Accounting and Finance Master Thesis No 2001:13

Investment Companies

Is a cross-border comparison between Sweden, the UK and the US possible?

Patricia González Grigori Carl Wingmark

Graduate Business School School of Economics and Commercial Law Göteborg University ISSN 1403-851X Printed by Elanders Novum AB

Abstract

The closed-end fund puzzle has for a long time been an unsolved problem. A vast number of attempts have been made in order to explain why closed-end funds are traded at a discount to net asset value. Nevertheless, none of these have been solely successful. However, none, or very few researches are of a comparative character for the three countries Sweden, the UK, and the US.

Although markets around the world have become more integrated over the years substantial differences remain. The investment company industry is no exception. Both the markets vary as well as the structure and function of the investment companies.

The purpose of this thesis is not to solve the discount issue, but to categorise the investment companies based on certain criteria. These groups will be used for further analysis. Categories have been established, but most of the groups are coloured by one country. The results show that the investment companies are not fully comparable on a cross boarder level.

Acknowledgements

Hereby, we would like to thank Joakim Rubin at Handelsbanken Investment Banking for supplying us with necessary and useful information. Joakim Rubin has also helped us to keep on track whenever tricky questions have appeared.

We would also like to thank our tutor Anders Axvärn for his guidance throughout our thesis.

Stockholm, December 7, 2001

Patricia Gonzalez Grigori Carl Wingmark

Table of content

1. Introduction	1
1.1 Problem Background	1
1.2 Problem	
1.3 Objective of the Study	
1.4 Limitations	
2. Method of Research	6
2.1 Conceptual Framework.	6
2.2 Methodological Considerations	
2.3 Research Approach	
2.4 Research Evaluation	. 10
2.5 Method of Data Collection.	. 10
2.6 Secondary Data	. 12
2.7 Primary Data	
2.8 Proceeding	
3. Previous Research	.18
3.1 Historical Background	. 18
3.2 Discount and Premium	
3.3 Bias in Net Asset Value	. 20
3.3.1 Unrealised Capital Appreciation.	
3.3.2 Restricted Stocks, or Letter Stocks	
3.4 Potential Factors Influencing the Share Price	
3.4.1 Agency Costs	
3.4.2 Segmented Markets	
3.4.3 Anomalies	
3.4.4 Noise Trader	
3.4.5 Arbitrage	
4. Theory	
·	
4.1 Net Asset Value	
4.2 Discounted Cash Flow	
4.3 Price to Earnings Ratio	
4.4 Relative Price to Earnings 5. Empirical Study and Analysis	
5.1 Reflections about Net Asset Value	
5.2 Attempts to Reduce the Discount to Net Asset Value	
5.3 Definitions of Investment Companies	
5.3.1 Swedish Investment Companies	
J.J. 2 III VESUITEIII 11 USUS	. 4 J

5.3.3 Closed-end Funds	46
5.3.4 Private Equity	46
5.3.5 Asset Management Group	
5.4 Companies Included in the Study	
5.5 Classification	
5.6 Discount / Premium Grouping	61
5.7 Content of the Invested Portfolio	
5.8 Ownership Structure	66
5.9 Valuation of the Companies	66
5.10 Reasons to Why Our Study was Difficult to Realise	71
6. Conclusion	75
7. Future Research	
7. I utul c Rescal elk	•••••••••••
Appendix 1	Q 1
Reference List	110
Graphs:	
Graph 1	19
Graph 2	
Graph 3	61
Graph 4	62
Graph 5	63
Tables:	
Table 1	29
Table 2	53
Table 3	55
Table 4	56
Table 5	58
Table 6	59
Table 7	59
Table 8.	

1. Introduction

1.1 Problem Background

Within finance a number of perplex and unsolved problems exist. Brealey and Myers (2000) point out ten issues, out of which the closed-end fund puzzle is one. A closed-end fund is similar to any business corporation, the difference being that its main purpose is to invest and hold securities in other companies. Therefore, many authors have chosen to compare closed-end funds with openend funds. The difference between these is that the closed-end fund issues a fixed number of shares in contrast to the open-end fund, which adjusts its capitalisation continuously. Like other stocks traded on the stock market, the price of the closed-end funds is derived from the demand and supply function. This market price does frequently differ compared to the closed-end fund's net asset value. The effect of this is that the stocks are traded at either a discount or a premium to the net asset value. Nowadays there exists a relatively new instrument, the Exchange Traded Fund, which is held very close to its net asset value of a responsible market maker. That is, the market maker is responsible to always offer shares bid and sell prices close to the net asset value. However, a substantial discount has historically been the norm for the closed-end funds industry.

Several attempts have been made in order to solve the closed-end fund puzzle. Three factors commonly used to explain the puzzle are biases in net asset value, agency cost theory, and investor sentiment. Biases in net asset value rely on tax liabilities of unrealised capital gains (Malkiel 1977, Pratt 1966, Brickley and Schallheim 1991) or illiquidity of assets (Malkiel 1977, Lee, Shleifer, and Thaler 1990). According to these theories it is argued that the net asset value is overvalued. The agency cost theory states that the management costs are to high and therefore the net asset value should be reduced (Lee Shleifer, and Thaler 1990, Malkiel 1977). Finally, the investor sentiment, related to the efficient market hypothesis, states that two different types of investors are

active on the market, the rational and the irrational investor (De Long, Shleifer, Summers, and Waldmann 1990). It is argued that the irrational investor would impose an extra risk, which in turn would be priced by the market. Nevertheless, none of these or any other attempts have been able to solve the closed-end fund puzzle.

