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The Closed-End Investment Company NAV Deviation Puzzle: What does the Industry Reveal*?*

A qualitative study of the net asset value discounts and premiums in Swedish listed closed-end investment companies

Max Odqvist (23399) **Jesper Warén (23409)**

Abstract

This study of net asset value deviations ("*NAV deviations*") is conducted with a qualitative method to find explanations for NAV deviations by testing the entrenchment of current theories in Swedish investment companies. The study was conducted through a total of 13 interviews with representatives from investment companies, equity research analysts and fund managers. The empirical findings show that premiums are mostly explained by technicalities such as the size of the free float and liquidity in the share, whereas discounts are mostly explained by the perceived agendas and the capabilities of the management, information asymmetries and portfolio structure. These results are in comparison to observed previous studies partially inconsistent and one explanation for this is that emphasis has to be put on company specific factors, rather than NAV deviations as a generic phenomenon.

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1. Introduction

1.1. Background

Throughout history, publicly traded closed-end investment companies (*"investment companies")* have been traded at market values that have deviated from their net asset values ("*NAV*"). That implicitly means that the investment company has a value not equal to the value of the underlying portfolio. The deviation between the NAV and the market value of the investment company ("*NAV deviation*") creates a puzzle, where some investment companies are traded at a premium, and some are traded at a discount. In the last 17 years, the average NAV deviation in Swedish investment companies has been approximately -16%.[1] This observation is an example of where well known finance theories such as the efficient market hypothesis and Modigliani and Miller's arguments fail to support the empirics (Dimson & Minio-Kozerski, 1999, p. 2). Although several academic researchers have approached the area in many different settings, there are no consistent or fully explanatory factors completely explaining the phenomenon. What makes the field of research appealing is the fact that none of the observed studies have used a qualitative method to approach the subject. Some variables tested quantitatively in previous research are tax related factors, management fees and portfolio composition. However, since many of the factors identified are often varying over time and between companies, quantitative methods seem to be problematic. We therefore believe that by approaching the area from another perspective, with qualitative tools and theories, value could be extracted and hence contribute to the gap in the current field of research.

In this study, we analyse five Swedish investment companies, namely *Investor*, *Industrivärden, Latour, Melker Schörling* and *Creades.* Historical NAV deviations for the investment companies were identified and analysed, thereafter followed by interviews with five equity research analysts, three fund managers and six representatives from the aforementioned investment companies. This gave us the opportunity to attain an inside industry perspective to further investigate some of the most important findings from previous research. Our results indicate that there are distinct variables that can explain both discounts and premiums. However, every investment company has to be analysed on a stand-alone basis in order to identify the underlying components that explain the NAV deviations. The somewhat divergent results found in previous research could potentially be explained by this.

[1] Non-weighted average on Swedish listed investment companies observed in this study. Calculation based on figures found in appendix 8.1.

1.2. Investment Companies

An investment company owns and controls other companies with the purpose of managing assets for the shareholders (von Essen, 1997, p. 9). According to current legislation, the definition of a Swedish investment company can be concluded to the following: *an investment company is a Swedish limited company or a Swedish business association that exclusively or almost exclusively administer securities or similar assets, whose job is essentially to provide a large number of individual shareholders exposure to a well-diversified portfolio of assets* (Chap. 39 §15 Inkomstskattelagen). In Sweden there are numerous companies that seem to follow the above definition, although some of them achieve an equivalent status in other ways. An investment company has a fixed amount of shares and hence a fixed amount of capital which makes the value of the company itself solely dependent on the current supply and demand of shares. (Lee et al., 1990, p.154). Outside of Sweden, the equivalent of an investment company is called a closed-end fund or an investment trust (Hjelström, 2007, p.3). The opposite of an investment company is an open-end fund, where inflows and outflows will lead to either issuing or cancelling shares at the current NAV (Lee et al., 1990, p. 154). Consequently, the value of open-end funds can never deviate from the underlying NAV and the anomaly of NAV deviations can never arise in the valuation of open-end funds.

1.3. NAV Deviation

The NAV is defined as the residual interest in the assets after deducing the liabilities, or more specifically, the total market value of the investment company's invested assets, less its net debt (Robinson et al., 2009, p. 171; Investor, 2017; Industrivärden, 2017; Melker Schörling, 2017). When investment companies are traded on the stock exchange, the market value of the equity might deviate from the NAV. In the case when the stock is trading below the NAV, a discount is present and in the opposite case it is trading at a premium. Figure 2. in the appendix illustrates this relationship. It is further important to differentiate between real NAV and the balance sheet NAV, as NAV can either be interpreted on a market value basis or based on what is reported in the financial statements. Additionally, when an investment company has unlisted holdings, the reported value can differ as some report the estimated fair value, whereas some do not. (Porse, 2017).[2] When an investment company is trading below its NAV, it is cheaper to buy it compared to what the underlying assets are worth, which in turn questions Modigliani Miller's argument of value additivity (Dimson & Minio-Kozerski, 1999, p. 2).

[2] Interview with Elias Porse, Nordea (2017-03-27).

1.4. Research Question and Purpose

The combined market value of the investment companies in Sweden is almost SEK 700 billion (Bloomberg Markets, 2017), thus investment companies attract a large amount of capital. The valuation of the investment companies has a significant impact on both institutional and private investors, and from this point of view it is of high importance to understand how shares of an investment company can be traded at a NAV deviation. The size of this anomaly inspires us to better understand the origin behind the NAV deviations as preceding research on the subject has not been able to find any consistent explanatory factors.

The first part of our purpose is to investigate how the NAV deviations in the chosen companies have developed over time. This will provide a useful overview of the sizes and characteristics of the historical NAV deviations. Thereafter, the purpose is to find explanations for the historical and current deviations that are found, by interviewing people from the industry. These findings are then related to the individual investment companies in order to understand the company specific NAV deviations. The purpose of this study can be digested into the following research question:

What are the explanatory factors behind the deviation between the value of the investment companies and their net asset values from an inside industry perspective?

1.5. Delimitations

The study is based on Swedish investment companies that are traded on mid- and large cap lists on the Nasdaq OMX Stock Exchange. Only including listed investment companies is a necessary demarcation as there are no market values and hence any NAV deviations for unlisted investment companies. Even though it would be of interest to examine other related aspects such as whether the management of the investment companies aims to affect the NAV deviations, the limitations in scope and time prevent us from investigating the subject further. In addition, when making an assessment of the historical NAV deviations, we have chosen to only observe quarterly data for the years 2000 to 2017. Two of the five investment companies were initially listed on the stock exchange after year 2000, thus the lack of data is what impedes us from assessing earlier data. The attractiveness of this subject from a research perspective has created a wide repertoire of tested variables and due to the scope of this study, a demarcation has been made to the most emphasised variables and theories that are expected to have an impact on Swedish investment companies.

2. Theory and Previous Research

There are many financial theories that have been accepted as standards when it comes to how financial assets are priced and how actors on the financial markets act in different situations. The most important theories from a perspective of NAV deviations are presented below. Thereafter, we further present a repertoire of factors developed to explain NAV deviations as the study takes a standpoint in previous research.

2.1. General Theories in Finance

2.1.1. Efficient Markets

The theory about efficient capital markets and the efficient market hypothesis propose that the market will price financial assets based on all available information and when new information is presented the market will instantly react and hence adjust the price of an asset to reflect the new information. In essence, the semi-strong version of this theory suggests that there should exist no arbitrage opportunities based on public information. (Fama, 1970). Further, the assumptions about perfect capital markets imply that the value of a financial entity should equal the sum of the market values of the underlying holdings as Modigliani and Miller's arguments of value additivity advocates (Modigliani & Miller, 1958). As consistent NAV deviations have been historically observed, the phenomenon is not in line with the efficient market hypothesis and the assumption about perfect capital markets (Dimson & Minio-Kozerski, 1999, p. 2).

2.1.2. Liquidity Aspects

Different kinds of financial assets have different amounts of liquidity when priced on financial markets and some even lack an active market. The liquidity differs both between asset classes but also between individual assets within one asset class. As a result, the price of assets with lower liquidity tend to be lower compared to similar assets with a higher amount of liquidity (Damodaran, 2005). This difference in price is often referred to as an illiquidity discount following the fact that an investor that tries to completely liquidate an illiquid asset may end up with a lower price. This risk is therefore reflected in the price as it leads to a lower price in comparison to an otherwise identical asset with higher liquidity. (Laro & Pratt, 2005; Damodaran, 2005). The theory is important as there are liquidity aspects to consider both in the underlying portfolio companies but also in the investment companies themselves (Cherkes et al., 2009). This in turn will have effects on the NAV deviations in investment companies as a lack of liquidity might cause problems in finding the fair market values (Seltzer, 1989, p. 116).

2.1.3. Agency Theory

In a given scenario, where one entity has delegated another entity to make decisions on its behalf, the problems with agency conflicts arise. Usually the entity that has delegated decisions (principal) is not able to supervise the one making the decisions (agent) and hence behavioural asymmetries may appear. The basic assumption of the agency theory is that the agent and the principal have different goals and thus the agent will not act in line with the principal's interest. Therefore, the principal needs to monitor the agent and the costs associated with this in combination with the resulting problems from the asymmetries are referred to as agency costs. (Eisenhardt, 1989). This is of importance as the management in an investment company is the agent in this dilemma and the investors in the investment companies are the principals. This could result in management of the investment company not necessarily making decisions that are in the best interest of the shareholders or lead to other potential issues resulting from the information asymmetries between the management and the shareholders. If these potential agency costs are high, the market may consider this and hence price the investment company with a discount. (Khorana et al., 2009).

2.2. Theories Related to NAV Deviations

In the 1970's, attention to this subject was given by researchers, when variables in line with traditional finance theory of rational and efficient markets, such as management fees, performance and tax related aspects were tested. The studies were mainly based on US data on closed-end funds[3] and although researchers such as Malkiel (1977) and Boudreaux (1973) performed quantitative empirical tests, low significance in terms of explanatory power could be found. Later on, some researchers began exploring variables that were not in line with traditional finance theories, but rather in line with behavioural finance where previous basic market assumptions were questioned. One example is the investor sentiment hypothesis that is based on the assumption that the capital market consists of different investors with different views and opinions about the investment company. Barberis et al. (1998) derived a model based on the investor sentiment hypothesis which in turn divides the market into rational and irrational investors indicating different expectations about future stock returns. These are only a few examples of the extensive field of research that can be found and it is important to keep in mind that the scope of this study limits us to present all examined variables, thus only the most emphasised theories are presented. These theories will subsequently work as a foundation for the analysis as well as the conclusions.

[3] Recall that a closed-end fund is the US equivalent of an investment company.

2.2.1. Ownership and Power Structures

Since the beginning of the Swedish investment company era, the majority owners have often consisted of different families as well as spheres from the Swedish business society, often with long traditions ownership. As Sweden currently has and has had shares with different voting rights, the control in the investment companies has often to a great extent been possessed by a small number of investors holding shares with strong voting rights, while there is an excessive number of smaller investors holding a high amount of shares with a lower degree of voting rights. This degree of control is not only derived from the presence of shares with differing voting rights, but also from being able to completely control the annual general meeting. (von Essen, 1997; Holmén & Högfeldt, 2009). Resulting from this, there are theories explaining that the shareholders controlling the company are acting in the interest of themselves, rather than in the interest of all shareholders. This could imply that agency costs arise, hence, other shareholders adjust the price of the shares to reflect this. (Hjelström, 2007). In fact, Holmén and Högfeldt (2009) established a relationship between the vote to capital ratio held by the largest shareholders and the NAV deviations in Swedish investment companies. They found that an increase in the vote to capital ratio will increase the discount. In addition, they also found that the history of the owners is important as the longer they have had control, the higher is the discount.

