the themes discussed later on, it is important to know where these ideas originated from. In short, there are two main theories, which are the most popular and considered the most reliable within the area of capital structure (Myers, 2001). The first one of these is the trade-off theory, developed by Kraus and Litzenberger in 1973, where a firm can use capital structure by having an optimal debt to equity ratio (as the capital structure can be described by this ratio), where it balances the benefits of debt interest tax shields against a deadweight loss of bankruptcy costs (the deadweight cost of going bankrupt). In this theory, value essentially transfers from debt holders to shareholders. The debt to equity ratio describes how much proportionally of firms assets are financed by debt and how much by equity (Kraus and Litzenberger, 1973). The other theory is the Pecking Order Theory developed by Majluf and Myers (1984). This theory assumes that a firm prefers to use internal financing (internal cash flow) over external, and when it comes to external, it will issue debt rather than equity. In the case of the pecking order theory, ‘optimal structure’ simply can not exist, as it supposedly does in the trade-off theory, because the order is what determines the type of financing instead of balancing costs and benefits (Majluf and Myers, 1984).

2.1.1 Trade-off Theory

With regards to the Trade-off Theory, besides the benefit of using debt interest payments as tax deductibles, Trade-off theory has a lot to do with the transfer of value from creditors to shareholders, hence the deadweight loss of bankruptcy costs. Creditors when providing debt to the company, have a certain amount of risk of not getting paid back, which they take on themselves. If debt was completely default free, then creditors wouldn't have any interest on the investment, however with default risk being in play, managers can force value transfer to

the shareholders, as equity is a residual claim, which means that equity investors have a right to claim profits only after all obligations have been paid out. Shareholders gain, when the value of existing debt falls, due to increased riskiness, even if the value of the firm has remained constant (Myers, 2001).

Myers (2001), also presented 4 ways in which managers can force this value transfer when there is a default risk:

- Making riskier investments or operating under riskier conditions. Higher risk means more potential upside for stockholders, whereas creditors of the firm absorb the downside.
- Borrow and pay out the cash to stockholders. The value of the firm remains constant, however, the value of debt decreases and, cash received by investors more than offsets this decline in share price due to the decline of debt.
- Once a firm is highly leveraged and has either no ability to take on more debt or debt is too costly, companies should also then cut back on the equity-financed investments. This is the case because usually, companies will invest until the point where the net present value (NPV) equals costs. Hence, even though NPV might be positive, it isn't necessarily beneficial to stockholders anymore, as a large portion of the positive NPV from the investment would go to creditors at this point, as they are most protected investors and will claim all the profits first. As a result, the company should instead try to pay down the debt.
- Finally, management of the organization might purposefully hide some of the problems that a firm is facing so that creditors don't force any unwanted actions such as bankruptcy or reorganization, and by doing so lengthen debt maturity and with it increase riskiness of debt and decrease value of debt.

2.1.2 Pecking Order Theory

The pecking order theory developed by Majluf and Myers (1984) presents a clear preference order regarding types of financing firms choose to obtain. It is based on cost of capital, where internal cash flow is first financing option, and when internal financing isn't enough, external financing is used, where debt due to its lower cost of capital is preferred against equity issues. In the study of American listed companies by (Asquith and Mullins, 1986, prices fell on average 3% after equity issues news. According to Myers (2001), this occurs because it is usually associated with something negative. This negativity is mostly based on information

asymmetry, which is differences in information held between executives and shareholders, as managers are incentivized to issue what they think are overvalued shares. On the contrary, managers don't want to issue undervalued shares, as the positive NPV might turn into negative, because investors did not know about the positive NPV project before equity issues and thus discount shares. Equity is also a residual claim on earnings, meaning debt holders have a prior claim on earnings and debt is usually collateralized by firms assets, which is the primary reason for cost of debt being lower than cost of equity, and thus the preference for debt financing instead of equity financing (Myers, 1984).

2.2 Type of Financing

Myers (2001) explained that cost of debt is usually less than cost of equity because creditors have a prior claim on firms profits and assets. Just like in case of decreased cost of capital, after-tax dollar return is larger when debt is used compared to financing with equity, which leads to an increase of firms value Myers (2001). He also mentioned however, that equity issues will happen when cost of debt is too high, which can be the case if current debt ratio is extremely high. This is something that Myers and Majluf (1984) conform to some extent, as their definition of a manager acting in the best interest of stockholders states: "Managers who maximize value will avoid external equity financing if they have better information than outside investors and investors are rational". This information asymmetry leads to cost of equity being again more expensive than the cost of debt. Furthermore, as mentioned previously, equity issues usually result in share value losses, hence managers shouldn't issue equities unless Net Present Value more than offsets this loss (Myers, 2001). Moreover, Graham (2001), also found that firms use debt only when internal funds are insufficient. Frank and Goyal (2009) and Fama and French (2002) found the same results. Finally, Mackie-Mason (1990) found that firms with low tax rates would be more likely to issue equity compared to firms facing higher or full statutory tax rates. All these researchers agree that taking on debt is usually less costly and leads to increases in share value, whereas for equity issues to be reasonable, certain conditions must be in place. These conditions could be differences in information and exceptionally low tax rates or exceptionally high returns.

2.2.1 Effects of financing on share prices

Moving on further, as this thesis focuses on listed real estate companies in Sweden, the effects of financing on share value and vice versa is important to know as it allows to better understand

management rationale. Based on Modigliani's and Miller's Theorem (1958), share values are left unchanged after any type of financing occurs, because of arbitrage opportunities that occur in efficient markets. On the other hand, Eckbo (1986) and Shyam-Sunder (1991), found that meanwhile insignificant, there was a positive change in share price after investment grade debt issues. This small gain in price is a result of a default risk being very small, and a larger potential upside for shareholders (see section 2.1.1 trade-off theory).

Furthermore, Graham (2000), found that on average a firm paying a full statutory tax rate in his sample could have doubled its interest payments in order to receive doubled interest tax shield. His estimation showed that these companies could have added 7.5% on average to the firm's value by increasing their leverage to 'still conservative debt ratios'. Hence, one can clearly see that debt can have a positive impact on share value. Finally, firms with volatile stocks likely face larger information asymmetry and thus suffer from adverse selection (Frank and Goyal, 2009), meaning one party has information that the other doesn't. In this case, pecking order theory predicts that companies would have higher leverage, as equity issuance costs are higher than for debt (Frank and Goyal, 2009).

On the other hand, generally share prices fall when issuing equity, because of what investors conclude of such an activity by the company. On average, firms that issue equities are worthless compared to companies that don't, hence the investors' pessimism on equity issuance (Myers, 2001). Bad news always outweighs the good news, and on average share prices fell by 3% after equity issuance news in the study of (Asquith and Mullins, 1986).

2.3 Determinants

Frank and Goyal (2009), defined the six most important determinants and key factors for determining a firm's leverage. These were: Industry median leverage - firms in industries where median firm has high leverage tend to be highly leveraged as well; Tangibility - firms with more tangible assets tend to have more leverage; Profits - firms that have more profits tend to have lower leverage; Market-to-book assets ratio - firms with high market to book ratio tend to have lower leverage; Expected inflation - high inflation expectations are usually associated with high leverage; Firm size - large firms (in terms of assets) tend to be leveraged relatively higher than others.

These six factors, provide a more powerful statistical explanation for market-based definitions of leverage instead of a book based definition of leverage. This is the case as capital markets tend to be forward-looking, just like market-based definition of leverage is forward-looking as well. Firms size and expected inflation would have been excluded from the results if Frank and Goyal (2009) had used book-based definition of leverage, which would have been incorrect considering they were at least as important as the other factors. Hence throughout this thesis, market-based definition of leverage will be used.

Throughout the study, all 6 determinants are included, however other factors such as macroeconomic conditions, taxes, flexibility, target financial ratios, and volatility of cash flow are included as well, as these factors were closely examined in other capital structure related studies as well.

External

2.3.1 Macroeconomic conditions

Macroeconomic conditions are important to understand how they can impact capital structure, as it can greatly impact firms' activities. Generally during expansion or growth times, when profits go up and expected bankruptcy costs go down, according to trade-off theory firms will borrow more, as now they have more profits to shield. Collaterals that are used for debt, are likely to be procyclical too, which leads to more leverage as well as the debt capacity grows. On the other hand, the pecking order theory suggests that during expansion, when retained earnings grow, debt should decrease as internal cash flow will be used more and more (Frank and Goyal, 2009).

2.3.2 Inflation

Friedman (1985) said: "the real value of tax deductions on debt is higher when inflation is expected to be high", because value of debt paid back is reduced, while returns on investments financed by those debts are likely to increase, especially in Real Estate industries where rental agreements are often tied up to the CPI*. Frank and Goyal (2009) also said "inflation expectations are usually associated with increased leverage", so it can have a great impact on capital structures in real estate firms.

2.3.3 Taxes

Taxes are obviously crucial to include as one of the determinants, as this is where trade-off theory creates value. The higher the taxes the greater the benefit of interest tax shields. In trade-off theory, higher taxes mean that firms can shield more profits by taking on more debt. (Frank and Goyal, 2009) However, non-debt tax shield, such as net operating loss carryforwards, depreciation expense, and investment tax credits, as shown by Masulis (1980) act as substitutes to interest tax shield, which reduces the leverage of the firms. Myers (2001) found taxes to be critically important within the capital structure, and Graham (1996) found that changes in long term debt in the company is positively and significantly affected by the firm's effective marginal tax rate, meaning debt increased when taxes did as well.