Investment companies, in general, exist on several markets. These markets can be looked upon from many perspectives. One approach is to group the world markets according to similarities in accounting principles and different cultural aspects. Even when making a rough division it is seen at an early stage that for example the Western European markets are fairly alike. This is one of the reasons to why we have chosen the Swedish, the British, and the American market. In Chapter 2, 'Method of Research', it is described more in detail why these markets have been chosen.

The three markets chosen offer different investment companies, i.e. that depending on what country they are located in the name and classification differ. Therefore, we have chosen to organise the companies into groups. These groups are a mixture of our own interpretation of the companies as well as classifications provided by sources such as newspapers and Stock Exchanges.

- Swedish Investment Companies (Sweden)
 - o Pure Investment Companies
 - o Diversified Investment Companies
- Private Equity (Sweden and the UK)
- Closed-End Funds (the US)
- Investment Trusts (the UK)
- Asset Management Groups (the UK and the US)

In Chapter 5.2, 'Definitions of Investment Companies', a more exact definition of the groups is presented. The above-mentioned groups have been used consistently throughout the thesis. Whenever all companies, regardless of group belonging, are to be described, we have used the expression "Investment"

Companies in General". We hope this will not be to confusing for the further reading.

The classification above is to a large extent based on what country the company comes from as well as the structure for the investments. The private equity companies for example have a substantial part of their investments in unlisted companies. This makes the valuation of these companies more complex, compared to for example the closed-end funds, which mainly invests in quoted securities.

The largest consequence of the discount to net asset value is that no new money can be obtained from the stock market. The signals from the market are rather that investment companies in general should be liquidated and the net asset value delivered to the owners (Custos, Annual Report 2000). This has also been the trend in Sweden. The number of investment companies listed on the Stockholm Stock Exchange has been reduced considerably since the beginning of the 1980's until today. However, efforts have been made in order to reduce the discount to net asset value. Custos (Annual Report 2000) have, for example, implemented liquidation clauses and certain buy-back programs of stocks.

As can be understood from this problem background, there are several problems and unsolved issues when it comes to investment companies in general. The problem we will deal with is discussed below.

1.2 Problem

As described above investment companies are in general often valued below its net asset value. Many attempts by financial researchers have been made in order to explain this phenomenon, nevertheless none of these can be considered as satisfactory on their own. From this our main problem is to find similarities and dissimilarities among the different classes of investment companies, i.e.

private equity firms, asset management groups, investment trusts, closed-end funds, and pure and diversified investment companies.

This problem can be broken down into a number of sub questions:

- According to what factors are the companies best categorised?
- In general, what conclusions can be drawn from the obtained categories?
- More specific, what findings can be directly related to the discount/premium phenomenon?

1.3 Objective of the Study

The objective of this study is to get a better understanding of investment companies in the UK, the US and Sweden. The aim will be to understand these markets and the investment companies operating on them in the best possible way. The different forms of companies that invest in other companies are various, and rather complex in both the UK and the US. We will also try to understand how these are valued and why most of them are valued at a discount to net asset value, whereas some are not.

Our hope is to find similarities among the companies traded at either a premium or at a discount to net asset value. Moreover, from the categories stated in Chapter 1.1, 'Problem Background', we hope to be able to suggest a number of potential reasons for why certain companies are traded below or above their net asset value. Also, we hope to put an end to some of the current rumours as to why investment companies are valued as they are.

1.4 Limitations

The main limitations for the thesis in general are discussed in this chapter. However, limitations concerning the chosen companies are discussed in Chapter 2.8, 'Proceeding'.

The study will be limited to only comprehend the US, the UK and Swedish market. There are several reasons for this. One of them is that most of the material written includes these markets in one way or another. This is important for us, as we needed some kind of starting point. We could of course have chosen some other markets or even better all markets, but due to the timeframe it would not be realistic. The reason is that these markets are very complex. We chose them because of their similarities, our knowledge and understanding of them, and the availability of material. The material available is written in English, which prevents misunderstandings and translations errors. This could perhaps have been the case if we for example would have chosen to study the Asian markets as well. Moreover, our intentions are not to draw any general conclusions, but rather to give some suggestions for why investment companies in general are valued as they are.

2. Method of Research

The purpose of a research method chapter is to give the reader an insight in our way of proceeding, and an understanding of the reasoning and arguments we have used when writing this thesis. Firstly we will deal with conceptual framework, methodological considerations, research approach and research evaluation. Thereafter the practical work when it comes to gathering information will be described. Here will also our study of the companies be touched upon.

2.1 Conceptual Framework

The positivism and hermeneutics are two starting points of theories of science, which are each other's extremes (Lundahl and Skärvad, 1992).

The roots of positivism come from an empirical/scientific tradition. August Comte, who was a French sociologist, was the person who named the positivism. He was active at the middle of the 19th century. According to Comte it was fully possible to generate knowledge that was positive and developing for human kind. Comte wanted to create a scientific methodology that was equal for all sciences, and he used physics as a model (Patel and Davidsson, 1994). In absolute form, the positivism is based on experiments and quantitative measurements and logical reasoning. The critics (mainly the hermeneutics) argue that the positivist researcher tries to see how things are now from a spectator's point of view, and therewith only serves the existing. The critics say that an increase in knowledge through empirical statistical investigations is many times wrong or impossible (Eriksson and Wiedersheim-Paul, 1997). A positivist view in strict meaning is based on facts and formal logic that is the result of measurement (Eriksson and Wiedersheim-Paul, 1997). The positivism is a belief in scientific rationality and that the knowledge shall be possible to empirically test to be meaningful. Measurements shall replace

judgements and estimations, explanations shall come from a cause-effect relation. The positivism is based to a high extent on measurements of, and logical reasoning about, reality (Patel and Davidsson, 1994).