Furthermore, Swedish investment companies may have large holdings in companies not necessarily to maximise the return to shareholders but rather to utilise its owner power to affect the company in itself and control a large part of the Swedish business society or for other emotional and traditional purposes. These facts will increase the level of discount as well. (Holmén & Högfeldt, 2009). Other researchers also support this theory, and one example is Barclay et al. (1993) who found a relationship between the NAV deviation and the amount of blockholders possessing ownership in American closed-end funds during the period of 1979 to 1989. They define blockholders as shareholders with 5% or more of the fund's common stock. For closed-end funds having a high number of blockholders, the typical discount was over 14%, while funds exclusive of blockholders only had a discount of approximately 4%. The proposed reasoning behind this is the potential private benefits only attributable to large shareholders and not to other shareholders that might arise when a small owner group has an overwhelming control. As these blockholders are often either closely related to the management or consist of members of the management themselves, an agency problem between small shareholders and the management arises. (Barclay et al., 1993). Another explanation for the phenomenon, besides

the aforementioned theory, is that the amount of liquidity in the actual share of the investment company tends to decrease when there are many large shareholders in an investment company. As there is a lower number of shares traded regularly, the trading volume decreases, and the lack of liquidity will in turn result in a lower valuation and hence a discount will be present. (Barclay et al., 1993).

2.2.2. Tax Specific Aspects

Tax effects have in previous research been a frequently used explanatory theory for discounts. Since double taxation of dividends and capital gains may often be a fact, discounts could for that reason be viable.[4] One example is Malkiel (1977, 1995) who argues that American closed-end funds with high unrealised capital gains in their investments should trade at a discount due to the deferred tax liability arising from future tax payments. However, as these studies are made on the basis of American tax laws, these findings are hardly applicable in Swedish investment companies since tax legislation differs depending on the country. (Hjelström, 2007). This is especially true in Sweden where dividends are tax deductible and where capital gains are not taxable for investment companies. In Sweden, the taxation of investment companies differs from the taxation of operating companies where profits from capital gains are taxable (chap. 44 §13 Inkomstskattelagen). For investment companies, interest income and received dividends are taxable while interest costs, paid dividends and management costs are tax deductible. Income from capital gains on shares are in turn not taxable but the company has to pay a flat tax on 1.5% of the market value of the holdings each year. This tax does not apply to what is called "business-related shares" (in Swedish "näringsbetingade andelar"), which are unlisted shares or listed shares where the company has holdings of at least 10% of the votes (chap. 24 §14 and chap. 39 §14 Inkomstskattelagen). In order for business-related shares to be excluded from the taxation, the holdings need to be held for at least one year (Industrivärden, 2017). For the companies that do not follow the exact definition of an investment company according to tax legislation, the possession of business-related shares will make dividends and capital gains not taxable and hence be completely exempt from taxes (chap. 24 §17 and chap. 25 §3 Inkomstskattelagen). These rules exist to make investment companies a tax neutral intermediator between the investors and the underlying holdings (Industrivärden, 2017).

[4] Double taxation implies that dividends and capital gains are taxed both in the investment company and on the investor level.

2.2.3. Management Capabilities

Researchers have also presented arguments for why NAV deviations are justified on the basis of managerial performance. The key stand point is that investment companies generating returns that are above the required rate of return should be valued at a premium and investment companies with inferior performance should be valued at a discount. One of the first to incorporate this was Boudreaux (1973), who accentuated the importance of the market's perception of the management's investment abilities when it comes to the valuation of investment companies. In other words, the capacity of the management to find investments that are superior to those that other investors and the market itself can find is critical for the valuation of the investment company. Boudreaux tested the portfolio turnover ratio and found that this ratio is significantly related to either discounts or premiums. If the market has a good perception of the investment capabilities, a higher turnover ratio should lead to a premium and vice versa. (Boudreaux, 1973). With this being said, the investment company should be compensated for conducting value adding activities that exceeds the value destroying activities (Malkiel, 1977; Chay & Trzcinka, 1999). In other words, NAV deviations should be seen as a reflection of management's ability to perform these value creating abilities. However, when these aspects have been tested quantitatively, the results are shattered and the significance is contradicting. This is mainly due to the difficulties arising when classifying and measuring performance. It can for example be seen as either relative or not, be based on past or preceding performance, be measured on the basis of NAV or other bases, or differ when it comes to the kind of adjustments that need to be made. (Lee et al., 1990; Hjelström, 2007). For instance, Malkiel (1977) used past performance as the lead indicator for expected future performance and found low significance while Chay & Trzcinka (1999) related future NAV performance to current NAV deviations and found high significance. Nevertheless, research supports the argument that the market sentiment and the beliefs about future management performance in terms of investment capabilities are very important factors in the pricing of investment companies (Lee et al., 1991).

2.2.4. Unlisted Holdings

Investment companies can invest in both listed and unlisted companies. Finding the value of listed shares and hence the NAV is associated with few difficulties since a current market price always exists. However, the situation is reversed when finding the value of unlisted holdings. Valuing unlisted holdings require the need for many assumptions to be made and a big degree of uncertainty is therefore present due to the lack of information. (Carroll et al., 2003). In

addition, unlisted holdings are generally more difficult to divest than listed holdings which in turn might give rise to the aforementioned illiquidity discount (Damodaran, 2005). Previous research has found some relationships between the portion of unlisted holdings in investment companies and the average size of the discount. However, a cautious approach is needed when evaluating company figures as differences in how unlisted holdings are accounted for may be present. Carroll et al. (2003) propose that illiquid holdings, for example letter stock or restricted stock where the right to disposal is restricted, are often overvalued in the reported NAV. Malkiel (1977) was early with the approach of testing the explanatory power of illiquid securities. He used the ratio of restricted stock asset value to the total asset value of the portfolio and found quantitative empirical evidence during the years of 1969 to 1974, that the market only valued the restricted stock in his sample to 50% of the book value. This was further tested by Seltzer (1989) who also included other illiquid holdings and his remarks are in line with those of Malkiel (1977), namely that illiquid securities tend to be overvalued in the books relative to the market's perception. This is mainly due to the increased amount of uncertainty and valuation difficulties with these holdings leading to a market scepticism that in turn leads to higher discounts (Cullinan & Zheng, 2014). At the same time, there are theories that advocate the opposite, namely that unlisted holdings will lead to a premium. Cherkes et al. (2009) argue and found support for the theory that investment companies investing in unlisted holdings create an increased attractiveness as it enables investors to get specific exposure not available elsewhere. In addition, the authors argue that it yields investors the possibilities of not having to deal with the costs related to the illiquidity of unlisted holdings. This could actually imply that the discounts could be lower when an investment company is exposed to unlisted holdings.

2.2.5. Diversification

There are somewhat inconsistent explanations found on portfolio diversification's effect on NAV deviations. Kim & Lee (2007) found a negative correlation between diversification and discounts. The correlation implies that a more diversified portfolio of holdings will lead to a diversification benefit, implying a premium. The underlying reason is that as the correlation in value between the underlying assets becomes lower, so does the risk, which increases the possibility of a larger risk adjusted return. This relationship is also said to increase as the underlying assets become more risky.

Another reasoning regarding diversification's effect on NAV deviations can be based on historical research on the subject of conglomerate discounts and heterogeneous beliefs.

Conglomerate discount or diversification discount is the name of the phenomenon where conglomerates are valued at an amount less than the sum of the different parts in the conglomerate (Berger & Ofek, 1995). Traditional finance theory assumes that investors have homogeneous beliefs, however, research on diversification questions this argument and rather assumes that there are heterogeneous beliefs. This implies that investors might have different opinions regarding a portfolio, suggesting that the portfolio will be priced with a discount, since investors are not willing to pay the full price for something they do not find attractive. (Miller, 1977). Hjelström (2007) explains that the arguments presented by Miller have been widely cited, but that it is difficult to find evidence for the arguments on the subject of investment companies. Hjelström further explains that evidence has to be collected from research on conglomerates, which provides strong evidence on the relationship between diversification and discounts. Important to keep in mind is though that he finds the explanations for this relationship hard to apply to investment companies, since there are conglomerate specific explanations not relatable to investment companies. (Hjelström, 2007). In his own study, he finds a strong negative correlation between diversification and premiums, implying that his findings are contradicting to the relationship found in the study presented by Kim & Lee (2007).

2.2.6. Management Fees

One of the most frequently tested factors are management fees or costs associated with the administration of an investment company. The theory states that discounted future management fees could explain discounts as this can be seen as a dead weight loss to the investors of the investment company. One of the earliest researchers to test this was Malkiel (1977), who tested it as an administrative expense ratio. He found no significance in explanatory power for the discounts, and when Malkiel returned to the subject in 1995 by testing the same variables, the quantitative empirical results remained. Management fees have also been tested in other ways, such as relating it to the total cash outflows of the investment company, rather than relating them to the NAV as Malkiel did. Kumar and Noronha (1992) found expenses to be related to discounts and the results can be interpreted as the more cash outflows that go to managers relatively to what go to shareholders as dividends, the higher the discount is expected to be, thus the authors find administrative expenses to have an explanatory power for discounts.

3. Methodology

In this chapter, we first present the method applied to conduct the study. Thereafter, we further present the observed companies, persons interviewed, how the interviews were structured and how the interview data were interpreted. Furthermore, we describe how we collected the quantitative data. Lastly, we explain the critical aspects of the applied method.

3.1. Choice of Method

The choice of method is based on the advantages of using a qualitative method in order to discover answers to the research question in combination with the aim to find the underlying reasoning within the industry. The advantages of using a qualitative method are the possibilities to analyse company specific factors and explore the entrenchment of existing research theories, rather than testing preconceived models (Taylor et al., 2016, p. 8). Also, a qualitative method has advantages since it can take factors hard to quantify into account (Bansal & Corley, 2011; Bryman, 2011). Examples of this are market psychology, market perceptions and feelings possessed by individual actors on the financial markets, as these are expected to have significant impact on NAV deviations. However, there are difficulties following the choice of using a qualitative method since there are no previously used similar methods within this field of research to relate to or to further develop. The method is structured as a combination between a multiple case study and an interview study, as specific investment companies have been selected and then used as a starting point for the interviews. We do not approach the subject based on a predefined hypothesis, but rather aim to find the in depth reasoning and explanations for NAV deviations. This is in line with what Bryman (2011) advocates as a qualitative method provides the possibility of finding an in-depth understanding of the research subject.