2.3.4 Median Industry Leverage

Moving on further, it is obvious that median industry leverage can also be a very important determinant for the capital structure. Firms in industries where median firm has high leverage tend to be highly leveraged as well (Frank and Goyal, 2009). It is common sense to realize that leverage levels vary across different industries, and studies by researchers such as Lemmon, Roberts, and Zender (2008) show that fact. These differences in debt ratios between industries can have several meanings. First is that managers use these industry averages to establish their own optimal debt levels, and Hovakimian, Opler and Titman (2001) in their study showed that firms actively adjust their debt ratios towards industry averages. Gilson (1997) and Hull (1999) also showed that industry median leverage is regularly used as a proxy for target capital structure. The second meaning of industry mean leverage is that common forces might be affecting a certain single industry, such as regulations or type of assets (Frank and Goyal, 2009).

Internal

2.3.5 Tangibility

Another crucial factor in determining a capital structure, as identified by Frank and Goyal (2009), is tangibility. Firms with more tangible assets tend to have more leverage, as tangible assets, such as inventory or real estate, are easier to value compared to intangible assets such as patents or goodwill from an acquisition, hence firms with tangible assets have lower expected distress costs and thus higher leverage. On the other hand, pecking order theory predicts that tangibility of assets will cause low information asymmetry, which makes equity

issuance less costly, hence a firm in this case should have less debt. Finally, Frank and Goyal (2009) also identified, that tangibility is more significant and reliable in explaining leverage for low market-to-book firms compared to high market-to-book firms. Market-to-book ratio describes what assets of the company are valued at currently on the market place compared to what was paid for these assets by the company. Firms with high market-to-book ratio tend to be associated with high growth prospects, which is why the real estate industry is not as popular, as compared to tech stocks for example. Thus, tangibility is a great determinant to study more about and see how important it is for managers.

2.3.6 Profitability

Furthermore, profitability can also be used as a determinant for a capital structure. A study by Wald (1999), showed that profitability was “the single largest determinants of debt/assets ratios”. On the other hand, according to Frank and Goyal (2009), before 1980s, profits were a very reliable tool for determining leverage, however as time went on, the statistical significance, while still remaining important, decreased. This is due to the fact that equity markets became willing to finance currently loss-making firms with high future growth potential (Frank and Goyal, 2009). Generally, firms that have more profits tend to have lower leverage (Myers, 2001). Wald (1999) also concluded the same thing, as in his study the most profitable companies in a given industry borrowed the least. “High profits mean lower debt and vice versa”. Rajan and Zingales (1994), also confirm this view for the US, Japan and Canada, however no significant correlations were found for France, Germany and Britain.

Additionally, profitable firms have lower riskiness and thus lower costs of financial distress, which would mean that they find tax shield more beneficial, hence these firms would use more debt, as static trade-off model suggests (Frank and Goyal, 2009). However, some recent papers, such as Strebulaev (2007), suggest that highly profitable firms will have less debt as dynamic trade-off model predicts. Because they will pay down outstanding debt that is above the optimal target. According to the pecking order theory, firms prefer internal financing methods over external, meaning highly profitable firms will have less debt over time (Frank and Goyal, 2009).

2.3.7 Market-to-book ratio

Speaking of market-to-book ratio, Frank and Goyal (2009), said that it is the most reliable ratio for identifying growth opportunities for a firm. Firms with high market-to-book ratio tend to

have lower leverage than other, as firms with high future prospects have higher cost of financial distress due to potentially missed value in the future (Frank and Goyal, 2009). These organizations additionally tend to rely a lot on stakeholder co-investment, and hence tend to have less debt, accordingly with the trade-off theory. On the other hand, pecking order theory predicts that these same firms should have more debt, as it will be required to finance all the new investments (Frank and Goyal, 2009).

2.3.8 Firm size

Another determinant identified by Frank and Goyal (2009), is the firm size in terms of assets or also known as log of assets. Large firms (in terms of assets) tend to be leveraged relatively higher than others. This log of assets determinant is again, just like tangibility, is statistically more significant in explaining leverage for low market-to-book firms than it is for high market-to-book firms. Trade-off theory predicts that larger, more mature firms, because of their diversification and hence lower default risk, will have more debt. Pecking order theory, on the other hand predicts that bigger and older firms will take on less debt as they had more opportunities to retain earnings and thus finance its operations and investments with internal cash flow.

2.3.9 Flexibility

Another potential factor is managerial flexibility, Anderson and Groth (1997), said that the “flexibility argument recognizes that the option to quickly obtain additional financing through unused good debt capacity is of significant value to shareholders. The degree of flexibility is a function of several variables including the business risk of the company, the cyclical nature of its business, the likely opportunity set facing the company, and characteristics of the company's existing financing.” Graham (2001) also found that managers cared mostly about financial flexibility when deciding on debt policies, which is also confirmed by Brounen, de Jong and Koedijk (2005). Their survey of 313 CFO's found that the most important consideration when it came to capital structure was financial flexibility and second was the target debt ratio.

2.3.10 Optimal Structure

Graham and Dodd (1951) said that managers acting in the best interest of shareholder will strive to achieve the “optimal capital structure”. Additionally, there hasn't been an equation yet formulated that can determine the optimal structure for a given company. However, there are

useful clues and rules of thumb that guide these decisions, as identified by Anderson and Groth (1997).

- “Increases in debt levels that results in a disproportionately large jump in the cost of debt.”
- “A suggestions that bond rating agencies may lower debt ratings below an investment grade rating.
- Comments by analysts can also offer some guidance, for example: “The company can comfortably handle its obligations”, which would suggest that company's capital structure is either already optimal or has still more room for debt.
- Market reactions on changes in the capital structure of other companies with similar business risk.

2.3.11 Volatility of cash flow

Finally, risk can also be somewhat of a determinant. Firms with volatile cashflow face high expected financial distress costs and should thus be less levered. This volatile cash flow also reduces the probability that tax shields will be utilized to the full extent. Additionally, these firms might need to access external capital markets, namely issue equities because of the volatility in their cash flow, as it is likely that cost of debt would be higher than the cost of equity (Frank and Goyal, 2009).

2.4 Application to Real Estate

Generally, theories mentioned above and related findings aren't necessarily related to real estate and instead are based on overall market findings. Usually, industries where profitability and business risk are high, industry debt ratios tend to be lower compared to other industries. (Myers, 2001) Firms with intangible assets and valuable growth opportunities are also associated with lower leverage (Myers, 2001). Contrary to those findings, Cvijanovic (2014) found a positive correlation between an increase in the value of a firm's commercial real estate and debt capacities. This is normal as real estate is a great source of collateral, meaning as values of properties grow debt capacity grows as well, because debt is protected by properties. This is in line with the trade-off theory regarding tangibility determinant. Chen and He (2017), found that higher debt to assets ratio leads to higher profitability for Chinese listed real estate companies. On the other hand, Howe and Shilling (1988), found positive stock reactions to debt issuance, even though reduced tax rates for REITs should favor equity financing according

to the pecking order theory. Finally, taxes weren't an influential factor for UK property companies when it comes to their capital structure, and instead, interest rates and flexibility were (Ooi, 1999)

3. Methodology

The following chapter explains the methodological approach used in this thesis. This is done by outlining the choice regarding the collection and analysis of data. Moreover, this chapter presents the research philosophy, approach and design. The aim of this chapter is to provide an insightful and reflective arguments why this methodology is appropriate for this particular research.

3.1 Methodology

Theories mentioned previously are only conditional theories, and by definition, they are not designed to be general. Each theory has its own benefits and negatives, however, because of the fact that they are not general, testing them on a large, heterogeneous sample of companies can be uninformative. This is why Myers (2001) argues that distinguishing subsamples may be more useful for these kind of theories. An example of subsample in this context could be to distinguish companies based on sector, the reason as to why large-cap real estate companies have been selected for this study.

Moreover, there is a substantial amount of research done with regards to which factors that determine the structure. In most cases, the far majority of previous studies applied a quantitative approach. However, in this paper the sample size is considerably smaller, hence the possibility to use a qualitative approach exist.

Furthermore, it is valuable to use a quantitative approach, because of the amount of data available to analyze. On the other hand, it can be questioned if the depth and correctness of analysis that is needed are possible. The benefits of applying a qualitative approach is that the authors can gain a deeper understanding of the issue at hand (Saunders, Lewis and Thornhill, 2016), which is one of the reasons for choosing a qualitative approach.

3.2 Research Philosophy

According to Saunders, Lewis and Thornhill (2016), there are two major research philosophies, positivism and interpretivism namely. The first one, the positivism view observes social reality in order to develop generalizations about particular things. The findings of this view are unambiguous in its nature, hence arguing for accuracy and true knowledge that findings bring. The other one, the interpretivism approach argues that humans are different from physical things because they create meaning. And this approach studies these meanings.

As the purpose of this thesis is to identify the most important factors that determine the choice for a certain capital structure, interpretivism approach seems to be the most applicable research philosophy for this thesis. The reason for this is because this study aims at interpreting and understanding the factors in terms of the theories mentioned above. Furthermore, this approach argues that it is not possible to find a specific universal law that would apply to everybody, in this case, to every company. The argument is that it is not possible to reduce the complexity into one law and one generalization. However, by implementing interpretivist philosophy, the authors accept this complexity while aiming towards creating a deeper and richer understanding of the issue at hand.