The total opposite of the positivism is hermeneutics. In hermeneutics one studies, interprets and tries to understand the basic conditions for human existence. Nowadays hermeneutics is a scientific direction. The hermeneutics scientist approached the research object from his/her own understanding. The scientist uses his/her own knowledge, thoughts, impressions and feelings in order to understand the research object. These attributes are an asset for the scientist and not an obstacle. The hermeneutic scientist tries to see the whole picture in a research problem (Patel and Davidsson, 1994). Hermeneutics is about interpreting the meaning in for example texts, symbols and experiences. When for example a text is translated and interpreted consideration must be taken to the way in which the text has arisen and who has written it, in order to be able to interpret the text in a correct way. Hermeneutics, as opposed to the positivism, is more qualitative and is based on interpreting reality through peoples thoughts, motives and goals etc (Patel and Davidsson, 1994).

We have chosen a hermeneutics standpoint. We have studied and tried to interpret and understand why some companies are traded at a premium to net asset value while other companies are traded at a discount to net asset value. We have approached the problem from our own understanding. It is not our intention to generalise, because different companies have different requirements and different preferences.

2.2 Methodological Considerations

One of the tasks of a scientist is to formulate theories that shall give as accurate knowledge as possible about the reality. The scientist does this by systematising data, assumptions and information. The scientist's work is to relate existing theory and reality to each other. An essential problem within

research is how this should occur. There are two alternatives for how this problem can be tackled - deduction and induction (Patel and Davidsson, 1994).

If the scientist works in a deductive way, it means that he/she aims at being able to prove the results reached. If a researcher for example is supposed to study the motivation to work at a workplace, this can be done from an already existing theory about motivation, and from this theory derive hypothesis that can be empirically tested in the specific case. The information that is gathered is already established by the existing theory. This theory also decides how the information shall be interpreted and how the results shall be related to the already existing theory (Patel and Davidsson, 1994). By drawing logical conclusions the result will be reached (Ericsson and Wiedersheim-Paul, 1997).

A researcher that works according to the inductive view would on the other hand try to formulate a general theory by studying how the working motivation is at the specific workplace. This is to say that the researcher shall discover something that can be formulated in a theory (Patel and Davidsson, 1994).

In our opinion we use a combination of both a deductive and inductive approach. On the one hand we start off by unbiased mapping down a number of potential factors influencing the discount to net asset value. From these and the information gathered we intend to draw conclusions. Yet, these findings will not be statistically justified. Moreover, our intentions are not to generalise, but to give suggestions for why investment companies in general are valued as they are. On the other hand, we will compare our findings with the already existing theories about closed-end funds and the valuation of their investments. From this perspective one may say that we use a deductive approach.

2.3 Research Approach

When an investigation is to be carried through, there are a few different ways of proceeding. When choosing the research consideration should be taken as to

how much knowledge there is within the area in which the thesis will be written, before the actual research is started (Eriksson and Wiedersheim-Paul, 1997).

This method is best suited for investigations where there already is knowledge, which can be systematised, for example as models or tables. The descriptive method is used when causality is not going to be investigated. The researcher limits himself/herself to describe some of the aspects of the phenomena he/she is interested of. This makes a more detailed and thorough investigation possible, something that is aimed at when using the descriptive method. It can be a description of the relation between different aspects or a description of each aspect separately. Most often only one technique is used to gather the information needed (Patel and Davidsson, 1994).

If a problem is hard to limit and when there is not a clear perception of the model that would be the most suitable, which relations and characteristics that are important, the explorative method is suitable. The explorative studies should be elastic in order to adapt to the results and knowledge that is gathered during the working process (Eriksson and Wiedersheim-Paul, 1997). The main purpose of doing such an investigation is to gather as much knowledge as possible about a specific problem area, to state that the problem has been looked upon from different angles. Wealth of ideas and creativity are important elements in the explorative studies, because these often aim at attaining knowledge that can lay the foundation for further studies. When an explorative study is conducted it is most common that several different techniques are used when gathering information (Patel and Davidsson, 1994).

We have used the explorative way to write the thesis and to search information. We have gathered information for our work by looking at earlier studies and theses made on the subject, newspapers and other financial magazines, searched the Internet for further information and annual reports. The reading of earlier studies was intended to give us the basic information about what investment companies in general are, how they operate, how they are valued

and why this company form exists. The Internet search was intended to broaden the information we found in the annual reports and the earlier studies. We have mainly concentrated on using printed information.

2.4 Research Evaluation

If the purpose of the measurements conducted is to see if the way of proceeding shows the same results, even if the test is carried out at several different points in time, the reliability measure should be used. This is to say that if the influence of chance should be left out, reliability is to be used. Since judgements are done by both the interviewer and the observer when the answers or observations are registered, different judgmental errors can occur. If a result should be as reliable as possible, the best condition is that both the interviewer and the observer are experienced (Patel and Davidson, 1994).

If what was supposed to be investigated, is in accordance with what one really investigates, then one has achieved high validity (Patel and Davidson, 1994).

The analysis and conclusions drawn from our study will be our own and will probably not be the same as of other scientist. We do not intend to draw conclusions for the whole industry, but rather contribute to a better understanding of how the investment funds, in general, are valued. Our hopes are that this thesis will serve as a guideline for companies in their endeavour to find potential solutions in order to reduce the discount to net asset value.

2.5 Method of Data Collection

The choice of method depends on what the purpose of the thesis is. There are two different methods, quantitative and qualitative. These two methods differ regarding the information observed, that is how numbers and statistics are used (Holme and Solvang, 1997).