3.2. Choice of Investment Companies

The investment companies observed in detail and interviewed are *Investor*, *Industrivärden*, *Melker Schörling*, *Latour* and *Creades*. The choice of investment companies is dependent on their characteristics. All of the investment companies have similarities from a structural point of view. They are all, in some way, controlled by a major shareholder and traded on the Nasdaq OMX Stock Exchange. However, there are several ways in which they deviate from each other. Firstly, they have different kinds of holdings, where for example *Investor* is heavily focused on medical and industrial companies, *Creades* is more focused on financial technology and financial services whereas *Melker Schörling* only owns listed holdings. Secondly, they differ in terms of market capitalisation and free float. In addition, they have different histories and

initial purposes which might have an impact for some of the applied theories. Furthermore, weight has been put on the actual NAV deviation, in order to get a selection of investment companies that represent both premiums and discounts. It was critical for us to choose a set of investment companies that differ from one another since it creates the possibility to assess company specific factors and reach a nuanced set of answers to the research question. Some of the major characteristics of the observed investment companies are presented in table 1. Another reason has also been the investment companies' willingness to participate. *Kinnevik* and *Öresund*, have rejected our interview invitations and are hence not included in this study.

Table 1. Selected Investment Companies[5]

Company	Market Cap	Liquidity	Founded	Largest Owner	(% Votes)
Investor	SEK 308.69 B	SEK 339 M	1916	Wallenberg Related	(50.1%)
Industrivärden	SEK 93.46 B	SEK 57 M	1944	Lundberg Related	(28.8%)
Melker Schörling	SEK 67.47 B	SEK 12 M	1999	Melker Schörling	(86.1%)
Latour	SEK 63.10 B	SEK 18 M	1984	Gustaf Douglas	(79.8%)
Creades	SEK 4.09 B	SEK 0.8 M	2012	Sven Hagströmer	(48.8%)

Sources: Bloomberg Markets (2017), Nasdaq OMX (2017), Company Annual Reports (2016)

3.3. Quantitative Data Collection

The quantitative data are historical NAVs and closing share prices for each quarter. Share prices have been collected from Nasdaq OMX's website. Data on historical NAVs have been collected from quarterly interim reports for each investment company, rather than from an external financial database as these figures might include various adjustments. In every report, the investment companies state a list of all their holdings and their net debt, hence also their NAVs. An aspect of relevance for the NAV presented by the investment companies is that there is sometimes a difference in how they calculate their NAVs. Some base the value of their unlisted holdings on fair value whereas some base it on acquisition cost. In order to assess the fair value of the unlisted holdings of the investment companies not presenting the fair values, an extensive valuation process would be required. As this is outside the scope of this study, the reported NAVs have been used. When all the data were collected, the NAVs and the share prices were compared using the formula below to get the NAV deviations. Negative figures illustrate discounts and positive figures illustrate premiums.

$$NAV\ Deviation\ (\%) = \frac{(Share\ Price - NAV\ per\ Share)}{NAV\ per\ Share}$$

[5] Market Capitalisation as of 2017-04-28. Avg. daily liquidity March 2016 – March 2017. Ownership as of 2017-03-31.

3.4. Qualitative Data Collection

3.4.1. Interview Objects

When assessing the subject from an inside industry perspective, we find it important to interview people with potentially different perspectives on the phenomenon. Therefore, we chose to target three different interview groups. Firstly, representatives from the investment companies as managers working at the investment companies should most likely have their theories about the observed NAV deviations, and even though we do not investigate whether managers act to affect the NAV deviations, their actions might reveal the underlying explanations. Secondly, we interviewed equity research analysts from the sell side of the financial markets that cover the investment companies. Since these analysts work with valuing the investment companies and setting target market values for them, they should also have explanations for what factors they incorporate when setting a target share price that deviates from the NAV. Lastly, we interviewed asset managers from institutional funds that invest in the investment companies to evaluate their thoughts, their valuation methods and to receive a better understanding of the dynamics of the financial markets from a NAV deviation perspective. The decision of not only interviewing the investment companies themselves was based on the fact that we aimed to explore the research question from different perspectives within the industry, thereby including both buy side and sell side, as the investment companies might be biased towards certain opinions or even have prefabricated answers.

The study is based on data collected from 13 different interviews with a total of 14 individuals. Of these, six represented investment companies, five were equity research analysts and three were fund managers. The three interviews with the fund managers were focused on attaining the market's perspective. From the equity research group, analysts might have specific agendas since their jobs are partially to provoke financial activity, thus analysts from five different banks were interviewed in order to get a broad picture from different analysts with different perceptions. All interviewees are assigned codenames showing the interviewee's category and its individual number, for example Analyst 1. Details regarding the interviews are presented in table 3. in the appendix.

3.4.2. Interview Structure

The interviews were conducted in Swedish using semi-structured interviews with structured elements where a predetermined set of questions were used, although with the allowance to switch from subject to subject and let the interview object talk freely about their opinions and thoughts. The interview questions can be observed in appendix 8.3. Furthermore, additional

and control questions were asked during the interviews to reach in depth explanations, which is one of the strengths with semi-structured interviews (Saunders et al., 2007). Within the boundaries of semi-structured interviews, certain adjustments were made to take advantage of knowledge and different ways of working possessed by the different interview groups. For instance, investment company representatives were asked specifically about their investment company and its NAV deviation development over time, whereas equity research analysts were asked about their approach to NAV deviations when analysing investment companies.

All interviews started from an inductive point of view, where the interviewees were asked open-ended questions regarding their general ideas about NAV deviations as a phenomenon, and thereafter about company specific NAV deviations, both current and historical. This gave the interviewees the opportunity to feel comfortable and enabled them to freely elaborate regarding their thoughts without any influence from us. In order to receive comprehensive and potentially unanticipated answers, this aspect is important. (Bryman, 2011). After about halfway through the interviews concerning company specific factors and historical developments, the interview entered in to a more deductive phase with questions concerning the theories presented in previous research. For comparability purposes, these questions were almost identical for all interview groups. All interviews ranged from 40 to 90 minutes.

Before all interviews, we thoroughly analysed the historical development and company specific factors regarding ownership structure, market capitalisation, free float, liquidity and the historical underlying purpose of the founding of the investment company. The knowledge and understanding of both theories and company specific factors gave us the opportunity to seek and understand in depth answers to the questions. A last important element of the interviews was the control questions, where we questioned arguments and asked for more elaborated answers why an argument was valid. This in order to minimise any effect from partiality, but also to be able to draw well-developed conclusions related to the purpose of the study.

3.4.3. Data Processing and Coding

Out of the 13 interviews, ten were held face-to-face at the interviewees' offices, two were held by telephone and one was conducted by the use of e-mail communication. Of the twelve interviews held orally, eleven were recorded and one was not. The interview that was not allowed to be recorded was thoroughly documented with notes. After all interviews, notes were refined and all recordings were transcribed within 24 hours. Of all the interviewees, one demanded anonymity, thus its name and bank are anonymised. After the process of transcribing

all interviews, the interviews were coded according to a structured process. As Taylor et al. (2016) propose, we created different categories in order to harmonise the different answers. The categories were primarily based on the theories presented in previous research but also on new answers that could not as easily be related to an existing theory, such as the market climate's effect on NAV deviations. In the process of coding, the recorded interviews were listened to while reading the transcribed material in order to discover keywords relatable to either different theories or specific investment companies. Re-listening to the interviews was necessary to incorporate the interviewee's cadence and to ensure validity when assigning the correct context to each keyword. This categorisation structure enables us to keep the same structure in previous research as in the empirics and the analysis. In general, some of the coding categories were somewhat broad in terms of definition range, for example directly named after certain theories. This was necessary as the received answers were highly affected by company specific factors and a narrower repertoire of coding categories would be too extensive in terms of the number of categories. The coding enabled us to interpret the data and create the fundamental structure necessary to present the empirical findings. An additional aspect is that quotes and arguments have been translated from Swedish to English during the time of coding which creates the risk of literal improper citation. However, all quotations have been approved by the interviewees before the publishing of this study.

3.5. Criticism of the Chosen Method

As the study is based on a method not previously tested within the observed field of research, several aspects of the method could be questioned. One example is the decision of how to design the interview structure and how to find comparable answers from different interview groups. Another aspect that could be criticised is that all interviewees could potentially be uninformed or unfamiliar with the subject. Prefabricated answers or specific agendas depending on the roles of the interviewees could potentially also lead to non-reliable answers. Furthermore, an important aspect to consider is the fact that the findings presented in this study are based on opinions and feelings of interview objects that might be speculative. Our way of counteracting this concern was to address the subject from three different perspectives, namely the analyst perspective, the fund manager perspective and the investment company perspective. We also ensured that we met at least three different representatives from each interview group. Because of this, there could be potential reliability issues with qualitative methods in general, but given that our structure fulfilled the purpose of finding nuanced and in-depth answers, we believe that our conclusions are generalisable for investment companies in Sweden.

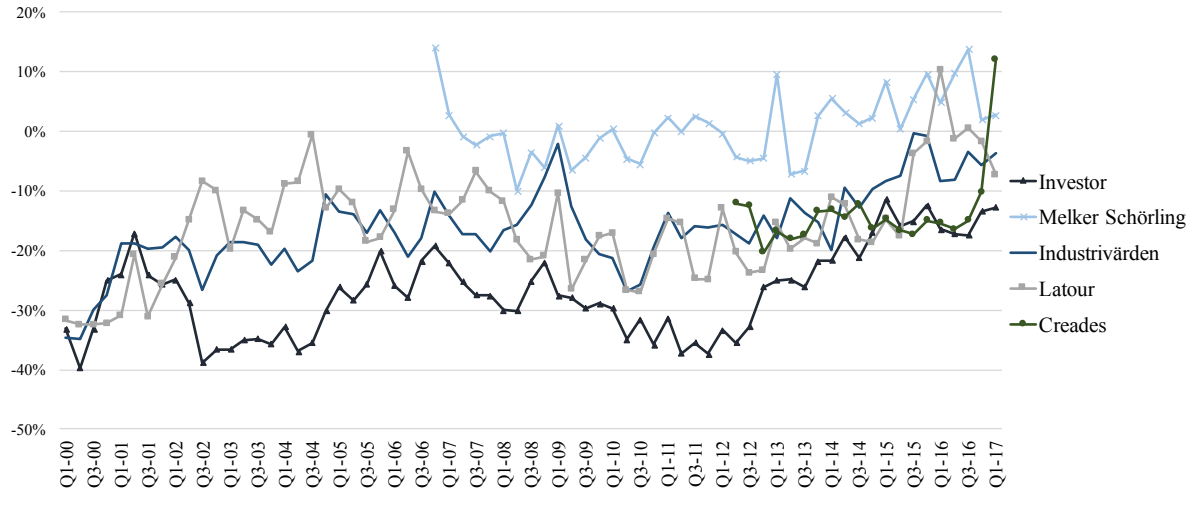
4. Empirical Results

In 4.1. we provide the results from the quantitative data collection to provide an overview of the observed NAV deviations. In 4.2. we present the empirical results from the interviews, where we first show the results from the general discussions with the interview objects, thereafter we present the interviewees' stand-points towards the theories identified in previous research. Thenceforth, we present findings that were not as heavily emphasised in observed previous research. Lastly, we provide the empirical results on an investment company specific basis, where the empirical findings are related to each of the observed investment companies.

4.1. Historical NAV Deviations

The results from the analysis of the NAV deviations since year 2000 are presented in figure 1. below.[6] As can be observed, *Melker Schörling* is the only investment company that in recent years has been valued at a rather constant premium. However, in the last quarters both *Latour* and *Industrivärden* have been traded at prices close to their NAVs. *Creades* currently has the largest premium of 12.1%, which is a big change in comparison to earlier quarters. The highest observed discount can almost regardless of observation date be found in *Investor*. Both in 2000, 2002 and 2011 *Investor* traded at discounts close to 40%. Further descriptive statistics on NAV deviations and a detailed overview of the historical NAV deviations on an investment company stand-alone basis can be found in the appendix.[7]

Figure 1. Observed NAV Deviations



[6] Sources: Nasdaq OMX (2017) and company interim reports.
[7] For descriptive statistics, see table 2.1.-2.2. For investment company specific observations, see figure 3.1.-3.5.