3.3 Research Approach

When it comes to the research approach, a researcher can choose between three different types of approaches. These are the deductive approach, inductive and abductive.

The main differences between these approaches are the way that theory follows data or the other way around. The deductive approach aim towards explaining causal relationships between concepts and variables, theory follows data. This approach develops a number of various hypotheses. Moreover, this approach needs to measure facts, usually quantitatively. In contrast to the inductive approach where data follows theory. Finally, an abductive approach allows the authors to constantly move back and forth between the framework and the collected data (Saunders, Lewis and Thornhill, 2016).

In this thesis, firstly data was collected, then the data was compared to the trade-off theory and pecking order theory. Hence, data follows theory, which according to Saunders, Lewis and Thornhill, (2016) makes the inductive approach the most suitable.

Moreover, according to Saunders, Lewis and Thornhill (2016), an inductive approach allows the authors to get a feeling for what is going on, in order to better understand the nature of the problem, and then to make sense of the empirical data collected through analysis. The result then would be the formulation of a theory. Furthermore, the inductive approach tends to focus on a small sample size which can be analyzed deeper than a large sample size (Saunders, Lewis and Thornhill, 2016). This is important for this thesis, because the aim is to achieve an understanding of why a certain behavior takes place instead of focusing only on what is happening.

Finally, through the analysis of the empirical data, that enabled the authors to develop a theory regarding factors that determine the choice for a certain capital structure.

3.4 Research Design

The research design is concerned with the overall plan describing the way research questions will be answered. There are three main research designs. These are the exploratory, descriptive and explanatory. An exploratory study is especially applicable when the authors aim at clarifying their understanding of a certain phenomenon, issue or problem, which is the case in this study (Saunders, Lewis and Thornhill, 2016). Furthermore, this kind of study has the attribute that it is both flexible and adaptable to change throughout the study. When conducting this kind of research as this study does, exploratory study is considered most applicable according to Saunders, Lewis and Thornhill (2016) to have the flexibility to change the course as new data appears, and to allow new insight being used. Therefore, since this study focuses on exploring and understanding the factors that determine the capital structure in real estate companies, the previously mentioned attributes are considered vital for this study. Hence, the most appropriate design was considered to be the exploratory design.

3.5 Data Sources

3.5.1 Secondary Data

In order for the authors to gain an understanding of the subject, secondary data was gathered. This helped the researcher to develop an understanding of capital structure, and the various capital structure theories. Moreover, it helped the researchers throughout the problem discussion and then in identifying research questions and purpose.

Our frame of reference was constructed by using Google Scholar online Jönköping University library, where ‘capital structure’ was the main input coupled with a category ‘peer reviewed articles’. In the beginning abstracts of articles where ‘capital structure’ was in the title were read. If article was relatable to real estate or theories mentioned, it was read further, after which references from those peer reviewed articles were collected and examined on their relatability to topic. Process was repeated until sufficient amount of knowledge and data was obtained to cover all determinants.

3.5.2 Primary Data

Because of the limited amount of secondary data regarding the research question, the authors identified the need to gather primary data. In this thesis, the primary data was gathered through conducting interviews. The most common position of our interviewees, Chief Financial Officer, requires our interviewees to have deep knowledge about the subject matter at hand. Therefore, it was considered by the authors that they had the knowledge and data, in order to provide valid and reliable data during the interviews.

Moreover, interviews enabled the authors to gather data that are relevant for the research at hand, because authors themselves could decide the structure of the interview and the kind of questions that were asked. In doing so, the interviewers could steer the conversation in the direction they needed.

3.6 Interview Design

A research interview can be defined according to Saunders, Lewis and Thornhill (2016) as: “A purposeful conversation between two or more people”. This kind of interview requires the interviewer to develop a good atmosphere, because it is important that the interviewee is

motivated to respond truthfully and listen carefully. In its essence, it is about asking relevant questions and carefully listening to the answers (Saunders, Lewis and Thornhill, 2016).

Moreover, there exist multiple types of interview designs. These are according to Saunders, Lewis and Thornhill (2016) structured, semi-structured and unstructured. In a structured interview, the structure of the interview is defined in advance and the questions are standardized. Hence, in all interviews, the same questions are asked. On the other hand, in semi-structured interviews, the interviewer has a list of themes and questions. However, the questions can be vary between various interviews. Lastly, in unstructured interviews, this is more of an informal setting. It is defined which area will be explored, however there is no predefined list of questions.

In an exploratory study like this one, according to Saunders, Lewis and Thornhill (2016) it is likely that the authors include semi-structured interviews, which is the case for this study. The reason for this is because it allows the authors to find causal relationships between variables. This is important in order to understand the reason for, in this case, the choices for a certain capital structure. Furthermore, it allows for the opportunity to explore interviewee answers further. For example, encouraging the interviewee to explain and build on their answers. Additionally, the answers can build a ground for further discussion, revealing information that had not previously been expected by the researcher, which is considered essential in this study. Because the authors identified that the interviewee is more knowledgeable within the area of capital structure than the authors, it was considered beneficial that the interview was semi-structured, as it allows the researcher to operate within some kind of predefined structure, although with the freedom to move in different directions, depending on the answers from the interviewee.

The data from the interviews was captured by audio-recording the interviews. The general structure of all the interviews consisted of the following three parts. First, an introduction to the study was given, where the background, purpose and research questions were presented. During this part, the interviewee had a chance to ask potential questions. In the second part the key questions and themes were covered (see Appendix C), and potential other questions that developed throughout the interview. In the last part, there was room for some discussion regarding the conducted interview. In this part, both parties could ask informal questions, regarding if something was unclear, or if something needed further explanation.

3.7 Sampling

Sometimes, it may be a possibility to collect data from the full set of elements in which the sample is taken, in other words from the entire population (Saunders, Lewis and Thornhill, 2016). However, in this study, this was not possible. The reasons why it would be impracticable to survey the whole population, was because of economic practicality and time constraint.

Therefore, the authors decided to select a sample from the population. Throughout the process of selecting a suitable sample, the authors have taken into consideration that the sample must enable the authors to answer the research questions. Moreover, by using sampling instead of analyzing the whole population, authors can achieve a higher degree of accuracy. The reason for this is because when collecting data from a smaller sample of companies, it enables the authors to collect more detailed information (Saunders, Lewis and Thornhill, 2016).

The population in this study is all the Swedish real estate companies and the target population is the Swedish listed real estate companies with a market capitalization of at least one billion euro. This process of identifying the target population was made through Avanza Bank stock search tool, *Aktielistan*. Here the following variables were used, “Real Estate” and “Finance”, “Market Capitalization”, “Large Cap Stockholm”. Using these variables provided a total of 43 companies. From here the authors manually sorted out the finance stocks. This resulted in 15 real estate companies with a market capitalization of at least one billion Euro (large cap), which is the target population of this study (see Appendix A).

Furthermore, the used sampling technique was non-probability sampling. More specifically, the volunteer sampling, Self-selection sampling. This kind of sampling follow the following steps. Firstly, the authors reached out to all the companies within the target population. Then, the collection of data is made from those who accept to take part in the interview. This method was chosen because it was the most appropriate with regards to the challenge of getting companies to accept to take part in this study. This resulted in a sample size of six companies. These companies are Atrium Ljungberg, Fabege, Hemfosa Fastigheter, JM, Kungsleden and Wihlborgs Fastigheter (see Appendix B).

3.8 Data Analysis

Firstly, because this study conducted interviews which were audio-recorded, the question of how to transcribe the data arose. As authors, it is of important to know what the participants in

the interviews said. However, it can also be important to know how they said it (Saunders, Lewis and Thornhill, 2016). Therefore, transcribing this kind of audio-recorded interviews are time-consuming, according to (Saunders, Lewis and Thornhill (2016) it takes around 8 hours to transcribe one hour of interview. With this in mind, with consideration of the time constraints, the authors decided to only transcribe the sections of data that was considered relevant for the research. This method is called the data sampling method (Saunders, Lewis and Thornhill, 2016).

Moving forward, there are different analytical techniques available to authors when analyzing qualitative data. The most applicable for this study was considered to be the thematic analysis. Because the central purpose of this approach matches with what the authors in this study aim to do, which is finding key themes or patterns from the data. Moreover, this approach provides researchers with a systematic approach while keeping some degree of flexibility (Saunders, Lewis and Thornhill, 2016).

Additionally, when analyzing the data, the authors followed the following steps. The first step was to become familiar with the data. Followed by coding the data. Which involves labeling different parts of the data, 1-4 importance scale in this thesis. This is done so the authors can more easily go on with further analysis. After coding the relevant data, the authors began to search for themes and relationships with the data. Throughout this process, the authors managed to establish multiple themes across the data set affecting capital structure. Moreover, some relationships between various themes were also found.

3.9 Research Quality

When it comes to quality of this research in terms of dependability, credibility and transferability, the authors took the following steps in order to ensure these criteria were met appropriately. First of all, dependability, in an interpretivist research means that the authors are recording all the changes in the research focus. So that these changes can be understood by the reader (Saunders, Lewis and Thornhill, 2016). Which is why in this research, the authors has been very keen on saving their own personal notes throughout the planning and writing process. Moving on, the credibility was taken into account through the following techniques. First of all, double checking with the interviewee so that their response was understood correctly by the authors. This was done through a follow up email. Lastly, the transferability was achieved

through providing a comprehensive description of the research questions, design of the study and the purpose to all the interviewees.