The qualitative method emphasises understanding. This is achieved by implying a small degree of formalisation. In addition it is characterised by the closeness to the source where the information is gathered. The main purpose of the qualitative method is to obtain a deeper understanding of the problem that is studied, and not to prove the trustworthiness with statistical tools (Holme and Solvang, 1997).

When it comes to quantitative research, the conclusions are based on quantifiable data. It is important that the method of working is more formalised and structured if one wants to reach a good and satisfying result. Statistical methods of measurement are of decisive importance in the analysis of the gathered quantitative information. If a quantitative research is carried out, statistical generalisation can be made (Holme and Solvang, 1997).

For the purpose of our thesis both a qualitative and quantitative approach will be used, in order to describe the procedures undertaken to come up with answers to the problem posed at the beginning of this thesis. The quantitative approach is assigned on as much as every company being unique, and has its own terms of conditions. Due to the number of our conclusions we have to rely on our interpretations, and our understanding for the problem. Therefore, it would be difficult to prove the trustworthiness of our conclusions by the means of statistical tools. However, certain company data, such as earnings per share, dividends and share price, useful for the valuation of companies will be used. Therefore, we suggest that all conclusions based on such information are more of a quantitative matter. Finally, we believe this paper to be a mixture of both methods, which to some extent can be justified from both a qualitative as well as quantitative perspective.

2.6 Secondary Data

Secondary data is data that is already printed by others. The secondary data used in our thesis are annual reports and analyst reports from brokerage firms. The companies themselves produce the annual reports, and it is therefore important to be aware of the positive influence that may exist, because the company always tries to give the best picture of itself. The analyses' can also be somewhat biased, because of the fact that the analysts that have done the report wish to have a good relationship with the management of the company, so that he/she, also in the future, can get information from the company when writing about it. This is why, many times, these reports may show a more positive view of the company's situation. It is, therefore, the secondary data that should be looked upon in a critical way. But on the other hand, secondary data is good because it helps the reader to get a more complete picture of the situation that prevails. By using secondary data one gets the possibility to study the problem area in a good way. Other secondary data has been found through different databases, for example LIBRIS, GUNDA, Internet searches, newspapers, academic journals and business journals.

2.7 Primary Data

To collect primary data we have contacted different newspapers, economic journals and the Swedish investment companies human resource departments. This gave us a better picture of the companies operating on the three chosen markets. We have also sent e-mails to persons that we could not reach by telephone. The questions asked are stated below. The answers will be part of the discussion in Chapter 5, 'Empirical Study and Analysis'.

Interview Questions

First round of questions were asked to a sample of journalists and analysts in Sweden (2001-10-10):

- What do the markets look like in Sweden, the UK, and the US?
- What companies in the UK, and the US are most appropriate for a comparison to the Swedish investment companies?

The Swedish investment companies included in our study were asked the following questions:

- What companies in the UK, and the US do you see as your competitors?
- Is it possible to make a meaningful comparison between your company and companies active on the Swedish market, as well as companies active on the UK, and the US markets?

A second round of questions were asked to a sample of Swedish analysts (2001-10-26):

- Do you make your own estimates of the net asset value of investment companies?
- According to what methods are these estimates performed?
- Which are the trouble spots?
- On what basis is a target price set for investment companies?
- How is the discount on net asset value treated?
- What are the first things you are looking at when reading an external analysis?

2.8 Proceeding

In order to conduct our study the first thing we did was to decide on what markets to conduct the study. The UK and the US markets have been chosen because they are the most efficient markets in the world, and the Swedish market is chosen because the study is conducted in Sweden. A study between

these countries would be of interest for many of the Swedish companies, and also for others, in order to get a better understanding for how the UK and the US markets function compared to the Swedish market. These markets are very liquid and play an important role for Sweden. Other reasons for choosing these markets, and not for example the Japanese market, is because of the similarity in doing business as well as cultural similarities. This will make the study easier to comprehend both for us as well as for future readers. Moreover, all studies that we have come across have in one way or another included at least one of these markets in their research.

The companies have not been chosen randomly. The selection has been made very carefully, where companies have been eliminated throughout the process. The main criterion for the chosen companies was that they should be listed on the stock exchange, either in London, New York or Stockholm. If this criterion is not fulfilled, no discount/premium can be obtained. The second criterion was that the market capitalisation should be as high as possible. A higher market capitalisation would provide us with some comfort regarding the pricing of the stock as well as the comparability. The third criterion was that the companies chosen should be as similar by definition as possible to the Swedish investment companies. The forth and last criterion was that the companies chosen should have good liquidity in their stock.

We started our study by looking into the material available about the subject, mostly previous researches, old essays, and articles in magazines and academic journals. These all referred to the Swedish investment companies as closed-end funds. Therefore, our first attempt to select companies turned to closed-end funds.

As a starting point for our selection of the companies, as just mentioned, we had the Swedish investment companies. We started by taking a closer look into the Swedish market. We found that important factors such as discount/premium were easy to find, as well as information about ownership structure, largest holdings etc. In Sweden there are not many investment companies, and

therefore we have chosen all companies suitable for our study within this industry.

In order to get a list over as many of the UK and the US investment companies, we looked in the American newspaper Baron's and in the British Financial Times. These newspapers have sections with closed-end funds and investment companies, respectively. From these lists we selected the companies with the largest market capitalisation. We soon discovered that most of the closed-end funds, have quite low market capitalisation. Already, at this early stage, the dropout rate was high. Since this study is a comparison of investment companies in the UK, the US and Sweden, it was important for us to find companies that had a large market capitalisation, preferably as large as Investor, a Swedish investment company. Because of this we turned to the Internet, to search some of the better-known financial pages for companies within the financial sector. Two of the pages used were Hoovers homepage (for the UK) and Excite's homepage (for the US). On these pages we found lists of companies active within the financial sector of each country. One of the problems when searching for the companies was that different Internet pages, and newspapers, do not include the same companies under the same categories. However, finally a selection of a number of closed-end funds was made.