4.2. Presentation of Empirical Results

4.2.1. General Perceptions

The most emphasised explanatory factors from investment company representatives ("*representatives*") for the NAV deviations are transparency, communication and belief in the management's capabilities. A trustworthy corporate governance system and transparency to the investor clientele seem to be important to all companies, as this is the best way to prove that they are acting in the best interest of the shareholders. This should thus in the long term contract any discounts. *"Lacking the pressure of customer demands, our owners become, relative to other companies, more important stakeholders, and we strive to always act in their best interest" – Representative 1*. This is the reason why *Latour* presents their own guidance of the fair value of their unlisted holdings which otherwise could be a source of information asymmetry. This is also what *Investor* began doing in the Q1 report of 2017. Many of the analysts and the fund managers argued this is a good direction from a NAV deviation point of view, as the industry has demanded it for a long time and since it would facilitate their job. The fund managers and the analysts express the importance of the transparency and communication aspects considering the market easily creates a perception of the company as being more or less shareholder friendly, which in turn has an immediate effect on the NAV deviation.

There is also a general perception that the ability of the management to succeed with good investments has an effect on the NAV deviation. Some even see that this can justify a small premium, especially when it comes to unlisted holdings or if the investment company makes frequent deals that are attractive and not possible to replicate. However, the perception regarding the possibility to replicate the portfolio is somewhat contradicting. The investment companies have the view that there is a first mover advantage which leads to market reactions while some interviewees from other groups believe in the possibility of replicating the portfolio. Something that almost every interviewee agrees on however, is the fact that a majority of all explanatory power regarding the premiums is given by the size of the free float and liquidity in the stock. All interviewees, including Representative 3, representing the investment company with the highest observed historical average premium, find it difficult to justify a premium. However, there is an aggregated opinion that the market could sometimes be willing to pay a premium in order to get exposure to some specific attractive unlisted holdings, in investment companies that actively invests in unlisted assets. In general, there is no interviewee that can completely provide comprehensive explanations for the NAV deviations. All interviewees have

their own perceptions and reasoning, but what is harmonised is that NAV deviations have to be analysed based on company specific factors and historical circumstances. Even though no one could quantify the extent of NAV deviations and justify the NAV deviations for specific investment companies, there is an underlying belief that discounts should and will exist in some investment companies. Therefore, equity research analysts often use target discounts and fund managers see the possibility to make trades in investment companies when the NAV deviation is relatively high or low compared to the historical average, specifically expressed by Fund Manager 1 and 2. *"As a majority of the portfolio is replicable, Investor should have some kind of discount, and if it starts to trade at a premium or at NAV, I am a seller" – Fund Manager 2.*

4.2.2. Established Theories

4.2.2.1. Ownership and Power Structures

Three representatives state that there is a positive aspect of a concentrated ownership and a dedicated owner and that it could lead to lower discounts. "*I think it is positive to have a strong owner as it ensures a long term view and makes it easy for the management to have a similar view as our owners*" *– Representative 4.* Representative 3 exemplifies that large owners lead to a focus on value creation as they have a large financial exposure, for instance Melker Schörling that has a lot to lose from not maximising value. However, Representative 2 and 6 believe that it is completely affected by the market's perception of the owners and the management. If the majority owner is acting in the best interest of shareholders, a concentrated ownership should not have an effect on the NAV deviation. Analyst 5 says that there is a low risk of agency costs from concentrated ownership, as long as the majority owner is competent. If this would not be the case and another agenda would be present, then that would be taken into account when the investment company is priced. This argument is harmonised among all representatives. One example is Representative 6 who says that the system in Sweden with shares of different voting rights might be acceptable if the market has confidence in the agenda of the owners. Although, it is explained that the existence of shares with different voting rights hamper the understanding for international investors about any perceived power agendas. Representative 1 further states that the discount was previously called the power discount, and that this goes hand in hand with the miss-belief in the capabilities of the management. Representative 4 confirms this and explains that the market changes slowly when it comes to the perception of investment companies. His view was also that equity research analysts contributes to this, by releasing target prices dependent on a specific target discounts, which are often based on historical

averages. In addition, having a concentrated ownership will decrease the free float and hence decrease the stock liquidity.

The fund managers agree on the fact that the agenda of the majority owner is an important aspect. For instance, Fund Manager 1 says that some of the investment companies were founded for certain purposes not necessarily in favour of all shareholders. Fund Manager 2 further states that emphasis has to be put on the deal making abilities since if they are bad, it might signal there are other agendas present. "*As long as the agenda is to maximise the return for the shareholders, the NAV deviation should not be negatively affected by the presence of majority owners." – Fund Manager 3*. It is further explained that there is a view on the market that some companies, for instance *Investor*, have a potential power agenda present. However, if the CEO would go public and address a new strategy and agenda, it would immediately have a significant positive effect on the discount. "*In comparison to Investor, where they will keep their holdings, it does not matter whether Atlas (Atlas Copco – one of Investor's holdings) costs 50, 100 or 150, they will keep it regardless. If they had shown, or if they would have had the rhetoric that they would sell Atlas when it costs 150, and buy it back when it costs 100, the discounts would be much lower". – Fund Manager 1.*

What is also affecting the NAV deviation negatively is according to Analyst 2 the potential incongruence in demanded time horizon and outcome by the majority owner and other investors. One provided example is *Investor* where the goal of the majority owners is partially to provide long-term stable cash flows to the owner foundations, while other investors might have a more short-term focus on value creation. However, there is still a harmonised view that all investment companies act to create value. *"Even though power structures may lead to discounts, all investment companies' goals are to create shareholder value."– Analyst 5.*

4.2.2.2. Tax Specific Aspects

Due to the specific tax legislation for investment companies in Sweden, all representatives argued that there are no tax specific aspects explaining the historically observed NAV deviations. *Investor*, *Industrivärden* and *Latour* are per the tax definition, investment companies, whereas *Melker Schörling* and *Creades* do not follow the specific tax definition of an investment company. However, because of the fact that almost all of their holdings represent more than 10% of the votes in each company, the holdings are classified as business-related shares, which implicates no double taxation and can hence not explain any NAV deviations. This is also justified by all analysts.

4.2.2.3. Management Capabilities

Initially, all interviewees concluded that the belief in the management's ability to manage their holdings and find new good investments have an effect on NAV deviations. However, there seem to be two different perspectives on the belief in management. The first one, is as Fund Manager 2 expresses it, about the market's perception of the management's future deal making capabilities. *"Deal making can be compared to investing in a hedge fund or a private equity firm - an investor is willing to pay for that" – Fund Manager 2.* Fund Manager 1 further explains that the market easily makes a certain judgement of the individuals in the management, which in turn affects the valuation of the investment company, in a sense that a good perception leads to a low discount or even a premium. It is not also only about the perception of management's capabilities, but also about the strategic direction of the company, as Analyst 4 puts it. He also explains that it takes time for the market to adapt to a new perception of a company. Near-term performance is therefore not always reflected in the pricing of the NAV.

The other aspect of whether the belief in the management has an effect on the pricing of the NAV relates to the perceived purpose of the management. Representative 2 explains that if the purpose of the management is to increase the NAV over time, there will be a significant value transfer to the shareholders and hence the discount will be reduced over time. "*If we can increase the NAV over time and hence generate a competitive total return to our shareholders, we believe the market will take this into account in the valuation of the NAV" – Representative 2.* Analyst 2 confirms that if the agenda of the management is not in line with the interest of shareholders, a discount could partially be explained. Representative 1 further explains that the view on the historical discount could be related to a misbelief in the management of the investment company. However, the aforementioned analyst explains that there is no mistrust or misbelief in the management in Sweden as of today, but once again, the importance is to achieve goal congruence between shareholders and management in order to lower the discounts. In addition, Representative 3 says that an historical excess return provided by the management could potentially explain certain premiums. However, another important aspect to be considered is as Fund Manager 2 expresses it, that it is not necessarily about the historical shareholder return, but rather the future outlook of stock picking and management of the portfolio companies.

4.2.2.4. Unlisted Holdings

Generally, the interviewees' views on unlisted holdings are somewhat inconsistent. What is agreed upon is the fact that transparency is very important when it comes to unlisted holdings

as no transparency will lead to a conservatism in the market regarding the valuation of the unlisted holdings and a discount can therefore be present. *"It is the ordinary argument of information asymmetry - by providing more information about the unlisted holdings, management can narrow the information gap between the company and the investors to some extent and thereby decrease the discount that the buyer would require facing less information."* – *Analyst 4*. The arguments are though shattered when it comes to the effects of unlisted holdings on NAV deviations. Representative 6 states that if there is no transparency issue and given that management is rational and acts in the best interest of shareholders it should not really matter whether the holdings are unlisted or not. Representative 4 agrees on this and advocates that factors such as performance and confidence in the market are of higher importance. Other interviewees say that there will always be a conservatism in how to value unlisted holdings as a result of the information asymmetry, which could potentially explain discounts. An example mentioned was when *Kinnevik*, another investment company, began investing in e-commerce. The holdings were very difficult to value which resulted in a 40% discount, but after some time when the real value was demonstrated, the discount almost disappeared. In general, there is a positive view on companies that provide guidance on the value of the unlisted holdings as this helps to eliminate the information asymmetry and help lower the discount.

What is also agreed upon is the fact that unlisted holdings could potentially explain a premium. *"It creates the possibility to invest in something that would otherwise not be accessible.*" – *Representative 1*. All fund managers explain that what matters for the existence of premiums is whether individual holdings are perceived as attractive or not. Analyst 4 further develops the above arguments and proposes that attractiveness in combination with asset scarcity is the driver for potential premiums. This is confirmed by Analyst 1 who states that the attractiveness of certain assets can potentially create temporary premiums. However, it is of high importance to make a selection of the unlisted assets as unlisted assets themselves must not be attractive because they are unlisted, since there often exist similar listed peers.

4.2.2.5. Diversification

Every single interviewee confirms that diversification leads to higher discounts, as additional diversification creates no value since investors can diversify themselves. Many interviewees justify the argument by explaining that the more diversified the portfolio is, the greater the chance is that an investor may dislike some parts of the portfolio, and would therefore not be willing to pay the full NAV. According to Analyst 2, this could also lead to institutional

investors buying the underlying companies instead, which could lead to a lower demand for the investment company's stock, which increases the discount. On the other hand, Representative 2 explains that even though diversification could have a negative impact on the discount, as long as the well performing holdings in a diversified portfolio overweighs the potentially underperforming holdings, diversification should not have an effect on NAV deviations.

Another aspect of diversification is the market's perception of whether there is an industry specific knowledge possessed by the management. Representative 6 explains that the market has a perception of *Creades* as being an investor with knowledge in for example the financial technology sector, and thus investments in for example pharma development would not be in line with what the market expects them to be good at, which could create a discount. This argument is strengthened by Representative 4 who advocates the importance of having an industry focused portfolio, as experience and knowledge can be exchanged between the portfolio companies without any forced synergies.