3.10 Research Ethics

Ethical consideration is important in order for researchers to conduct research with high standards (Daymon and Holloway, 2011). Therefore, this study has taken ethical considerations into account continually throughout the process of writing this thesis. This is important in any study, however it is especially important when conducting a qualitative study, because it involves human interaction, and therefore a relationship between the researchers and the participants (Daymon and Holloway, 2011). Furthermore, it is important that the participants agree to the interview voluntary, that they are not harmed in any way and that they are well informed about various aspects of the interview. Therefore, in this study when approaching companies, the first approach was through email. In this way, the respondents would feel less pressure to agree against their will to an interview. Secondly, in the initial email, a brief description of the thesis was presented. This included for example the research questions and purpose. Lastly, a brief description of the interview and the budgeted amount of time it would take for the respondent. By providing this, the company and the respondent had a good understanding of the researcher's expectations with regards to what kind of information that would be asked for and the effort needed. Hence, the respondent could make an informed decision regarding if he or she should accept the invitation or not. After the respondent agreed to an interview an attached file of the interview questions that the interview would be based on were sent.

Lastly, the participants were given the option to be anonymous, also with regards to which company they represent. This was an important consideration because of the nature of the design of the study, as with semi-structured interviews interviewees are encouraged to speak freely, and the interviewee should not fear to say something that could harm them or the company (Saunders, Lewis and Thornhill, 2016). However, all the participants agreed that the researchers could mention that they have participated in this research. However, a compromise was made, that the researchers will not display who said what. Therefore, anonymity system was developed. Each company gets a capital letter, from A to F. And the interviewee gets a double capital letter from AA to FF, where the interviewee of company A is in this research denoted as AA.

4. Empirical Data

The following chapter presents data obtained through interviews with six executives from six different large-cap real estate companies in Sweden. The chapter goes on to describe findings and answers from each interviewee by topic, where certain commonalities are being presented.

4.1 Types of financing

To finance its operations and investments, company A uses a combination of internal cash flow and debt. The reason for this was because the company invests a lot into their project portfolio and have an investment target, for which internal cash flow is not enough.

Furthermore, company B preferably uses internal cash flow to finance its investments, and when that is not enough, they will take on more debt. Acquisitions require more leverage than development projects and they do not use debt for anything although acquisitions or development projects. They issue equity when debt capacity for equity/assets ratio is reached, meaning it goes below 30%. According to BB, equity issues occur very rarely and only for expansion purposes instead of covering for losses. Also occasionally they might issue equity if it is considerably faster and project is extremely profitable.

Moving on, company C is also using internal cash flow and debt to finance their new projects, because they invest more than their internal cash flow is able to cover for. Any excess cash flow is used to pay down on debts, and they borrow money only when they need the money. Moreover, CC said “We use debt to get leverage. That's why we don't finance everything with equity”. Also, according to CC, the company has not issued equities for more than 15 years, and it is not something they would consider, except if there is a very good opportunity that would require a substantial amount of capital.

On the other hand, according to DD, Company D mainly uses debt to finance its new projects and investments. This is to ensure that liquidity risks are minimized, where only the surplus above the book value of the assets is generally used to invest. This is their risk capital.

The go to way to finance new projects for company F is through a combination of internal cash flow and debt. Moreover, the company has issued equity two times in recent history, because they lost tax disputes on historical transactions, so they used it to reset their capital structure. For company E, they prefer to use internal cash flow and when this is not enough then they go on to use debt. They have not issued equity for more than a decade.

External

4.2.1 Future growth opportunities & Business Cycle/house prices

According to AA, the company have one of the real estate most competitive real estate portfolios, and “that is a huge opportunity”. A are not looking to expand into new markets. Rather they are focusing on the projects they have right now.

BB said that as long as banks are providing debt they are going for it, no matter the macroeconomic conditions. The main reason for using debt is that it is lowering the company’s WACC so they can make further investments. They also think that their current leverage levels are sustainable over the business cycle, so it doesn’t affect their capital structure.

The aim of C, is to continue to grow. Their office market is very strong and they have an investment target for the upcoming years.

For D, the business cycle affects their capital structure very much and they adjust their capital structure to it whether it’s time to invest heavily like they have done in the past into the land banks or to stay cautious in worse cases. They constantly adapt to the changing environment, although higher prices generally mean higher margins for them. It also provides them with surplus value above the book value which they then can add to the risk capital of the company.

For F, their loan to value (LTV) is influenced by the fact that they are in the late stages of a business cycle. Moreover, FF said that they have been in this very low-interest rate environment for past 8 to 10 years, and good financing terms, coupled with increased demand for commercial premises, has led to a value uplift in their asset portfolio and thereby their leverage has come down substantially.

Moreover, house prices are considered very important because of the accounting standard IFRS (International Financial Reporting Standards), where the current market value of the property portfolio is part of the asset side of the balance sheet. In accordance with this, if there is a value change in the assets this will have a direct effect on the leverage.

For company E, the business cycle is considered although not important /important. EE said that since property prices have gone up last couple years, and they do not want to stretch their LTV target of 60%. So they rather have some leeway now, so if prices fall they would be closer to their LTV target.

4.2.2 Inflation

For A, the inflation is considered important and something they follow closely. However, AA said that if inflation takes off, then rental income increases, if inflation goes down then it follows. Therefore, high inflation means high interest cost, although also higher revenue, and has a similar impact as increase in real estate prices, which provides more headroom for the LTV target and thus higher absolute leverage.

For company B, inflation isn't a big concern, because real estate industry is almost naturally hedged against inflation. It wouldn't affect their capital structure.

Inflation expectations is an important part of valuation for C, it is important for their business because rental agreement is linked to inflation. However, apart from that, it don't really have an impact on what to finance and how to finance things.

Inflation is considered although not important for D, because of their very long-term view, Moreover, they changes in inflation won't change their business model in any way.

For company F, inflation expectations is important although not a main concern. According to FF, it affects assets valuations and therefore the loan to value ratio. Moving on FF said that since inflation has been stable for recent years, this factor as became less of a concern for them. Also, the fact that there is a indexation to inflation rate in the rental agreements means that there is a "natural hedge" for a real estate company if inflation were to rise.

On the other hand for E, inflation do not have an impact on their leverage.

4.2.3 Taxes & Ability to tax shield

For A taxes are considered very important. However, they are not aggressive with taxes. Their policy is to pay the correct amount of tax, although not more.

For C, taxes affect their capital structure decisions to a very small extent. However, according to C, looking forward this might change. There are new legislations coming, regarding a limit on how much interest cost a company can deduct. Therefore, this question might rise in importance.

For company C, when it comes to the balancing costs of bankruptcy versus benefits of tax shields, that is considered although not important.

Company D is about sustainable growth and constant value creation for the society, hence they are very transparent about their incomes and taxes. They do not utilize any special strategies to reduce the taxes, and thus taxes have no effect on capital structure of company D.

For company F, taxes do not have any impact right now as they do tax deferrals. Moreover, the balancing costs of bankruptcy versus benefits of tax shield is not considered.

4.2.4 Median Industry Leverage

According to AA, they look closely at what their competitors do, and naturally, the median industry leverage is one of them. However, they don't necessarily act on this knowledge. Therefore, it is considered although not important.

For company B Industry average is of course something they take into account, and all companies have different quality of the assets. For example, you have more risky properties like retail, then you need to have a higher equity/assets ratio. Company B has a very stable and secure real estate, because of contracts that are tied up to CPI with very secure customers, so they have a lower equity/assets ratio compared to industry average.

The industry average leverage doesn't really impact company C's decisions, because according to CC when looking at the real estate companies in Sweden today, they are very different from each other. Therefore, what matters most for C, is their own key measures.

For company D and for company F, the industry leverage averages are not considered. On the other hand, for E, the median industry leverage is considered although not important.

4.2.5 Currency exchange

For A, this exchange is not considered because they have only monetary flows in SEK. AA said that they have Norwegian bonds although that this currency risk is hedged.

The currency exchange is not considered. Because they only borrow in Swedish crowns and own only real estate in Swedish crowns. Moving forward, increased potential risk of bankruptcy is not a consideration for C. However, when it comes to their ability to tax shield, that is considered although not important.

When it comes to company D, the currency exchange doesn't really affect their capital structure, as they have a very long-term view, similar with inflation. Moreover, their regional organizational structure allows them to take care of these risks accordingly by having clearly distinguished markets in which they operate.

For F, the currency exchange is not important. The reason for this was because they do not have assets denominated in other than SEK.

This is similar to company E, where the currency exchange is also not considered.

Internal Factors

4.2.6 Firm size

The firm size is important according to CC, since C has been in the market for a long time and is one of the largest real estate companies in Sweden. Moreover, they have a good track record which helps with lowering cost of capital, through a lower interest rate.

According to DD, the firm size doesn't really directly influence management's decisions on capital structure, instead, it is more of an environment or favorable situation that needs to be managed accordingly. However, the firm size in terms of assets is what allows company D to have such favorable financing terms with banks.

For F, their size is important, because their retained earnings capacity grows.

4.2.7 Flexibility

The flexibility aspect is very important for A. According to AA, it is important that they have a well spread out financing base. Therefore, for example, they have both fixed and variable interest rate. Moreover, when it comes to flexibility, their timing of refinancing is very important. Hence, they are constantly looking for new opportunities when it comes to new financing sources, lower interest rate, and longer loans. Additionally, AA said that long debt maturities possess a lower risk. That the longer debt average a company have, the more spread out credit risk and smaller refinancing risk.