Surprisingly the market capitalisation of the closed-end funds was not as large as we had expected. Therefore, we decided to also look at other groups of companies whose business idea was to invest in other companies. The information attained was processed again, and we realised that not only the closed-end funds are companies that by definition invest in other companies. We also found that various forms of venture capital firms were suitable for that definition. We, therefore, added this category to the list. Private equity firms were chosen because the Swedish companies Ratos and Bure are currently rearranging their business towards the private equity market. A few private equity firms that were big enough for our study were therefore chosen. We matched our new list with the old one, and the companies were reviewed again.

Still there was a large portion of uncertainty, whether the companies chosen were the most suitable for our purpose.

Again, we searched both the American and the British markets, carefully. This time we decided to take a closer look at the asset management groups. These are the companies that manage the closed-end funds. It was our belief that these would act as closed-end funds, but in a larger scale. Because, after all, the only business these companies had was to manage the portfolios of the closed-end funds. One downside with the asset management groups was that net asset value was neither given in their annual reports nor on any financial Internet page. At that time, we thought this would not be a problem. One other reason as to why we chose companies other than closed-end funds, was because of some doubts that had entered our minds about the suitableness of only having one kind of investment companies in the study.

Finally, fifteen companies from the UK and the US were chosen. The information we wanted to use were primarily the companies annual reports and analysis made by brokerage firms. We started by ordering the annual reports, and also printed the analyses needed. A matrix for each company was made in order to get an overview of the information available. These matrixes can be seen in Appendix 1. Once again, some companies did not provide enough information or lacked in other ways, so a final review of the list of companies was made once again. The final list contains eight Swedish companies, ten British companies and ten American companies.

In the matrix mentioned above, the following factors were set up:

- Listing date
- Listed where (which stock exchange)
- Net asset value
- Net asset value per share
- Share price
- Discount / Premium
- Price Earning Ratio
- Cash Flow
- Yield
- Dividends per share

- Earnings per share
- Market Capitalisation
- Listed/Unlisted holdings
- Market/Industry for holdings
- Largest holdings
- Ownership structure
- Company managers
- Benchmark used by the company
- Other activities

The information in the matrix is gathered from the annual reports and the analysis. When looking at Appendix 1 it can be seen that there are lacks of information, i.e., all the information needed to make the matrixes complete was not available. We started to look at alternative sources of information at first, because our intention was to make the matrixes as complete as possible. Unfortunately, this turned out to be extremely time consuming. We therefore decided not to use other external information sources for the matrix. Besides, much of the information that can be found on the Internet can sometimes be of a doubtful nature, if it is not found on one of the well-known financial pages as, for example, Yahoo Finance.

The analyses used will be from a shorter time period, approximately six months back in time. Our intentions are not to draw conclusions regarding the share prices, but to observe what valuation methods are used for the different companies. From these analyses we may gain further understanding for this industry.

3. Previous Research

This chapter has mainly two purposes. The first one is to make the reader aware of previous studies, but also to make clear that a lot of studies have been performed regarding this issue. As pointed out earlier none of these studies have been able to fully explain the phenomenon of discount or premium on the net asset value of closed-end funds. Secondly, our intentions are aimed at making the reader familiar with the issue discount or premium, as well as, pointing out a range of complexities related to this topic.

3.1 Historical Background

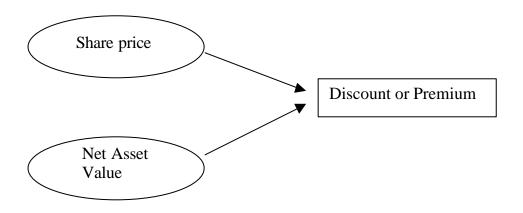
From a historical perspective regarding the US closed-end funds we can conclude that they have been continuously traded at a discount with the exception for two time periods. First, before 1929 and the crash, Lee, Schleifer, and Thaler (1990) refer to De Long and Schleifer (1990), who found that the median closed-end fund sold at a premium of 47 percent. During this time period a large number of shares were issued. The second period is found in the 1980s. At this time closed-end funds investing in foreign countries were optimistically valued. Potential explanations for this could be certain restrictions related to investments in foreign countries. Contradictory and unexplainable evidence show that funds in open capital markets, such as Germany and Spain were also traded at a premium. The conclusion may be that closed-end funds seem to be more optimistically valued when investors are enthusiastic about stocks in general or about a specific security.

3.2 Discount and Premium

As described in the definition of closed-end funds, the price is set by the demand and supply for the outstanding shares. Any difference between the

share price and the net asset value will result in either discount or premium. As suggested above the discount or premium arises from two different factors, the share price or the net asset value. A combination of both is, of course, also a possibility.

Graph 1



Source: own animation

The share price is set by the market, which can fluctuate for every single trade. The other factor, net asset value, is defined as the market value of the securities held less the liabilities. By dividing the total net asset value figure by the number of shares outstanding, the net asset value per share is obtained.

Previous research has tried to explain the phenomenon of share prices being valued below the net asset value. We have focused on organising them into the two aspects mentioned above, net asset value and share price. In addition, we may point out that the following studies are made on, and for, closed-end funds (US) and investment trusts (UK). Although, some of the results and studies, can be generally applied to investment companies.