4.2.2.6. Management Fees

From the representatives' point of view, management fees are expected to have some explanatory power for the historically observed discounts, given that the fees are substantial. What Representative 2 and 6 present is though that management fees, irrelative of size, can be justified as long as the value added is larger than the costs. Another perspective presented by Representative 1 is that management fees have to be considered in relation to dividends, rather than NAV. It gives a more apparent overview of what is actually consumed, which could otherwise be distributed to the owners. However, even though this perspective could be justified by the historically large management fees in for example *Investor*, it is only expected to explain a very small part. Analyst 1 gives an example of discounting future management fees in *Investor*, applying the current fees of 0.15% of NAV with a multiple of ten would only explain a discount of 1.5%. Consequently, the cost of 0.15% is significantly lower than the yearly fee of a normal mutual fund. On the other hand, it could be reflected in the price if the costs are very high. *"Over time, if you have very high management fees in combination with bad performance then your portfolio will be eroded and that will of course be reflected in the share over time." – Analyst 1.*

From Analyst 4's point of view, management fees can be related to the subject of corporate governance. As Sweden have a well-developed corporate governance system, management fees are not a problem explaining discounts. Analyst 5 further explains that management fees were

more of a problem past in time while Analyst 3 states that he does not even consider the costs when valuing investment companies. This is confirmed by the fund managers, who explain that management fees are an argument of last resort, when nothing else can explain the discounts. *"If Investor would bisect their costs, the price would not change" – Fund Manager 1.*

4.2.3. Other Factors Identified During Interviews

One of the most eminent elements of the historical NAV deviations found during the interviews was the market environment. Almost all of the interviewees mentions the importance of the current valuations on the stock market as these are assumed to be highly correlated with current NAV deviations. *"I believe that a general reason for the contracting discounts that we have observed during numerous years for the investment companies is an effect of the general market environment with very stimulative central banks which creates a capital inflow to the markets." – Analyst 2.* The presented dynamics are that increasing market prices tend to compress discounts and vice versa. As the valuations on the stock markets have increased during the last years, the amount of capital in the markets has increased significantly in line with the amplified willingness to take risks, Fund Manager 1 explains. He further exemplifies this phenomenon with the case of Spiltan Funds' investment company mutual fund, which solely invests in investment companies. As soon as they receive new capital, regardless of whether the underlying investment companies are traded at discounts or premiums, they need to acquire additional shares. According to some analysts, these actions could have a significant effect on the price of the illiquid investment companies. Furthermore, Analyst 4 explains that the dynamics of the NAV deviations are derived from when the underlying portfolio companies become increasingly expensive, investors seek to buy the investment companies instead, which in turn reduces the discounts. The decreased discounts are also said by many interviewees to be affected by the heavily decreased market interest rates in recent years. With decreasing market interest rates follow lower discounts. The conferred reasoning underlying this relation is the fact the yields of the investment companies are perceived to be relatively good compared to the alternative yields that could be obtained elsewhere. This argument is specifically strengthened by Analyst 3 who mentions the fact that investment companies can be viewed as a bond proxy as they automatically bear a lower amount of risk than other stocks due to the diversification in their portfolios, and hence their yields become more attractive. In addition, the argument is further strengthened by others who advocate that the leverage held by many of the investment companies will further increase the attractiveness of the yields as well.

Another thought that Representative 5 presents as an explanation for all investment companies is that the amount of attention in media has a significant impact on the NAV deviations, in the short to medium term. An example he mentions was when *Latour* began being published in news articles positively regarding their performance approximately two years ago, which led to an increased interest from retail investors, resulting in a 100% increase in the number of shareholders, and an eliminated discount which has remained low.

The temporary differences and sometimes high amounts of short term volatility in the NAV deviations are explained by fund managers and analysts as being almost completely liquidity driven. As there are so many investors present in the financial markets, many of them aim to speculate in potential future events. One of these events are index rebalances where actors speculate in whether a certain company will be included in a specific index or not, as this decision in turn will affect flows of passively managed assets such as ETFs that follow certain indices. Both the actual capital flows from the passively managed funds in combination with the capital flows from the speculations prior to the eventual rebalancing have significant impacts on the fluctuation in the NAV deviations.

4.2.4. Company Specific Factors

4.2.4.1. Investor

There is a general consensus among the analysts that the current and historical discount in *Investor* is too large. However, the underlying explanations for this are somewhat different. Analyst 2 advocates that the unlisted portfolio is very attractive and should indicate a low discount, which is also justified by Fund Manager 1 who proposes that there is a hidden value in the unlisted portfolio that the market might not take into account. Analyst 4 advocates that the decrease in the historically high management fees in combination with a more focused strategy, increased transparency and above average historical performance should have a significant decreasing effect on the discount. *"Investor's previous performance is too good to justify a discount of around 25%." – Analyst 3.*

Even though there is a consensus that the discount might have been too high in previous years, all fund managers and analysts agree that there should be a discount. *"I believe that there is a certain power discount in Investor. The market is not certain whether their interest will be aligned with the interest of other shareholders, and Ericsson is a good example of that." – Analyst 1.* Analyst 3 has a similar standpoint and explains that in addition to the misalignment of interest, *Investor* has a longer time horizon in terms of value creation than most investors.

Other interviewees further state that there is currently no power-misbehaviour in any way, but rather a more long-term agenda, explaining the observed discounts. However, even though there is no power-misbehaviour at the moment, Fund Manager 1 explains that the market has seen *Investor* as a power company with different agendas, and since the market is rational and slow, it takes long time to adjust to a proper discount level. This argument is strengthened by Analyst 4 who states that many actors on the financial markets apply some kind of historical average, which could explain the historically high discounts in *Investor*.

As *Investor* has a relatively big portion of unlisted holdings, there are according to some interviewees difficulties in the valuation of these. For instance, the market sees difficulties in how to value Mölnlycke, one of their unlisted holdings. This is further supported by Analyst 2 who consider the unlisted holdings as a source of information asymmetry, especially as the transaction intensity is low and hence no value indicating evidence can be disclosed. Representative 1 supports this argument and believes that increased transparency will help lower the discounts and refer to when *Investor* sold Gambro in 2012, a previously held unlisted holding. She speculates that this sent a positive signal to the market about the value of the unlisted holdings and had potentially an effect on the reduced discount that followed.

Analyst 2 has another theory, which was thereafter confirmed by all fund managers, which is following *Investor's* large market capitalisation, institutional investors might decide to buy the underlying holdings instead. This will eventually lower the demand of the *Investor* share, and therefore also increase the discount. *"Investor has a very large market cap and has quite a big weight in index. When individual fund managers look at Investor and think about how to deal with this weight, whether to be overweight or underweight, I believe that many people think that as they already got Atlas Copco or SEB in their portfolios, they can cover some of the index weight of Investor by owning the underlying instead. If many fund managers reason like this, and as it is a large amount of value to be allocated, it can quite easily effect the discount..." – Analyst 2.*

4.2.4.2. Industrivärden

The aggregated opinion among the fund managers and the analysts about the historical discount in *Industrivärden* is associated with the low degree of transactional activity. There is also a general consensus that the decreased discount observed in recent years is attributable to the increased activity by management regarding their holdings. "*The discounts have come down much due to the fact that management have been more active and shown the market that they*

are taking value creating actions" – Analyst 1. Fund Manager 3 confirms this and explains that the lower discounts may be related to the actions in SCA, one of *Industrivärden's* largest holdings. Furthermore, some interviewees state that the same factors as in *Investor*, regarding the misalignment of time horizon and agendas might have a negative impact on the NAV deviation as well. In addition, Representative 3 and 6 state that the historical structure of cross ownership and a broad owner base might have had a negative impact on the discount and that the entrance of Fredrik Lundberg, a financially strong major shareholder, can be related to the decreased discount in recent years. The key argument behind the decreased discount presented by Representative 2 is the increased focus on listed holdings.

4.2.4.3. Melker Schörling

Fundamentally, no interviewee could justify a high premium in *Melker Schörling*. However, almost all interviewees propose the low liquidity and low free float as the main explanatory factor behind the observed premiums. *"The premium reached almost 30% intraday once, most likely due to a robot trading the stock. This was probably because of low liquidity and low free float" – Representative 3*. Fund Manager 1 is convinced that a very important explanatory factor in all of the minor investment companies is when an investor seeks to invest in for example *Melker Schörling*, the relatively low liquidity can make it difficult to get hold of the desired amount of shares which can potentially drive the premium. *"I think it is the free float that is important, when the premium peaked it certainly correlated with the fact that funds such as Spiltan had an inflow of capital. I think it is that simple" – Fund Manager 1*.

Furthermore, it is explained that there is a technical aspect of the almost non-existing discount, which is the special stock redemption program offered to the shareholders every year at the time of the annual general meeting. The program enables shareholders to redeem their shares at the NAV at that point in time. The explanatory power of this factor is confirmed by all fund managers and all analysts, as it sets a lower bound at the NAV. This in turn creates a limit for how low the discounts can go as the arbitrage execution possibilities increase with the size of any discount. There is also a general positive view on the historical performance in *Melker Schörling* and Analyst 3 states that some may want to follow the management's capabilities of finding good investments, which could partly explain the observed premiums.

4.2.4.4. Latour

According to Representative 4, historical discounts in *Latour* have been high due to less communication and transparency than today. This might have impacted the market's trust and

confidence in *Latour*. In recent years, discounts have decreased and Representative 5 explains that the increased positive attention through different media channels has had a positive impact on the NAV deviations as the market has realised the historical excess returns provided by the company. Analyst 4 further states that the transparency is currently high and that *Latour* has a good strategy for the unlisted holdings in combination with a good track record, which arguments for a low discount. As in the case of *Melker Schörling*, many interviewees explain that low liquidity and a low free float have had a high impact on the observed NAV deviations in *Latour*. Lastly, the recent volatility, in the NAV deviation is according to some interviewees explained by several recent index rebalances, for example in Q1 2016, as the market capitalisation of the company has been close to numerous index boundaries.

4.2.4.5. Creades

Both fund managers and analysts agree that the low liquidity and the low free float have a significant impact on the currently observed premium. Analyst 2 and 3 find it hard to justify a premium by performance. However, Fund Manager 1 explains that a current premium could potentially partly be explained by the trust in *Creades'* new CEO, since his deal making abilities could be perceived as good on the market. Representative 6 has a different view on the NAV deviations and advocates that the recent increased attention and the increased awareness of the yield and historical performance in *Creades* can explain the shift in NAV deviations that has been observed in Q1 2017. He further states that the previous discounts could potentially be derived from the fact that *Creades* was not subject to a great amount of attention.

5. Analysis

In this section, we present an analysis of all factors emphasised in the empirics. The empirics are compared to what previous research suggests, and the theories identified during the interviews not thoroughly discussed in the observed previous research are analysed separately. Furthermore, investment company specific aspects are integrated in each part of the analysis.