Company B, have a variable interest rate although they are capping these interest rates so they have a better predictability. They think that they shouldn't lock in as much as others do because they have a very stable cash flow.

For C, the flexibility of their debt is very important. Because for a company like C that wants to sell a property every now and then while at the same time having long term capital maturity. Therefore, they do not want to look in a specific property, so it needs to be a flexible financing. Moving on, according to CC, when company C needs to take on new debt, then they always look for a combination of as cheap and long as possible. Additionally, leaving a certain amount of unused debt capacity for future investments is considered very important.

In the case of D, while constantly adapting capital structure is important, it is mainly based around the ability to refinance, which was considered the most important flexibility aspect for this company. Moving on, the type of interest rate, variable or fixed, is not something that affects their decisions. However, it is still something that they consider. Leaving certain amount of unused debt capacity while important, isn't currently a concern because of a lot of headroom in their debt capacity.

For F, flexibility is very important, where both maturity and ability to refinance are very important. On the other hand, the variable or fixed interest rate is not considered, because they hedge these risks on a group level, not per project. Additionally, FF said that longermaturities on loans means that the company have secured funding for a longer period, which reduced refinancing risk. However, this comes as a cost in terms of a premium. The focus of F, during

the recent years has been on increasing the average capital term of the borrowings. The reason for this is because they argue that this leads to a lower financial risk in the longer run. And, in doing so, create the right conditions for long term management and development in accordance with their business strategy. Leaving certain amount of unused debt capacity is also important, and is currently dictated by the target of having LTV below 50%, which means that some positive NPV projects may be passed by.

For company E, the refinancing risk is most important risk for them to manage. They have been able to refinance and prolong their obligations. The average maturity is pretty long in Swedish comparison, about 6 years. Longer maturities are preferred for the sake of managing refinancing risk.

4.2.8 Competitive advantage

According to A, the competitive advantage of AA comes from one of the highest interest coverage ratios among Swedish real estate companies. Also, their aim towards a long capital commitment allows them to have competitive costs.

For C, CC said that their capital structure fits their company in a good way and is very good for their business model, because their business model is property management in combination with property development. To increase the potential in the portfolio.

For company D on the other hand, their competitive advantage comes from their internal risk capital model that they use. This model, is according to DD, much more sophisticated and efficient than what their competitors have and the markets seem to agree on that.

On the other hand, for company F, the goal with their activities within the capital structure for them right now is to achieve an investment grade rating from an external rating agency. This was what they consider to be their competitive advantage.

According to EE, their competitive advantage comes from their balance between financial risk and growth opportunities. Also, because their market is less volatile compared to many other markets. Therefore, they can have higher leverage than companies owning assets in more volatile markets.

4.2.9 Optimal Structure

For A, the target debt to equity ratio is very important. However, they are so much lower than the average in the sector. Therefore, this one is not a problem at the moment. Additionally, A has a financial target of maximum 45% LTV. So, in an up trending market when relative leverage decreases, A would take on more debt. In a downtrend however, they would likely have to sell something in order to reduce leverage to below 45% of LTV.

For company B, the equity/asset ratio target is based on how the agencies rate the credit. They don't have any rating today, so they have more room to adjust their equity/assets ratio, although ones that do want to have a rating they have to have approximately 50% ratio. Their preferred ratio is about 40%. So in times of surplus cash flow, even when it's below 40%, they will prioritize to invest further if they can choose, because it will improve their extended earnings capacity going forward and that's always a priority.

For C, according to their CFO, the company deploys a rule that their amount of loan divided by their real estate value should never go higher than 50%. Furthermore, this leverage ratio depends on the business cycle. Their CFO said: "We have been in a period [for many years] when the value of real estate increase year after year". Therefore, at this stage in the market today, with a higher valuation of real estate, they don't want to have 50%. Rather they are aiming much lower, and currently, their LTV ratio is around 38%. Moving on, this low ratio is used by the company to hedge potential drop in valuation of real estate. Lastly, CC mentioned that company doesn't have an optimal level as such, however their maximum leverage is dictated by LTV target of maximum 50%.

In the case of company F, in recent years they have been working on decreasing the financial risk of the company by decreasing the leverage of the group. At the moment, they have a leverage ratio of approximately 50% compared to a couple of years ago when it was north of 60%. The reason why they focus on this 50% value, is because the financial terms that you can receive once 50% loan to value ratio is achieved. Then the company can become investment grade bond issuer. Additionally, for rating agencies, it is one of the most important aspects in evaluating the creditworthiness of the company.

For E, when it comes to their target debt to equity ratio, EE said that it is basically a combination of LTV, equity to assets and interest coverage ratio. For E, their LTV is max 60%, equity ratio of at least 30%, and interest coverage ratio of at least 2 times. Moreover, the LTV is considered very important, while the debt to equity ratio and the interest coverage are considered important. Moving on, EE said that the company always try to stay within the just mentioned range. However, historically they have deviated from them. For example, exceeded their LTV target, although when doing that they have had a concrete good plan and understanding of how to bring the leverage back down again. Lastly, the level of debt in their company is according to EE, a function of managing the financial risk and growth opportunities and finding the balance between the two, rather than taxes having an effect on the capital structure.

4.2.10 Volatility of Cash Flow

When it comes to risk and more specifically the volatility of cash flow, it does not affect company A and their capital structure at all. They have a very secure cash flow, they can make approximate estimations two years ahead.

B described their cash flow as very stable, which is why it isn't important consideration for them. For company C, it is very important to manage their cash flow appropriately, which they do by having interest coverage and LTV ratio targets towards which they constantly adjust.

Taking care of risks is a central and fundamental use of capital structure for company D. Instead of focusing on various leverage ratios, which are also important, company D ensures that their balance sheet is strong enough to face worst case scenarios. Volatility of cash flow is a big concern for D, and it is usually solved by having enough of capital to cover for all risks, where liquidity risk is one of the most important ones.

Company F manages the volatility of cash flow by repaying their commercial papers. They use according to FF, commercial papers to manage their cash flow in the short term. Although when it comes to raising debt, volatility of cash flow doesn't have any negative impact.

Lastly on the subject of risk, for company E the volatility of cash flow is considered important, however they see their cash flow as stable.

4.2.11 Most important Financial Ratios

For company A, among the most important financial ratios are the interest coverage ratio, return on shareholders' equity and WACC. Additionally, they are very keen on their investments in

their properties portfolio. Recently, they doubled their investment goal per year and as, AA put it, “our investments are our future cash-flow.”

For company B, the loan to value, equity/assets ratio and interest coverage ratio are their most important ratio from a capital structure point of view. The goal for them is to have interest coverage ratio at 2 although they have currently 3.5. Therefore, they have a lot of headroom. According to BB, it is easy to have a lot of headroom in interest coverage ratio with interest rates being so low.

For C, the three most important financial ratios are the Loan to Value ratio, Interest coverage ratio, and the Net Debt-to-EBITDA Ratio. For all these ratios, the company has financial targets, which are presented in the quarterly and annual report. However, from time to time, the difference in importance between them differ. LTV has been very important in the last years. At this point, C has a very low LTV because of the strong property market in recent years. Net Debt-to-EBITDA Ratio is the weakest for C. So moving forward, according to CC, this one is something that the company will monitor closely. For C, it is important that the Net Debt-to-EBITDA Ratio does not increase much in the coming years.

Also, according to CC, because C is so good at low yielding assets, and with a large project portfolio, the cash-flow in C is quite limited compared to other real estate companies. So for that reason, these metrics are the most important.

The most important financial ratios for company D are the equity/assets ratio and the interest coverage ratio. Even though these ratios are nowhere near as sophisticated as their risk capital model, it gives company D a clue whether they are going in the right direction. The target for equity/assets ratio is 35%, which company D is exceeding right now. On the other hand interest coverage ratio and targets on them, are not communicated to the public however company D at the moment is way above its targets in those ratios.

On the other hand, for company F, according to FF, the key ratios that Moody’s are looking at is what F considers to be important as well. Therefore, the LTV is very important, interest coverage ratio is important and the Net Debt-to-EBIDTA is very important.

Company E, the most important ratio is NET Debt-to-EBIDTA This ratio is according to EE a better measure of financial risk compared to LTV.

4.2.12 Cost of Capital

For A, this is very important since they have a so large absolute debt.

For company B an important determinant is the weighted average cost of capital (WACC). The reason for this is because low WACC allows them to compete with other companies. Therefore, they have to have it as low as possible, so when they go down with the equity/assets ratio, they have a better WACC, although about 40% is their preferred ratio.

On the other hand for C, the cost of capital is an important factor. However, it has not been an issue in the recent years. Because for many years there has been a low interest rate environment. This has boosted investments all over the property sector. Therefore, if interest cost were to increase significantly, then C would have to reconsider how to invest.

Furthermore, for F, Interest rate it is important, however FF pointed out that it is important to see the cost of capital in terms of correlation with other factors.

For example, the duration of the loan, maturities and the refinancing risk. The last one of these is considered as very important for F. Moreover, the cost of capital is of course important, which is why they are trying to achieve an investment grade rating.

When it comes to company E, the interest rate is very important, however that is looked at in combination with maturity and refinancing ability.