3.3 Bias in Net Asset Value

3.3.1 Unrealised Capital Appreciation

The first aspect examined under this heading is the risk of having net asset value miscalculated. Malkiel (1977) argues that one possibility to the discount is attached to the built-in capital gain tax liability that unrealised capital appreciation carries with them. Thus, a fund with a large amount of unrealised capital appreciation should be traded at a lower price than an equivalent closedend fund without capital appreciation. This is best explained by an example: assume that a closed-end fund has a net asset value amounting to \$10 per share and a tax base amounting to \$5 a share. The closed-end fund then distributes \$1 per share each year for the following 5 years. In this case the shareholder will have to pay capital gain taxes on each distribution even though these distributions actually are a return on invested capital. However, Malkiel (1977) found evidence for that up to 6 percent of the discount could be explained by unrealised capital gains, whereas average discount on domestic equity funds in US has been around 10 percent (Malkiel 1977).

Contradictory, to the evidence provided above, is the fact that British investment trusts are not allowed to distribute any capital gains. Therefore, the shareholders are not liable to any capital gains unless they sell their shares. Regardless of these obvious differences, the investment trusts of the two countries behave with remarkable similarity.

According to Pratt (1966) the discussion above does not include the potential tax benefit the shareholder obtains when selling the shares, i.e., suppose the shareholder sells his shares immediately after the first \$1 dividend is paid. On the one hand, the shareholder obtains \$1 dividend, and on the other the share price will be reduced with exactly the same amount. Consequently, the \$1 distribution will be offset by the \$1 loss in the share price. Therefore, Pratt (1966) concluded that the tax advantage of unrealised capital gains mainly depends on the holding period of the shares. One problem seems to be that the

spreads between the bid and asked prices will add to the costs. Evidence shows that the discount on net asset value has to be as large as 30 percent, in order to avoid all cost related to such a move.

Brickley, and Schallheim (1991) found contradictory evidence regarding the relationship of unrealised capital gains, and the discount, compared to what Malkiel (1977) suggests above. Brickley, and Schallheim (1991) were able to show a negative correlation between the discount and unrealised capital gains and a positive correlation between the discount and unrealised capital losses. In other words, the unrealised gains cannot be said to have as strong influence as a tax liability that increases the discount as suggested by Malkiel (1977) and others.

However, Brickley, and Schallheim (1991) also provided some other fundamental explanations to the discount as such. First, the discount in their opinion is unrelated to the market adjusted performance of the underlying net asset value. Second, the discount increases during stock market declines, and decreases during stock market increases. Third, the discounts are lower in economic expansions than in economic contractions. In this case, on the other hand, it could be argued that the discount in economic contractions should narrow. Hence, the underlying assets are falling relatively more in value than the stock price of the closed-end fund itself. If this is the case, the net asset value will fall faster than the market value of the closed-end fund, and consequently the discount will narrow. Without any deeper studies into this issue, we can conclude that the discounts of closed-end funds in the US are narrowing today.

3.3.2 Restricted Stocks, or Letter Stocks

Another factor that may influence the net asset value figure is how different asset classes are valued. Malkiel (1977) points out the problem related to how fund managers value investments in restricted stocks, or letter stocks. This kind

of investment includes stocks where the closed-end fund commits itself to keep the asset for a pre-specified period and that the trade is for investment purposes. The advantage of buying this kind of stocks is that they normally sell at a discount compared to the market. On the other hand, these restricted stocks have, gradually been written up to market price. As these stocks are very illiquid, one must expect the net asset value of the closed-end fund to be overestimated in terms of liquidation. Therefore, closed-end funds with a substantial part invested in letter stocks may have an overestimated net asset value, which in turn is punished by the investors with a large discount. Over the time period 1969-74, Malkiel (1977) provided evidence of a significant relationship between the discount and the portion invested in restricted stocks.

Conversely, Lee, Shleifer, and Thaler (1990) meant that discount as such could not be explained by this factor. They argue that most of the US closed-end funds only have a small portion of their investments dedicated to restricted stocks. Nevertheless they still sell at a discount. Moreover, when open-ending a closed-end fund with investments in restricted stocks, the net asset value would fall with the reasoning of Malkiel (1977). According to Lee, Shleifer, and Thaler (1990) this is not the case, evidence shows that the share price rather rise than fall at open ending the closed-end fund.

3.4 Potential Factors Influencing the Share Price

3.4.1 Agency Costs

Agency costs have for a long time been an attempt to explain the discount on closed-end funds. There are, however, some problems related to this approach. The theory can neither explain cross-sectional nor periodic fluctuations in the discount. In addition the theory cannot explain why some funds are traded at premium. A typical agency cost is the management fee, which is said to force funds traded at equilibrium to be traded at a discount. Lee, Shleifer, and Thaler (1990), however, argue that closed-end funds selling at a discount should be

more attractive than for example, a mutual end fund. Thus the investor gets a higher yield, since they are actually buying more assets for their money. Moreover, Malkiel (1977) found no evidence of management fees being correlated with the discount.

Lee, Shleifer, and Thaler (1990) question the above reasoning of management performance being related to the discount. They point out that new closed-end funds are normally started at a premium, but are traded at a discount just a few months later. The contradiction herein lies in that the investors must expect superior returns when the new funds are issued, but than quickly change their minds and predicting returns to be below normal performance. Lee, Shleifer, and Thaler (1990) conclude that both predictions cannot be accepted as rational at the same time. Moreover, Malkiel (1977) found no evidence for a relationship between past performance (measuring net asset value changes) and the discounts. He also showed that discounts and turnover did not correlate. The final conclusion by Lee, Shleifer, and Thaler (1990) was that agency costs could not be used in order to explain the discount. Deaves and Krinsky (1994) observed the managerial performance and the discount from another perspective. They argued that if the managerial contribution declines, the discount would narrow, as the investors are more likely to believe in an open ending of the fund, which pushes the price towards the net asset value.