5.1. Ownership and Power Structures

The results revealed in this study are somewhat contradicting compared to what the observed previous research has found. The results proposed by Holmén & Högfeldt (2009) about major shareholders' effect on NAV deviations are not exactly in line with what the majority of the interviewees believe. Rather than completely focusing on any potential agency costs arising with major shareholders and their controlling power, our study reveals the importance of taking the perceived agenda and purpose of the major shareholders into account. As major

shareholders have large financial exposure, it would in many cases be irrational for them to take actions that are not value creating for all investors. In addition, the theory of major shareholders taking advantage of private benefits presented by Barclays et al. (1993), is not well entrenched within the industry at the moment. It might have had an impact in the past, but with the increased transparency, the explanatory strength of this factor is according to our study estimated to be low. However, in line with the reasoning by Barclay et al. (1993), management and major shareholders are often closely related in some of the Swedish investment companies. In line with the general theory about agency conflicts, this might cause potential agency costs between blockholders and the other investors. This in turn stresses the importance of aligning the interests between the conflicting groups, which might sometimes be difficult. Mentioned by the interviewees are for example the differences in time horizon between blockholders and other investors, which could potentially explain some part of the presence of discounts.

In contrast to the observed previous research, many of the interviewees have emphasised the importance of signalling long-term value creation. Taking advantage of private benefits could easily signal the opposite and would hence be completely irrational, especially when the major shareholders have such a large financial exposure to the share price of the investment company. However, even if the investment company is fully focusing on long-term value creation, the discrepancy between the investment company and other investors when it comes to the time horizon of value creation could still be a vital factor when evaluating discounts. In addition, in line with what Holmén and Högfeldt (2009) propose, is the fact that passivity in holdings is negative in terms of discounts, as it might signal other agendas to the market, such as the potential existence of power structures. One example is *Industrivärden*, where interviewees mentioned that recent activity with respect to their holdings has sent value maximising signals which could be an explanation for the decreased discount.

Moreover, the discount increasing effects of using shares with different voting rights presented by Holmén & Högfeldt (2009) can be related to only if the market's perception of the agenda of the investment company is incongruent with that of major shareholders. If these two are aligned, the use of shares with different voting rights is not considered to have a significant impact on the NAV deviation. However, as the market's perception is often inert, the alignment of these interests might take time. In addition, international investors might think different about the signalling effects of shares with different voting rights and hence think they exist to utilise power. This would henceforth increase both the market's inertia and the potential discounts as there are often international investors present. The market's general inertia can partially be

derived from the fact that investment companies were founded for a reason, not necessarily to create value for the shareholders, but rather to structure ownership and gain power.

An interesting aspect not considered in the observed previous research is that power must not be seen as a negative attribute. In order to create long-term sustainable businesses, power, or rather control, could be necessary and could hence be used to create value which should have a positive effect on NAV deviations. With this being said, there might be a general misconception on the market regarding power and why it exists. One example is *Investor* where some interviewees have mentioned that there might be a certain power discount and related it to the history and the purpose of the founding of the investment company. However, it would most likely be both fundamentally and financially irrational for the management in *Investor* not to act in the best interest of the shareholders, as that would most likely increase the discount. Even though the blockholders in *Investor* among other investment companies could potentially utilise their majority of votes to control the annual general meeting, the purpose of utilising any power would not be to destroy value, but rather to create long-term value for all shareholders. The fundamental idea of keeping control of holdings because of the long-term horizon, misconceptions might exist regarding what agendas are present, which in turn could be a potential explanation for discounts.

5.2. Tax Specific Aspects

The difference between the tax related aspects in terms of explanatory power of NAV deviations in different countries are as presented by Hjelström (2007) important. As the interviewees confirmed, the special tax legislation in Sweden make tax specific aspects not subject to explanation for NAV deviations, in accordance with chapter 39 §14 Inkomstskattelagen. The arguments presented by Malkiel (1977, 1995) are hence not applicable, since his findings are based on US data. The different possible structures that all eliminate significant tax payments, either being classified as an investment company according to current tax legislation or taking advantage of the tax rules of business-related shares, supports the sole idea of investment companies as being an intermediary between investors and the underlying companies.

5.3. Management Capabilities

As presented by Boudreaux (1973), Malkiel (1977) and Chay & Trzcinka (1999), managerial performance is expected to have significant impact on NAV deviations. The empirical results support that the perception of management's ability of conducting value creating activities is

very important in terms of investment company valuation. In line with the findings of Boudreaux (1973), the empirics show that the perception of management is highly dependent on the perception of deal making abilities, since all investments cannot be replicated. An example of this could be the observed premiums in both *Melker Schörling* and *Creades*, where emphasis during the interviews were mostly put on liquidity aspects, but also on the perception of management's capabilities of identifying good investments.

Our results also show the importance of understanding performance and the measurement of it when relating it to NAV deviations. As both previous performance and expected performance can be referred to, our study shows that most of the emphasis is though put on expected performance, which is in line with the significant results presented by Chay & Trzcinka (1999). The fact that the performance must not solely be dependent on decisions taken by management is of importance when assessing previous performance of the investment company and relating it to management capabilities and premiums. In other words, historical performance must not be a good proxy for management capabilities and it can thus be problematic to put any explanatory power on historical stock performance. Something that is hard to understand when analysing *Investor's* relatively high discounts over time is the fact that they have performed very well. However, when investigating who the performance should be attributable to, it is not necessarily the current management. For instance, the decision of investing in certain holdings might have been taken many years prior to the existence of current management. If this specific holding then outperforms radically, it might be difficult to attribute this performance to the current management. Important to remember is still that the investment company might have representatives on the board of directors and could hence contribute in that way, but the market might still attribute the performance to someone else than the current management. This could in turn justify that a premium attributable to a high previous performance should maybe not exist.

Something that was identified during the interviews, which cannot be viewed as a prominent explanation and hence not as heavily emphasised in observed previous research, is that expected future performance is also related to the perceived purpose of management. Agency costs might arise if the purpose of management is not in line with what the market expects, which can thus have an effect on the NAV deviations. Although it is explained that there are no high risks of agency costs with the well-developed corporate governance system in Sweden, it can still be related to the previous discussion regarding the incongruent time horizons and demanded outcomes of the investments. If the strategy and time horizon of the management is not in line

with what investors expect, there could be a goal incongruence issue explaining discounts. Also, the market's perception of the company's strategy and their knowledge within certain industries is relevant to consider. In line with the investor sentiment hypothesis, partly presented by Barberis et al (1998), the market might be split in terms of the perceptions of management's capabilities and the strategy which also is an apparent deviation from classic assumptions of perfect markets. Also, the market might have a perception about the expertise of management to act and make investments in certain industries and will hence adjust the market price following this perception. This is in line with what Lee et al. (1991) propose regarding expected future management performance and the investor sentiment.

5.4. Unlisted Holdings

The two theories of unlisted holdings, either that certain caution is needed when valuing unlisted holdings as presented by Carroll et al. (2003), or that unlisted holdings may create an attractiveness due to an increased accessibility for investors as presented by Cherkes et al. (2006), are both supported by the empirical results. However, it seems like the theories cannot be applicable at the same time. Attractiveness and performance could potentially explain certain premiums, temporary at least, but that is not due to the liquidity aspects of unlisted holding per se. It rather depends on a temporary attractiveness of an industry not available on the stock market for instance, and an example that was presented was when Kinnevik began to invest in e-commerce which became popular, causing a premium. However, when the unlisted holding's industry is available elsewhere on the stock market, or when there is nothing specific that stands out as attractive in the unlisted company, the other theory of conservatism in valuation takes over and rather explains a discount because of information asymmetries. This is especially the case when there is a low transactional intensity in the unlisted holdings as the underlying values are seldom displayed. One example presented in the empirical results is when *Investor* divested Gambro and the market value was surprisingly high. These results are in line with those of Seltzer (1989) and Malkiel (1977), namely the difficulties in valuing illiquid assets, although our empirical results put an emphasis on the information aspect rather than the aspects of liquidity. What also becomes clear in the empirics is the fact that transparency is the most valuable tool to potentially fight a discount caused by the presented conservatism. In accordance with Cullinan & Zheng (2014), the valuation of unlisted holdings is problematic and helping the market with the valuation by providing valuable insights will decrease any information asymmetry, which should potentially decrease any discounts explained by the unlisted holdings. Just like *Latour* has done for a long time, *Investor* started to provide guidance

regarding the fair value of their unlisted holdings in Q1 2017, and all fund managers and analysts we met were very positive about this. Given that the stock market does not react and the market value of *Investor* remains, the discount will become larger because of the wider spread between the NAV and the share price. However, if the increased transparency shows the market that there is a larger value than what the market has assumed, the discount might even decrease because of this.

Lastly, Damodaran (2005) explains that any company with a liquidity problem in the share should be priced with a discount, and since many of the unlisted holdings might potentially have a greater liquidity problem than any listed holding, this would potentially also be an explanatory factor for discounts derived from unlisted holdings. However, no interviewee saw this as a concern and thus it could be argued that unlisted holdings should lead to a certain conservatism and a discount, if the holdings are very attractive, it could explain a premium.

5.5. Diversification

Of the two contradicting theories in previous research, namely that there is a negative correlation between diversification and discounts as presented by Kim & Lee (2007) or Hjelström's (2007) findings advocating that diversification should explain discounts, the latter is most established within the industry. There is a consensus among almost all interviewees that a concentrated portfolio is better than a diversified portfolio from a discount point of view, due to the fact that investors can diversify themselves. The negative arguments of diversification presented by the interviewees are also in line with what Berger and Ofek (1995) present regarding conglomerate discounts and what Miller (1977) presents about heterogeneous beliefs of certain holdings. The reasoning among many of the interviewees, represented from all interview groups, is that the more diversified the portfolio is, the larger the probability is that some of the investors will dislike some of the holdings and are therefore not prepared to pay the full NAV, in accordance with the theory of investor sentiment partly presented by Barberis et al. (1998). Furthermore, an alternative explanation might be that institutional investors would rather buy the attractive underlying holdings, than the investment company itself, which thus supports the argument that a high degree of diversification will increase the likelihood of discounts. Another interesting aspect of this is that it could potentially be related to the perceived management capabilities. One of the analysts, and some of the representatives from the investment companies, explain that a more concentrated portfolio fulfils the purpose of achieving knowledge and experience within a specific industry. Investors could therefore perceive that they are good at creating value within that industry, but should for that reason not

invest in industries where they have no previous experience. Lastly, there is an aspect presented by one of the representatives which is that as long as the well performing holdings in a diversified portfolio weighs higher than the non-performing holdings, a discount should not be attributable to the investment company. However, even though this does not directly support the findings from Hjelström's study, the argument is still not in favour for the findings presented by Kim & Lee (2007).

5.6. Management fees

With the increased amount of transparency regarding the different investment companies, management fees have also been trending downwards. With this stated, management fees are by some said to be a part of the explanation for historical discounts. However, when following an expense ratio method like Malkiel (1977, 1995), the explanatory power is according to our study estimated to be very low. The expense ratio when management fees are put in relation to assets under management of 0.15% in the case of *Investor* is not enough to explain the observed discounts. If we view management fees as lost dividend capacity and discount the future lost cash flows to shareholders instead, the potential explanatory power increases. This is in line with the argument presented by Kumar and Noronha (1992). The aspect of management fees is also relatable to the increased importance of a well-developed corporate governance system and signalling theory. The advanced corporate governance structure that Sweden has creates a transparency that makes it possible to interpret the operations of an investment company through many channels, such as media, analyses and company reports. This in turn might decrease the emphasis put on management fees as an explanatory factor for discounts, although the investment companies still need to prove the value of their costs through value creating activities. On the other hand, in other countries where there are inadequate corporate governance systems, management fees might signal the fact that value destroying activities may be present. With this being said, just as previous research has shed light on, certain difficulties arise when finding the explanatory power of management fees, and in Sweden, management fees' effect on NAV deviations are estimated to be low. In general, the empirical results propose that high management fees are problematic for NAV deviations only in the case when the performance is lacking. On the other hand, if performance is perceived as good, management fees are an argument of last resort.