4.2.13 Information Asymmetry

When it comes to information asymmetry, which is when one party has more knowledge than the other part, and this leads to an advantage for the more knowledgeable party (Kenton and Hayes, 2019). All the companies in the sample where very clear that transparency is very important for their business. Therefore, information asymmetry is considered to not play any impact in the companies' decisions.

5. Analysis

The following chapter present an analysis of the data. Firstly, it presents a data table where determinants are evaluated by their respective importance to the capital structure. Then, the chapter goes on to describe patterns found in data by theme where relevant importance and its effects on capital structure are shown. Lastly, chapter 5 goes on to compare trade-off and pecking order theories in their reliability in explaining companies' behavior theme by theme.

5.1 To what degree do different determinants affect the choice for a certain capital structure in Swedish real estate companies?

	A	B	C	D	E	F
Industry Average	2	2	1	2	2	1
Interest Rate	4	-	3	-	4	3
Balancing Cost of Bankruptcy vs Benefits of Tax	1	1	2	1	1	1
Cost of Capital	4	4	3	2	4	3
Aim to obtain Investment grade rating	yes	no	yes	no	no	no
Volatility of cash flow	1	1	4	4	3	2
Flexibility						
-Refinancing	4	4	4	4	4	4

-Length of maturity	4	3	4	3	4	4
-Leaving unused good debt capacity	2	3	4	2	3	3
Firm Size	3	3	3	3	3	3
Business Cycle	4	2	2	4	2	3
Inflation	3	2	3	2	2	3
Information Asymmetry	1	1	1	1	1	1
Tax	1	2	1	1	2	1
Ability to use Tax Shield	1	2	2	1	1	1
Financial ratios						
-Debt to Equity	4	4	4	4	3	3
-LTV	4	4	4	-	4	4
-Interest Coverage Ratio	4	3	3	3	3	3
-Shareholder Equity Return	4	-	--	-	-	-
-Equity to Assets	-	4	-	-	3	-
-Net debt to EBIDTA	-	-	4	-	4	4

Meaning of the values (1-4)	Meaning of sign
1 - not important 2 - considered although not important 4 - important 5 - very important	- = no answer obtained

External Factors

5.1.1 Future growth opportunities & Business Cycle/House Prices

Starting with macroeconomic conditions, and more specifically the business cycle, our interviewees agreed on the fact that we are currently late in the business cycle, however, the end of the cycle it is not very close either. Overall, a sense of cautious optimism was the feel received during the interviews, which is confirmed by answers as well. Out of six companies, four have clear targets on reducing or keeping the current LTV ratio (Loan to Value Ratio), where consideration of the business cycle was at least important. Reason for this was common as well, where prices of real estate have gone up due to the long business cycle. Therefore, the companies relatively low leverage ratios compared to the past can be somewhat misleading, especially if a downturn arrives. So the reduction of leverage ratios is driven not solely by increased prices, although as a reduction of risk and a hedge before next potential downturn. Moreover, late stages of business cycles mean lower potential growth, which is why the lowest possible cost of capital is extremely important. Furthermore, five out of six interviewees mentioned that for rating agencies LTV ratio of below 50% is one of the most important indicators if not the most important one, in order for a company to obtain investment grade rating. There are no evaluations of an effect of the business cycle on the obsession over cost of capital. However, the fact that three out six companies mentioned obtaining investment grade rating for the purpose of a lower cost of capital, and one having similar leverage targets to those mentioning rating agencies, allows for a conclusion to be drawn that business cycle has an impact on the importance of cost of capital as well.

5.1.2 Inflation

When it comes to inflation, 50% of the companies evaluated the importance of inflation at 3 and 50% at 2. Higher inflation was seen as a positive, as it would drive real estate prices and

rental income up. Additionally, the authors did not exactly ask whether rental agreements are tied up to inflation. However, 50% of the companies mentioned that their agreements are linked to inflation. Furthermore, inflation in Sweden is currently at a low level, however, this did not have much impact on their current decisions. All the companies mentioned that because inflation affects the LTV ratio, they do look at it. However, from a financing point of view, inflation would not affect those kinds of decisions. Instead, higher inflation would create some headroom for their LTV targets, which then allows for an increased amount of debt.

5.1.3 Taxes & Ability to Tax Shield Profits

Unlike in the literature, taxes did not have any impact on capital structure in our sample. No company has taken on debt, just because interest payments can be used as income tax deductibles, as the ability to tax shield profits was evaluated at 1 in 67% of the cases, where those that did evaluate it at 2 simply considered it an important cost to take care of.

5.1.4 Industry Leverage Averages

Furthermore, industry mean debt averages do have some effect on the capital structure for the companies in our sample. These averages act as guidelines more than something that needs to be met. For example, BB mentioned that, where they are as a company with very stable and secure cash flow. Because of the customer type they work with, they can have a lower equity to assets ratio compared to competitors who are for example holding retail properties. Therefore, even though it is important, these industry averages rather set boundaries between which companies want to operate in. Overall, not a single company evaluated the importance of industry leverage average at 4 or 3, only showing the point that differences within the sector, as to the type of real estate owned or overall strategy matters.

Internal Factors

5.1.5 Profitability

As the number of interviews progressed, it became clearer that profitability did not directly determine the capital structure in listed real estate firms. Instead, firms focus on leverage ratios where profitability numbers are part of, such as Operating Profit to Total Debt and Net Debt to EBITDA. Furthermore, in the short-term firms seemed to plan out their expenses and investment based on their internal cash flow. However, in the long term, the earnings capacity

was the most popular factor to work on when it came to profitability. Leverage is also impacted because growing earnings capacity usually requires debt in real estate, although again, that is capped by set leverage range. It is also important to include, that three out six companies managed their cash flow by using debt. Meaning any excess cash they had, they used that to pay down the debt, hence profitability is strongly affected. On the other hand, profitability did have one impact on capital structures. Two companies mentioned using the surplus value of their assets, meaning market value minus book value of the assets, as one of the important drivers for the leverage levels, as when this surplus did occur, they would materialize it in a form of debt that is then used for investments and dividends.

5.1.6 Firm Size

Firm size in terms of assets, even though it was agreed with all interviewees that it is more of a theoretical or hypothetical question rather than something that can be calculated, was evaluated by all companies at 3. Firm size allows for much lower cost of capital, not only because of diversified risk as mentioned by previous literature (Frank and Goyal, 2009) although because of successful track record and reputation, as mentioned by CC and DD. Time is required to grow to the point of being considered as a large-cap company, hence these large-cap companies naturally have a sustainable competitive advantage against smaller companies when it comes to cost of capital and debt capacity.

5.1.7 Flexibility

When it comes to flexibility, as the literature suggested, it is one of the most important considerations when taking on new debt. Overall, this flexibility mostly depended on two factors for the firms in our sample. These two factors were debt refinancing and length of debt maturity. Moreover, 50% of the firms evaluated refinancing and length of maturity as 4, and other evaluated both at 3. Five out of six companies preferred longer maturities, in order to spread out their credit and refinancing risk. Refinancing was most actively discussed flexibility category, as besides longer maturities allowing for easier refinancing management. On the other hand, only one company mentioned the importance of the ability to select whatever property they want instead of committing their debt financing to a certain preselected property.

Additionally, 67% of companies evaluated leaving unused good debt capacity for future investments at least 3, of which only one company evaluated it at 4. What has to be mentioned though, is that left unused debt capacity was mostly driven by ratios such as LTV, as companies

really did not want to exceed those targets. Moreover, in real estate development particularly, there are very long-time horizons between the stages of idea discussion to the implementation of the idea. This allows for companies to carefully evaluate NPV of projects, and if returns are lower than expected, they can decide not to issue debt. Additionally, not a single company complained about financing being difficult to achieve. Instead, 50% of interviewees mentioned it was easy to have a lot of unused good debt capacity because of a recent increase in prices.

5.1.8 Optimal Structure & Most Important Financial Ratios

Unlike it was expected before the study began, that the debt to equity ratio would be the most important determinant for capital structures in our sample. While 50% of companies did evaluate it at 4 and 50% at 3, only AA made any additional comments, which stated that this ratio isn't even discussed right now because of. Instead when asked how they calculate their optimal capital structure or which financial ratios they consider to the largest extent, the most common answer, was the Loan To Value Ratio (LTV). All companies evaluated at 4, and only two out of 6 did not use it as their main consideration on capital structure. This makes sense, not only because of the investment grade rating discussed earlier. Although also because of the ability to evaluate real estate prices at any given time. This is because unlike for example in technology companies, where assets are primarily intangible and different in nature, such as data or software, and cash flow can be quite volatile. On the other hand, for the real estate industry, it is exactly the opposite. Their assets are relatively similar, tangible, and cash is very stable, hence it is quite easy to get the valuations right, and if you look at the table, company D is the only one that didn't mention LTV, which is the same company that described their cash flow being particularly volatile.

Another important ratio, which was evaluated at 3 by 83% of the firms whereas the other 17% evaluated it at 4, is the interest coverage ratio. All firms in our sample also have limits on the value for this ratio, which in most cases was at 2, however as mentioned by BB, it is easy to have a good interest coverage ratio because of low-interest rate environment in Sweden. Overall, all of the companies had headroom in this ratio, which can be a reason for questioning the usefulness of obtaining the investment grade rating discussed earlier, although that's something that could be explored in further research.

On the other hand, one ratio that 33% of the firms used internally as the most important ratio to get the best understanding of capital structure, and evaluated it at 4, is net debt divided by

EBIDTA. This ratio shows how many times bigger or smaller debt of the company is compared to operating profit, which according to FF, is a better measure of financial risk for real estate companies.