Draper (1989) investigated the relationship between the fund management and the shareholders on the UK market. He found that contracted specialist groups mostly managed the UK closed-end funds. Draper (1989) argues that this implies ineffective fund management for the shareholders, as the management has the incentive to continue its profitable operation. A potential effect is that the shareholders might actually have gained more benefit from liquidation or open ending of the closed-end fund, and therefore a discount should be motivated.

The ambition of power by the management is another often cited argument for the discount. There are mainly two approaches related to this issue. The first

perspective takes into account how the power is divided within the investment companies in general. The second is more focused on what kind of power these exercise or potentially could exercise on their investments.

Barclay, Holderness, and Pontiff (1993) presented some interesting findings on this issue. The idea, basically, builds on the fact that the agent (the management) and the principal (the owners) are not striving towards the same goals. The principals' only wish is to see the company value become as high as possible, whereas the agent puts a higher value on his own wealth. The evidence provided states that the larger the managerial ownership, the greater the discount to net asset value. The reasoning behind this would be that block holders are more likely to benefit by some other means than the smaller shareholders. Hence, the agent prioritises nice working areas, an expensive car, and luxury hotels instead of any cheaper alternative. This in turn, however, destroys capital and most probably does not create company value. Therefore, it is argued that power concentration to the management, imposes reasons for suspicion of the intentions of the management. Consequently, the company stock will be punished. Historically, investment companies in general, with power concentrated to the management has been traded at higher discount than investment companies, with owner structure spread out.

3.4.2 Segmented Markets

Some closed-end funds follow the strategy of investing in foreign stocks. The advantages related to this are that the investors might find difficulties in duplicating their portfolios. As long as restrictions on foreign investments exist, a narrower discount or even a premium can be justified. Examples on restrictions are tax and exchange controls or any other kind of limitations of non-domestic investments in foreign companies.

Malkiel (1977), however, makes clear that these effects are most likely to be small. The portfolios, although invested in foreign countries, could in most

cases actually have been duplicated. Therefore, Malkiel (1977) suggests that premiums or discounts cannot be explained by market imperfections but rather from the large demand for foreign securities.

Pratt (1966) points out that local market segmentation influences the size of the discount. He argues that the main reason for the discount is because to little efforts are made in order to sell closed-end funds to the general public. Anderson (1984) support this idea by saying that brokers prefer to sell mutual funds compared to closed-end funds, as they benefit more from these kind of transaction.

3.4.3 Anomalies

Many of the financial theories rest upon assumptions of having an efficient market. These assumptions include expectations of all market participants to act rational. That is, all behaviour should be explainable by rational choices consistent with well-defined preferences. If not, discrepancies are defined as anomalies within the financial theory. When thinking of investment companies in general, which are commonly valued below its net asset value by the market, it is not surprising to find studies on this topic.

Lee, Schleifer, and Thaler (1990) and Lee, Schleifer, and Thaler (1991) address four anomalies, which can hardly be dismissed as a fact. Those include, (1) new funds appearing on the market at a premium and move rapidly to a discount. Weiss (1989) among others has provided evidence on the US market for this. The peculiarity with this is that, obviously, investors are prepared to buy these stocks when they are initially issued, although the closed-end funds in most cases are approaching a discount after a while at the market. (2) Closed-end funds usually trade at substantial discounts relative to their net asset values. Lee, Schleifer, and Thaler (1990) refers to their own study (not yet finished), which concludes that all major closed-end funds in the US where traded on an average of 10,1 percent discount. One may add that all investment

companies in Sweden, except for Svolder, are currently traded at a substantial discount. Moreover, the question is extended to why some funds are traded at a premium and some not. (3) Discounts (and premium) are subject to wide variation, both over time and across funds. (4) When closed-end funds are terminated, either through merger, liquidation, or conversion to an open-end fund, prices converge to the reported net asset value. Evidence that share prices do rise are provided by Brauer (1984), and Bickley and Schalheim (1985). The conclusion is that the discount narrows as the announcement is made public, but a small discount remains until final open ending or termination.

3.4.4 Noise Trader

Lee, Shleifer, and Thaler (1991) investigate an interesting approach to the discount. The model investigated was first developed by De Long, Shleifer, Summers, and Waldmann (1990), and it is based on two categories of investors. The first category includes rational investors, who make rational decisions in accordance with their preferences. That is, investment decisions are based on rational expectations about assets future return. So far, we are handling investors who act within the efficient market hypothesis. On the other hand, we have the second group of investors, the so-called noise traders. These investors do not act fully rational, and their investment decisions are considered as unpredictable. In some periods they do overestimate expected returns, relative to the rational expectations, and in other periods they underestimate them. Concluded from above two different categories of investors trade securities according to their own believes. Therefore, prices of securities are a function of both. As a cause of the unpredictability in the changing expectations of returns, stochastic fluctuations in the discounts arise. Moreover, rational investors only will buy closed-end funds, in this case, if they are compensated for the noise trader risk, i.e., funds have to be traded at a discount.

The risk from holding a closed-end fund can therefore be divided into two parts; the risk of holding the closed-end fund itself, and the risk related to the

noise trader's sentiment. The noise trader may cause the discount to widen at the time the investor wants to sell his shares. However, if the unpredictable investor sentiment is systematic, that is, all stocks are affected at the same time, the risk will be priced in equilibrium. This assumption in our opinion, seems to be relatively fair, and therefore all assets on the market must be exposed to noise traders' sentiment. Also, the model of De Long, Shleifer, Summers, and Waldmann (1990) is based on noise traders impact on the whole market rather than closed-end funds specifically.