5.7. Liquidity

The empirics has revealed the high importance of investment company stock liquidity that previous research has not put the same emphasis on. As a matter of fact, a low degree of liquidity in combination with a low free float is mentioned as one of the most important factors when explaining the observed premiums in the smaller investment companies, in for instance *Creades*, *Latour* and *Melker Schörling*. The results from this study are therefore contradicting to the arguments presented by Damodaran (2005). Instead of having a discount resulting from low liquidity, an observed premium is often a fact. This can though be related to the rising valuations in the markets in recent years that have kept the demand for shares in investment companies gradually increasing or at least stable. On the other hand, in times of declining market valuations, the lack of liquidity will most probably have the opposite effect. To conclude, the liquidity will not, at least in normal market conditions, have a negative effect on NAV deviations, which is not in line with the results by Barclay et al., (1993).

In addition, the fact that many of the investment companies have a very large market capitalisation with a relatively low liquidity includes them in several indices that are based on market capitalisation but not free float adjusted. This might have the effect that they are further affected by what is called "dumb money", such as automated trading algorithms and index flows, as could be observed in the example with *Latour*. The historical levels of discounts or premiums might not be explained by this factor, but at least short term volatility in the NAV deviations can be explained. A further potential aspect of a low liquidity is the fact that market anomalies will not be corrected as low liquidity prohibits actors to take short positions in order to take advantage of the anomalies. This in turn might support long periods of fundamentally strange NAV deviations. Also, when comparing different investment companies' NAV deviations, the aspect of liquidity must be incorporated as it interferes with other explanatory factors since a low liquidity might prohibit the use of classic finance theories as they often assume perfect capital markets. This is not the case when liquidity affects the valuations. A good example of this is *Melker Schörling* which historically has had a very good performance, which according to some interviewees could explain some parts of the observed premiums, whereas the liquidity, free float and the stock redemption program is still said to be the key explanations.

5.8. Other Factors Identified During Interviews

Identified during the study was also the importance of the current market conditions on NAV deviations. Due to increasing market valuations in recent years, the inflow of capital has been

significant. When investors seek to invest and realise that the valuations of certain companies are high, they might seek to buy the investment companies instead as these are often traded at a discount. In addition, as investment companies often have diversified portfolios they can be viewed as providing index exposure, which by many investors might be seen as attractive to buy at a discount. Usually, when the risk willingness on the market increase, different kinds of spreads tend to contract which further decrease the NAV deviations. This can be compared to the phenomenon of multiple expansion taking place during increasing market valuations. In addition, in times with increasing capital inflow to the financial markets, different kinds of mutual funds investing in investment companies also receive an inflow of capital. Subsequently, when this capital is to be invested, the demand for investment company shares will increase and the NAV deviations will be affected positively.

What is interesting is how much of the decreased discounts that is attributable to the rising stock markets and to a change in other factors such as overall investment company attention. When the market once again reaches a recession, the answer to this question will be revealed. Another important thought is the fact that many analysts base their target prices on predetermined NAV deviations, often discounts, that in turn might be based on historical means. If they have thoughts about mean reversion of the NAV deviations, complications may arise when investment companies reach undiscovered areas in terms of NAV deviations as analysts and hence the market might believe the NAV deviation will go back to its historical mean. This might create a certain inertia when it comes to adjusting the levels of NAV deviation. Further, this basic standpoint by the analysts and fund managers about the existence of discounts is not in line with the assumptions of a rational market, therefore it seems to exist a consensus that the efficient market hypothesis and the assumptions about perfect capital markets can be set aside.

As presented by two representatives, the market's perception about the investment company is highly affected by the degree of attention it receives in different media channels, as in the example of decreasing discounts in *Latour*. Even though only two interviewees mention this as an explanation for NAV deviations, we find it to be an important element as the attention in media has the possibility to shed light on all factors that according to our empirical findings are expected to explain NAV deviations. In the case of low liquidity in the investment company itself, this aspect could have significant impact as the marginal potential trading volume received from additional media is probably very high.

6. Conclusions

In this section, we present our main conclusions from the study and thereafter discuss what implications these could have for both various stakeholders that in some way are affected by NAV deviations and for the field of research. We end the section with a discussion regarding the implications from this study and suggestions for future research.

6.1. Conclusions from the Study

The major question regarding NAV deviations in a general context is that something can be bought for less than what it is worth, which clearly contradicts the efficient market hypothesis and the assumption of perfect capital markets. However, conducting this study from an inside industry perspective has revealed a harmonised view of potential explanatory factors for the existence of NAV deviations. Previous observed studies have proven that there are no consistent explanations for NAV deviations on a general basis. Our results from analysing five different investment companies are in line with this as they reveal that NAV deviations have to be understood on a company stand-alone basis. Several technical factors, such as size of the free float, liquidity, market technicalities and stock redemption programs as well as fundamental factors such as market perceptions and market climate are according to the study major explanations for the observed NAV deviations. Many of these factors can be hard to quantify, which could explain the fragmented results between observed previous studies, especially since the presented factors vary both over time, but also between companies. It can therefore be concluded that finding a schematic model with predefined variables for a wide range of companies has and will probably be troublesome, thus comparing an investment company like *Investor* with *Creades* with distinct differences in market capitalisations, free float and liquidity will not be possible.

Based on this study, explanations for premiums are partially the view on historical and future performance in combination with a perception of the current management. However, the main explanation is the low liquidity and the low free float in times with increasing market valuations. Explaining discounts is more burdensome, as the arguments are more disunited. There is a consensus that most of the companies should in the long run trade at a small discount because of fundamental factors such as the perception of the agenda and capabilities of management and blockholders. Furthermore, diversification and the perception of whether unlisted assets are attractive or not in combination with an underlying information asymmetry are also expected to have an impact on discounts. Theories such as management fees, tax

specific aspects and illiquidity in holdings leading to higher discounts are not confirmed by the empirical results in this study.

The main conclusion is that discounts could have been justified past in time, where the degree of corporate governance and transparency were low and management fees were higher. Since the market is inert and has a certain perception of some specific investment companies as having different agendas and time horizons, it will take time to adjust these perceptions, thus certain levels of discounts will remain. Regardless of whether the explanations found in this study are rational or not, there is a harmonised view that investment companies should trade at prices closer to their NAVs than what has historically been observed. The question can thus be raised whether the efficient market hypothesis and the assumptions about perfect capital markets are applicable on investment companies, since NAV deviations could be a sign of an irrational market.

6.2. Contribution and Implications

We believe our study contributes to the prevailing research field in several ways. As a starting point, it is based on a qualitative method which has proved to be fruitful and has also illuminated aspects of current theories that are harder to shed light on when using a quantitative method. According to our main conclusions, it might be troublesome to quantify some of the explanatory factors for NAV deviations, and hence conducting quantitative studies on the subject can be difficult in terms of statistical significance. We believe that we have contributed to the field of research by finding evidence that are both contradicting and in line with previous research, but also that we have tested a qualitative assessment of the phenomenon. We believe that we have provided qualitative insights regarding the complexity of the subject, and found that NAV deviations need to be assessed on a company stand-alone basis in order to find noteworthy explanations. We also believe that the study contributes to the research field by approaching NAV deviations in a Swedish setting, since a majority of the previous research has been conducted in other countries. However, with evidence based on our study, we argue that the market's perception of the investment company is rather more important than the domicile of the investment company.

In addition, various actors on financial markets that in some way encounter valuation of investment companies could make use of the qualitative aspects of the subject. Further, we hope that our findings could be helpful to investment companies in regards to the understanding of their NAV deviations. By being transparent and working with communication in combination

with providing the market evidence of value creating activities, discounts could theoretically be reduced. Another implication is that investment companies with different characteristics are not eligible for comparison, since liquidity, free float and other technical factors seem to have a significant impact on the NAV deviations.

6.3. Suggestion for Future Research

Our general standpoint after conducting this study is that a qualitative assessment of the NAV deviation phenomenon has its advantages. Company specific factors and specific events can be incorporated in the analysis, and since we have found that the fundamental perception of many aspects in an investment company has an effect, it can be troublesome to quantify those. Therefore, our first suggestion is to conduct further qualitative studies on the subject as it will strengthen the qualitative foundation and potentially discover new findings.

Furthermore, we have four suggested types of studies that we would find interesting and that will complement this study in many ways, which are based on the findings in this study. The first one would be to make the study more objective by conducting the same type of interviews in a group setting. By conducting interviews in focus groups, we believe that prefabricated answers could be eliminated, but most importantly, that any disagreements could be sorted out and discussed. Another recommended study would be to further assess the finding that fundamental perceptions are important. This could be done by putting a stronger emphasis on fund managers, but also retail investors and the market in general. The market is what actually determines whether there will be a NAV deviation or not, thus interviewing a wider and larger range of investors in a frequency study would be interesting.

Even though we find a qualitative assessment of the phenomenon advantageous, there are findings in this study that could be tested quantitatively. The first aspect is the media's effect on NAV deviations. Fundamental perceptions seem to have a major impact, thus it would be interesting to understand if media's positive and negative articles about a specific investment company do have an impact on these perceptions. Another aspect that could be tested is the market's perception of a specific holding in an investment company, and its correlation with the value of the investment company on the stock market. The hypothesis based on the findings regarding diversification is that if an investment company holds an exceptionally disliked holding, the share price of the investment company will have an unmotivated correlation with the price of the disliked holding with respect to its portfolio weight.

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7.4. Annual- and Interim Reports

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Industrivärden: Annual reports- and interim reports from Q1 2000 to Q1 2017