Finally, when it comes to the Equity to Assets ratio, which shows how much of equity you have per one SEK of assets. This ratio was the most used indicator only for the B company, and only one other company mentioned it and evaluated it at 3.

5.1.9 Volatility of Cash Flow

Managing risks is a big part of the real estate business. Generally, firms in our sample have all the financing they need for the project to be completed and for all risks to be covered. However, since this thesis in the later stage is comparing data collected to the theories, the volatility of cash flow was the risk discussed mostly during our interviews, besides the refinancing risk that was mentioned in the flexibility part of chapter 5. The volatility of cash flow was evaluated at 4 on its impact on capital structure. Rest of the companies evaluated it at 2 or even 1. This drastic difference can be attributed to the fact their business strategy is different from all others, which unfortunately cannot be disclosed due to anonymity purposes. It has to be mentioned though, that they considered their cash flow to be highly volatile, whereas others did not, which is also the reason why conventional financial ratios, as will be discussed later, weren't relied on to such a large extent as compared to other 5 companies in the sample. The company E evaluated the importance of cash flow on capital structure decisions at 3 and described their cash flow as very stable. This, coupled with the fact that their maximum LTV ratio they can allow themselves to hover around is 60% and that they are not going for an investment grade rating, which is higher than any other company in our sample, might suggest that this stable cash flow is what allows them to use more leverage.

5.1.10 Cost of Capital

Cost of Capital or Weighted Average Cost of Capital (WACC), which show the particular cost of capital for a separate project and overall cost of capital in the company respectively, was one of the most important determinants for capital structures in listed real estate companies in Sweden. With profit margins being not necessarily so high and high competition in the industry, cost of capital can be a great source of competitive advantage. Informs of larger return on investment, cheaper financing and extended debt capacity. In order for companies to achieve this low cost of capital, all of them rely on debt financing, which is why equity issues barely

happen in real estate companies in our sample. Also as mentioned in the business cycle section of chapter 5, four out of six companies were obsessed with obtaining investment grade rating for the sake of cheaper financing. This affects capital structures of these firms in a form of lower leverage ratios, such as LTV below 50%, which is the most closely followed indicator for rating agencies according to AA, BB, CC, and FF. This interesting fact that companies are only now trying to obtain investment grade rating, is an interesting thing to know. The low-interest environment did not affect firms pertaining to cost of capital as mentioned by CC, however the fact that they are thinking about it now, might suggest that we are very near to the end of the business cycle, as based on basic macroeconomic knowledge interest rates tend to rise at the end of the business cycles according to AA.

5.2 Are effects of determinants on capital structures of large cap listed real estate companies in Sweden in accordance with what trade-off theory or pecking order theory suggest?

	Trade-Off Theory	Pecking Order Theory
Business Cycle	-	+
Inflation	-	+
Taxes & Ability to Tax Shield	-	-
Profitability	-	+
Tangibility	+	-
Firm Size	-	+
Financial Ratios	+	-
Volatility of Cash Flow	-	+

Meaning of signs	
+	In line with theory X
-	Not in line with theory X

External Factors

5.2.1 Business Cycle

With regards to the business cycle, it's explained more reliably by the pecking order theory. Relative leverage is mostly stable over the business cycle, as companies used debt when internal cash flow wasn't enough to finance itself and its projects. On the other hand, 50% of the firms have leverage targets that are relevant over the business cycle, meaning their absolute leverage will be fluctuating with their asset valuation, which is in line with the trade-off theory, however, the fact that relative leverage remains stable over the business cycle allows for a conclusion to be drawn that pecking order theory is more reliable in explaining the effect of business cycle on the capital structure.

5.2.2 Inflation

Pecking order theory turned out to be a better determinant for explaining the effect of inflation, as 67% of interviewees mentioned it wouldn't have any effect. Rest however mentioned that higher inflation would drive valuations of assets up, which then creates headroom for leverage targets, and thus more leverage, which is in line with the trade-off theory.

5.2.3 Taxes & Ability to Tax Shield

Taxes and ability to tax shield turned out to be not affecting capital structures of firms in the sample. Because tax shields are the primary benefit in the trade-off theory, it cannot be relied upon to explain tax policies of the firms. Neither did companies took into consideration increased cost of bankruptcy vs benefits of tax shields, which again shows that financing activities are mostly driven by the pecking order theory.

Internal Factors

5.2.4 Tangibility

Real estate companies have a lot of tangible assets which are easier to value and can be used as a collateral, hence they face lower expected distress costs. Based on trade-off theory these companies should have more leverage compared to other industries, which is in line in this case. No companies issue equities, and if they did it was for very special cases such as covering for unexpected large costs, which is opposite to what pecking order theory predicts, as tangibility increases information asymmetry and thus reduces the cost of equity. As a result,

tangibility is one of two determinants whose effect on capital structure for firms in the sample is explained more reliably by the trade-off theory.

5.2.5 Profitability

Profitability turned out to be a not important determinant for capital structures in listed real estate firms in Sweden. According to the trade-off theory, more profitable firms should be more leveraged, because they can benefit more from income tax deductibles. Firms in the sample have no clear pattern between leverage levels and profitability, for example in the case of company C and A, who are two most profitable companies in the sample respectively, have the lowest leverage respectively as well. Least profitable company D, was third in terms of leverage, and the rest are in between. Such results favor pecking order theory, because most profitable firms will favor internal financing methods to invest and thus will have lower leverage levels, which is confirmed by companies C, A and D although vice versa in case of company D.

5.2.6 Firm Size

Trade-off theory predicts that larger firms in terms of assets will have more leverage again because of diversification and lower default risk. This is only the case for company B, however, due to the type of properties that they own, which bring extremely safe cash flow, they can allow themselves to be more leveraged. For other companies in the sample, pecking order theory is more reliable, according to which larger firms would have more time to retain earnings and thus prefer internal financing methods. Companies C and A, the two largest firms in terms of assets, have the lowest leverage ratio, which is in line with the pecking order theory.

5.2.7 Financial Ratios

Financial ratios play a crucial role in five out of six companies studied, and because the pecking order theory doesn't include an 'optimal structure', authors can go on to say that trade-off theory is more reliable in explaining the importance of financial ratios. While increased expected distress costs vs benefit of tax shields isn't important for firms, it is certainly important for them to be in a certain leverage range, as when they exceed their leverage limits, plans for reducing this leverage to 'optimal levels' are already set, which means that leverage levels will fluctuate back and forth to optimal levels, which is in line with the trade-off theory.

5.2.8 Volatility of Cash Flow

According to the trade-off theory, firms with volatile cash flow will be less leveraged because they can't utilize tax shields to full extent and cost of debt is likely to be higher than for equity. This is exact the opposite compared to our case, where a firm with the most volatile cash flow has the highest debt, and the company with the most stable cash flow, is least leveraged. Hence, leverage levels reflect the need for external financing instead of creating value through deadweight bankruptcy costs or tax shields, which is why pecking order theory is more reliable in explaining the impact of volatility on capital structures in listed real estate firms in Sweden.

5.2.9 General

Overall from the data collected, in all companies besides one, preferred financing method is in line with what the pecking order theory suggests, where companies choose to finance its investments with internal cash flow first, then raise capital through debt when internal cash flow is not enough, and equity issuance was the last capital raising option or wasn't an option at all. On the other hand, pecking order theory is supposed to work because of costs of capital that differentiate between debt and equity financing because of the information asymmetry. All of the companies said that information asymmetry did not have any impact, as they believe they are already as transparent as they can. However, management of the companies agreed on the fact that cost of capital is lower for debt than for equity and is the reason for using debt, which is also in line with the pecking order theory.

When it comes to the trade-off theory and balancing deadweight bankruptcy costs vs the benefits of tax shields namely, it wasn't a factor in determining the capital structure. Instead, companies tend to focus on financial risk that debt brings to the company, and benefits of tax shields are just a side effect of debt in general that is then utilized. Taking on additional debt however for the benefits of tax shields wasn't the case for any of the companies, which can be explained by recent changes in regulations where only certain amount of debt payments can be used as tax deductibles as well as interest rates in Sweden being so low.

6. Conclusion

This chapter presents the most important determinants affecting capital structure and the extent to which decisions regarding capital structures are in line with the pecking order and trade of theories. Finally, an overall pattern discovered is presented.

In conclusion, the determinant that had the most significant impact on capital structures in our sample was the LTV ratio. This ratio was evaluated by 83% of the companies at 4, more than any other determinants. Moreover, 50% of the companies, have their capital structure decision based around their LTV target, which helps obtaining investment grade rating the most. The remaining companies did not have some specific one goal that they base their decisions around. Instead, they want to grow while managing their risks. This means being in a certain financial ratio range and having all liquidity potential issues solved. For all three companies though, refinancing risk is extremely important to manage, as late stage of business cycle brings fears of tighter debt supply, which later might cause issues when extra financing is needed.

Overall, all firms worked in a similar manner to what pecking order theory suggests. Companies use their internal cash flow first to finance all of their activities, and when that is not enough, they reach out to external financing, where debt is preferred. Equity issues occurred only in 16% of the firms, which company F uses for cost-covering purposes. Companies B and C said they would use equity financing only in special circumstances, such as when speed matters and when NPV of the project is extremely high. The reason for using debt is to get leverage on the equity, and thus to drive higher returns on equity. Also, equity has always a higher cost (Myers, 1984), which is why it is of a rare use in our sample. On the other hand, the trade-off theory can be almost fully rejected, as not a single company in our sample took out extra debt for the sake of utilizing interest payments as income tax deductibles. However, with all companies having target dividend payouts, it can be argued that they do finance themselves with debt, as internal cash flow isn't enough to finance capital expenditures, dividends and costs. Therefore, to some extent, the deadweight loss of bankruptcy costs that occurs when taking on debt is present, meaning a loss in value of previous debt transfers as a gain in value for existing shareholders. However, that should be examined closer by performing statistical tests. Another way in which companies' behavior is somewhat in line with the trade-

off theory is that they do have target leverage ratios. Moreover, there is a range from which they deviate, although when doing so, clear adjustment plans towards those target levels are already in place as well. These target levels, however, aren't based on balancing the costs and benefits of debt. Although rather leverage levels that allow for cheapest possible financing and minimize risks, while having enough of good debt capacity to make further investments.

Finally, our results agree with a “modified pecking order theory” of Myers (1984), although only with the first three points:

1. Firms avoid issuing equities because they do not want to pass up what would be positive NPV project had they used debt to finance it, and do not want to issue undervalued shares.
2. They have target dividend payouts which still allow for normal rates of equity investment, such as at least 30% of the project, can be funded by internally generated cash flow.
3. Firms cover parts of their investments with new borrowing, although restrain themselves enough to keep their debt safe, meaning close enough to default-risk free. It does so for two reasons: to avoid material costs of financial distress and to have enough of unused good debt capacity in case that is needed.
4. Because target dividend payouts are predetermined and abide by for long periods of time, and investment opportunities relative to firms' cash flow fluctuate, firms might from time to time exhaust its ability to issue safe debt. When that happens, they will issue less risky securities first such as risky debt or convertible bonds, after which common stock follows.

The last point could be in line with results obtained from a similar study, however in a different market. This is because low-interest rate environment and fast price increases of the assets in Sweden caused firms in our sample to have a lot of leeway in terms of debt capacity, so this problem from point 4 hasn't occurred besides one instance when company F issued common stock to cover for costs from a lost court case. So instead, firms don't exhaust their debt capacity, although limit their leverage levels and stick to them, primarily to limit financial risks and lower cost of capital, and when have extra cash is in place, pay the debt down.

7. Discussion

This chapter presents an inspective critical review regarding the whole thesis. Furthermore, the author presents their theoretical contribution and practical implications of this study. Followed by suggestions for future research.

7.1 Critical Review

The authors were pleasantly surprised when six out of 15 companies agreed to participate in an interview. However, since there was a considerable amount of time between interview one and six, approximately 25 days, the authors gained a deeper understanding of the subject at hand, which led to a need to change the design of the interviews slightly. The interview was changed mostly with regards to what questions were asked and how the authors incorporated their one to four rating system. There might have been an issue here, that the differences were significant, which could have impacted differences in responses. However, the authors resolved this by reaching out to the companies one more time for clarifications. Furthermore, the differences in the time constraints between the different interviewees, made the different interviews differ significantly in time. This again could lead to a difference in the depth of information between interviews. Finally, the fact that this was the first time the authors conducted this kind of research, might as well have impacted the result of the study.

7.2 Theoretical Contribution

This thesis contributed theoretically in the following two ways: First of all, while previous studies had identified which factors that have an impact on the capital structure with a certain statistical correlation. This study went on to provide an explanation of the degree to how these different factors impact the capital structure in large-cap real estate companies in Sweden from a managerial point of view, where the problem of assuming ‘other things constant’ is evaded. Secondly, while an extensive amount of previous studies has looked at which of the two theories is more reliable in explaining certain capital structures, this study on the other hand laid a theoretical foundation on which of the two theories is more reliable in explaining importance of various determinants for Swedish real estate firms.

7.3 Limitations

The authors identified the small sample size as a clear limitation. However, since the target population consisted of only 15 companies. With that in mind, the sample of 6 companies is 40% of the target population, which the authors argued to be a sufficient amount. In order to argue for the data is representative of the whole target population.

7.4 Future Research

Since this research is focusing on listed real estate companies in Sweden with a market cap of more than SEK 1 billion, our sample includes companies that strictly buy and hold, developers, flippers, property managers or a mix of all. Future research instead, could focus only on one type of real estate companies and remove the limitation of specific size such as in the case of this thesis only large-cap.

Moreover, during one of the interviews, an executive from our sample, while agreeing on the relevance of this topic for research purpose, said that now such a research might not bring the most feasible results. According to the interviewee, in Sweden this is especially the case because of a decade long bull market with unusually low-interest rates, hence making money in real estate was relatively easy for the past 10 years, because financing was easily available. Instead, interviewee suggested, that such research could be worked on during tough financial times such as during 2008-2009 financial crisis when debt financing isn't easily available and equity issues make more sense.

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9. Appendices

Appendix A

List of companies in the Target Population

(in alphabetical order)

Company Name	Market Capitalization (MSEK)*	HQ
Atrium Ljungberg	21 289	Stockholm
Bonava	13 819	Göteborg
Castellum	48 575	Göteborg
Fabege	44 601	Stockholm
Balder Fastighets	53 892	Göteborg

Hemfosa Fastigheter	13 309	Stockholm
Hufvudstaden	38 253	Stockholm
JM	12 772	Stockholm
Klövern	11 544	Stockholm and Nyköping
Kungsleden	15 998	Stockholm
Nyfosa	9 334	Stockholm
Padox	28 542	Stockholm
Sagax	26 655	Stockholm
Wallenstam	30 789	Göteborg
Wihlborg Fastigheter	20 244	Malmö

* Based on fourth quarter (Q4) report 2018 (Avanza, 2019).

Appendix B

List of companies in the sample

(in alphabetical order)

Company Name	Market Capitalization (MSEK)*
Atrium Ljungberg	21 289
Fabege	44 601
Hemfosa Fastigheter	13 309

JM	12 772
Kungsleden	15 998
Wihlborg Fastigheter	20 244

* Based on fourth quarter (Q4) report 2018 (Avanza, 2019).

Appendix C

Overview of the interviews conducted

(in alphabetical order)

Company Name	Interviewee	Position	Type	Date	Length of the interview
Atrium Ljungberg	Martin Lindqvist	CFO	Telephone interview	24/4/19	39 min
Fabege	Åsa Bergström	CFO	Telephone interview	24/4/19	34 min
Hemfosa Fastigheter	Peter Anderson	CFO	Telephone interview	3/4/19	21 min
JM	Claes Åkesson	CFO	Telephone interview	25/4/19	33 min
Kungsleden	Fredrik Sandell	Finance chief	Telephone interview	29/4/19	22 min
Wihlborg Fastigheter	Arvid Liepe	CFO	Telephone interview	29/4/19	24 min

Appendix D

Interview Questions

Order	Questions
1.	What is your goal when making decisions regarding capital structure?
2.	What is your 'go to' way to finance new projects?
a)	Internal cash flow?
b)	Debt?
c)	Equity issue?
	<ul style="list-style-type: none">- If debt, is it because you don't have sufficient internal cash flow, or because of other reasons such as ability to tax shield profits? If no, then why? If yes, then:<ul style="list-style-type: none">- do you have an optimal debt to equity ratio- In times of surplus cash flow, do you pay down the debt to reach the optimal target, or go even below optimal target?- Or do you tend to increase debt when markets are early in the cycle and pay debt down when they are late such as now?- What determines this optimal capital structure for you? From 1 to 4, please rate following:<ul style="list-style-type: none">● industry average

	<ul style="list-style-type: none"> ● balancing costs of bankruptcy vs benefits of tax shields ● leaving certain amount of unused debt capacity for future investments ● Others
3.	<p>To what extent do you consider the following factors to be important when deciding to take on new debt in your company? From 1 to 4, please rate following:</p> <ul style="list-style-type: none"> - interest rate - currency exchange - volatility of cash flow - ability to tax shield - increased potential of bankruptcy - flexibility <ul style="list-style-type: none"> ● refinancing ● variable or fixed interest rate - profitability and return ratios
4.	<p>Have you ever used debt for something else rather than investing in real estate?</p> <ul style="list-style-type: none"> - stock repurchases - dividend payouts - tax shields
5.	<p>To what extent does taxes affect your capital structure decisions? (1-4?)</p>
6.	<p>Do you ever issue equity? If yes, when:</p> <ul style="list-style-type: none"> - due to asymmetric information between you and investors - when company is overvalued - when you don't have anymore debt capacity
7.	<p>To what extent does firms size affect your ability in general to finance your projects the way you do? (1-4?)</p>

8.	<p>What is the most important financial ratio that you consider when evaluating your capital structure? (1-4)</p> <ul style="list-style-type: none"> - debt to equity - interest coverage ratio - loan to value - equity/assets ratio
9.	<p>Do you use certain capital structure strategies to gain competitive advantage? Where does that advantage come from?</p>
10.	<p>How important is cost of capital as a determinant for your financing decisions? (1-4?)</p>
11.	<p>Does information asymmetry have an impact on your decisions?</p>
12.	<p>To what extent does future market outlook affect your capital structures and amount of investments in general? (1-4?)</p>
13.	<p>To what extent do inflation expectations affect your financing decisions? (1-4?)</p>
14.	<p>Any other ratios or determinants that are important to you?</p>