Investor: Annual reports- and interim reports from Q1 2000 to Q1 2017

Latour: Annual reports- and interim reports from Q1 2000 to Q1 2017

Melker Schörling: Annual reports- and interim reports from Q4 2006 to Q1 2017

8. Appendix

8.1. NAV Deviations

Figure 2. NAV Deviation

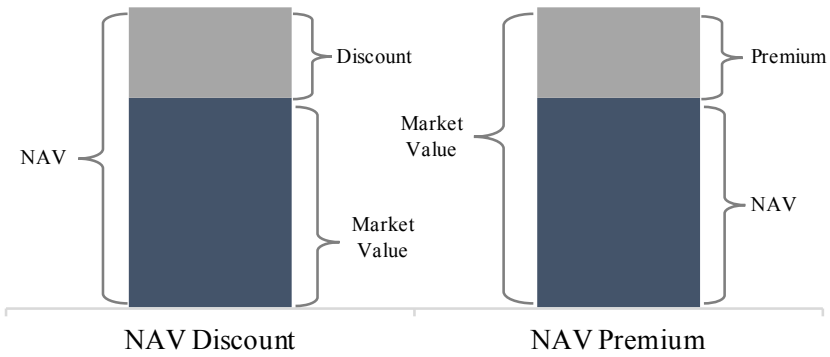

Figure 3.1. Observed NAV Deviations - Investor

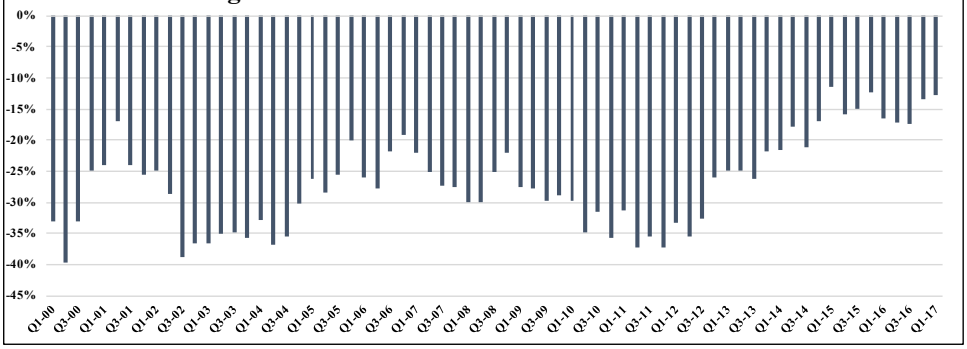

Figure 3.2. Observed NAV Deviations - Industrivärden

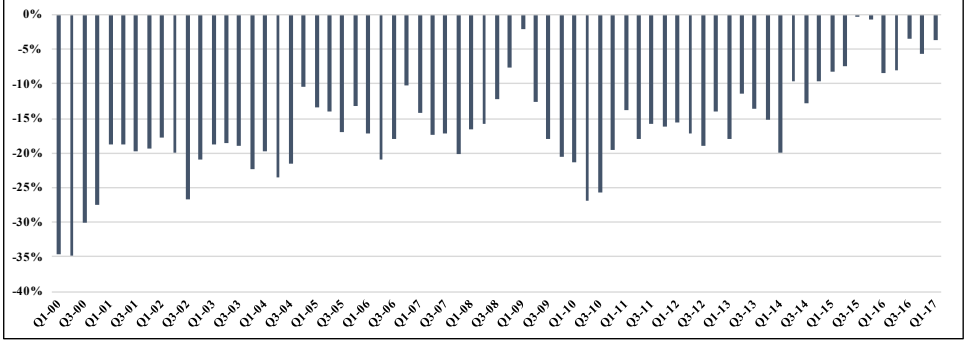

Figure 3.3. Observed NAV Deviations - Latour

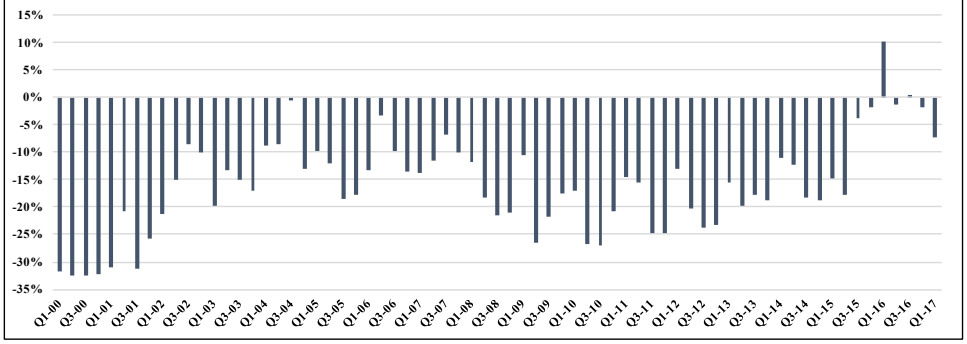

Figure 3.4. Observed NAV Deviations - Melker Schörling

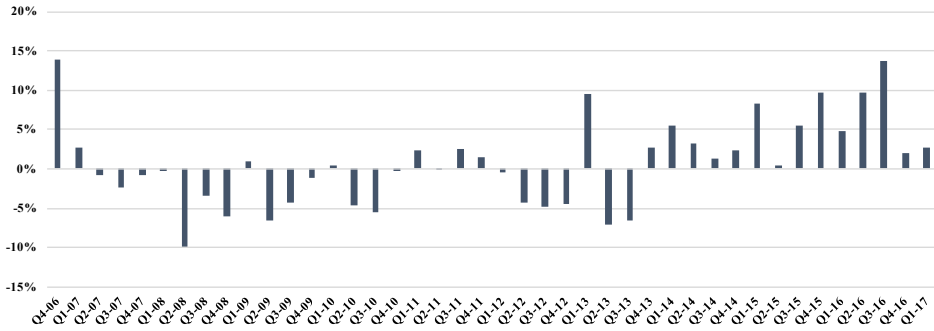

Figure 3.5. Observed NAV Deviations - Creades

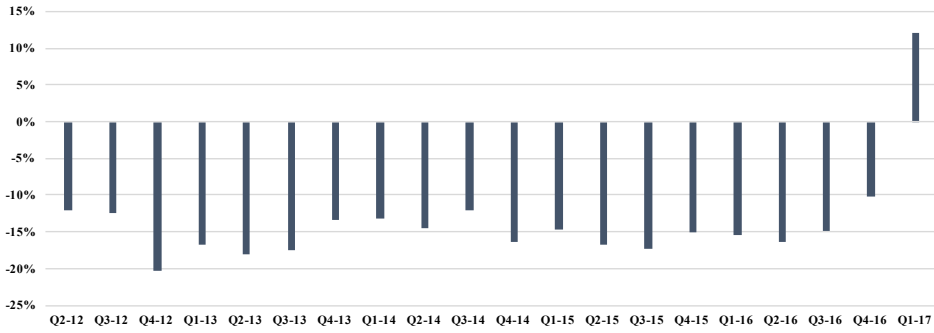

Table 2.1. Descriptive Statistics - 17 Years Ending 2017-03-31

	Investor	Melker Schörling*	Industrivärden	Latour	Creades*
Average	-27%	1%	-16%	-16%	-14%
Max	-11%	14%	0%	10%	12%
Min	-40%	-10%	-35%	-32%	-20%
Actual Q1-17	-13%	3%	-4%	-7%	12%

Table 2.2. Descriptive Statistics - 5 Years Ending 2017-03-31

	Investor	Melker Schörling*	Industrivärden	Latour	Creades*
Average	-20%	3%	-10%	-12%	-14%
Max	-11%	14%	0%	10%	12%
Min	-35%	-7%	-20%	-24%	-20%
Actual Q1-17	-13%	3%	-4%	-7%	12%

** Melker Schörling was listed 2012-09-05 and Creades was listed 2012-02-22*

8.2. Interview Objects

Table 3.1. Interview Objects - Investment Companies

Name	Codename	Position	Company	Date	Setting
Helena Saxon	Representative 1	CFO	Investor	21/3/17	Office
Sverker Sivall	Representative 2	Head Corp. Comm.	Industrivärden	30/3/17	Phone
Albert Strömberg	Representative 3	Mgmt. Trainee	Melker Schörling	27/3/17	Office
Anders Mörck	Representative 4	CFO	Latour	6/4/17	Office
Torbjörn Carlén	Representative 5	Cash Manager	Latour	6/4/17	Office
Erik Törnberg	Representative 6	Investment Director	Creades	28/3/17	Office

Table 3.2. Interview Objects - Equity Research Analysts

Name	Codename	Position	Bank	Date	Setting
Elias Porse	Analyst 1	Chief Analyst	Nordea	27/3/17	Office
Magnus Råman	Analyst 2	Analyst	Handelsbanken	28/3/17	Office
Oskar Lindström	Analyst 3	Senior Analyst	Danske Bank	28/3/17	Phone
Gustav Österberg	Analyst 4	Analyst	Pareto Securities	28/3/17	Office
Anonymous	Analyst 5	Analyst	Swedish Bank	27/3/17	E-Mail

Table 3.3. Interview Objects - Fund Managers

Name	Codename	Position	Institution	Date	Setting
Jannis Kitsakis	Fund Manager 1	Portfolio Manager	AP4	30/3/17	Office
Martin Wallin	Fund Manager 2	Portfolio Manager	Lannebo Funds	31/3/17	Office
Jörgen Wärmlöv	Fund Manager 3	Portfolio Manager	Spiltan Funds	31/3/17	Office

8.3. Interview Questions

Since the interviews were semi-structured, the following order of questions was used as a starting point, but in reality the order of the questions sometimes deviated from the original template. Note also that all of the questions below were complemented with control questions.

8.3.1. Harmonised Questions

Question 1. General Discussion Regarding NAV Deviations

Could you describe your thoughts and ideas regarding what factors there are that could explain the discounts and the premiums among the Swedish investment companies on a general basis, covering the NAV deviations as a general phenomenon rather than company specific?

Question 2. Specific Discussion Regarding NAV Deviations on a Company Specific Basis

Could you describe your thoughts regarding the NAV deviations in the following companies; *Investor*, *Industrivärden*, *Latour*, *Melker Schörling* and *Creades*? (Note that the interviewees were handed graphs with the NAV deviations over time for each investment company).

Question 3. Comparison Questions

Based on the answers from question number two, additional questions were asked about explanations for the difference between the NAV deviations in the different companies.

Question 4. Question Regarding Premiums

Could you find any explanations for why the market in some cases is willing to pay a premium for certain investment companies? Could a premium be justified?

Question 5. The Theory Regarding the Belief in Management Capabilities

a) Do you believe that the market's belief in management capabilities could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theory according to previous research) What is your view on the presented theory?

Question 6. The Theory Regarding Portfolio Composition in Terms of Unlisted Holdings

a) Do you believe that the type of investments the investment company makes could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theory according to previous research) What is your view on the presented theory?

Questions 7. The Theory Regarding Portfolio Composition in Terms of Diversification

a) Do you believe that the amount of diversification in the investment company could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theory according to previous research) What is your view on the presented theory?

Question 8. The Theory Regarding Ownership in the Investment Company

a) Do you believe that the ownership in the investment company could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theories according to previous research) What is your view on the presented theory?

Question 9. The Theory Regarding Ownership in Terms of Power Structures

Do you believe that the presence of power agendas in the investment company could have any explanatory power for NAV deviations and in what way?

Question 10. The Theory Regarding Management Fees

a) Do you believe that the management fees and the administration costs in the investment company could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theory according to previous research) What is your view on the presented theory?

Question 10. The Theory Regarding Tax Specific Aspects

a) Do you believe that the taxation rules for the investment company could have any explanatory power for NAV deviations and in what way?
b) (After we presented the theory according to previous research) What is your view on the presented theory?

Question 11. Question Regarding the Development of NAV Deviations Over Time

Many of the factors discussed have been relatively stable over time while the NAV deviations have fluctuated, how can you explain this?

8.3.2. Interview Group Specific Questions[8]

8.3.2.1. Fund Managers

Question 1. Investments in Investment Companies

What specific factors do you primarily take into account when making investments in investment companies?

Question 2. Investments in Investment Companies

In what way do you take NAV deviations into account when making investments in investment companies?

8.3.2.2. Equity Research Analysts

Question 1. Analysis of Investment Companies

a) What factors do you primarily consider when analysing investment companies?
b) What is reasonable for a Swedish investment company in terms of NAV deviations?

Question 2. Analysis of Investment Companies

How do you relate to NAV deviations when setting target share prices?

8.3.2.3. Investment Company Representatives

Question 1. Explanations for the NAV Deviations in the Specific Investment Company

(After question two regarding company specific NAV deviations, we asked more about the specific investment company) Could you describe the historical development of the NAV deviation in your specific investment company? What are the explanations for the fluctuations?

[8] These questions were most often asked between the general questions and the theory related questions.