Noise traders will, therefore, only have an impact on closed-end funds if we assume that they trade closed-end funds more actively than the underlying assets. If not, and provided that the same investors invest in both closed-end funds and the underlying shares, any change in investor sentiment will affect both the net asset value and the share price. Consequently, no changes in the discount would occur, because of noise traders. It is, however, speculated by Lee, Shleifer, and Thaler (1991) that if the trade would be performed by a large group of small individual investors, the chances for noise traders will increase. According to Weis (1989) this is the situation on the US market. The main conclusion Lee, Shleifer, and Thaler (1991) make, is that when enough stocks in addition to the closed-end fund shares are affected by the same investor sentiment, risk from this sentiment cannot be diversified and is therefore priced.

Although there may be provable evidence for the noise trader theory, we cannot immediately transform this study neither to Swedish nor to English circumstances. Most of the Swedish investment companies do have large and powerful owners and therefore the necessary assumption of small and individual investors as owners fall apart. However, if the small investors would be the most active in the daily trade of Swedish investment companies, the theory cannot be dismissed. Arnaud (1983) argues that, similarly to Sweden, institutional investors own large portions of investment trusts on the UK market. Again, the noise trader theory emphasised by Lee, Shleifer, and Thaler (1990) is questionable as a solution for the discount. This is concluded by

observing investment companies in general in both Sweden and the UK, which behave similarly to the closed-end funds on the US market.

3.4.5 Arbitrage

When, as an investor, approaching the phenomenon of having any security valued below its net asset value, the most obvious thoughts must be, how can I make money out of this? One possibility is to buy shares in an investment company and to reproduce the portfolio of the closed-end fund, which in turn is sold short. This strategy may seem fairly obvious, but there are certain complexities regarding arbitrage strategies and closed-end funds. Lee, Shleifer, and Thaler (1990) point out some probable reasons to why arbitrageurs leave their hands off closed-end funds. First, it may be difficult for the arbitrageur to reproduce exactly the same portfolio as the closed-end fund. In addition, it could get even more difficult to follow any changes in the portfolio of the closed-end fund in a timely manner. Second, the reproduction of the portfolio is associated with transaction costs, which have to be covered before the investors can enjoy any gains from the hedge¹. Third, although the criteria above are fulfilled, the arbitrageur still has to overcome a crucial problem, which in our opinion makes the hedge questionable. As long as the discount remains at the same level, one could say that the hedge is perfect. But, if the discount on the other hand widens, the arbitrageur runs into the risk caused by noise trader, provided that they exist. This risk can only be avoided if the arbitrageur has an unlimited time horizon for the investment, and if we assume that the discount will get back to the origin where the trade was initiated. See the example below:

¹ Is a trading strategy. If a risk-free portfolio is produced, it is a perfect hedge. When hedging, one security is bought and another security is sold, to reduce risk.

Table 1

t=0,	t=1,	t=1,	t=1,
Disc=20%	Disc=20%	Disc=40%	Disc=0%
-80	+80	+60	+100
+100	-100	-100	-100
-20	+21	+21	+21
0	+1	-19	+21
	Disc=20% -80 +100	Disc=20% Disc=20% -80 +80 +100 -100 -20 +21	Disc=20% Disc=20% Disc=40% -80 +80 +60 +100 -100 -100 -20 +21 +21

Source: Our own interpretation

As we can see in the table above, the hedge is only effective if the discount remains unchanged or even better if the discount narrows. In the case of a widening discount we have the opposite effect, and the arbitrageur will actually lose money, unless he does not have an infinite time horizon for the investment.

The conclusions in the articles provided by Lee, Shleifer, and Thaler (1990, 1991) are pretty similar to each other. The demand for securities can influence security prices. As described above Lee Shleifer, and Thaler (1990, 1991) claim the demand and trade of securities to be based on both rational and irrational investors expectations about future returns. Therefore, their main conclusion is that closed-end funds discounts are a measure of the sentiment of individual investors. The sentiment of the investors, however, influences both small stocks as well as closed-end funds. Fluctuations in the sentiment of investors make the closed-end funds riskier than the underlying portfolio.

3.4.6 Discount as an Estimator

The following reasoning is based on the discussion above, with the point of departure in investor sentiment. Swaminathan (1996) investigated the correlation between the closed-end fund discount and the small firm returns. He found that small investors tend to push stock prices above their fundamentals now and then, which naturally leads to high returns. On the other hand, as the stock prices fall back to their fundamental value, the future returns are considered as low. The result of the tests suggest that discount forecasts small firm returns better than they forecast large firms returns. The result in itself supports the investor sentiment theory. In addition Bodurhta, Kim and Lee (1993) studied this issue with the starting point in country funds. They found evidence for that the discount could be used in order to predict the future price of the fund, but not for the underlying assets. This implies that the fund prices are based on other factors than the underlying assets' value.

4. Theory

4.1 Net Asset Value

The net asset value and the share price are two essential factors in order to obtain the premium or discount to net asset value. Therefore, we find it important to explain how the net asset value is calculated. In addition, it becomes even more interesting as the investment companies included in our study follow different investment and holding strategies. The main idea behind the net asset value is based on that the market value of all assets being summed up. From this total asset figure all the liabilities are deducted, and the net asset value figure is maintained. This may seem to be very easy, but there are a number of difficulties, which have to be overcome in order to arrive at an as fair as possible net asset value figure.

A number of venture capital associations exist. The most important of these are the American based National Venture Capital Association (NVCA), the European Private Equity and venture Capital Association (EVCA), the British Venture Capital and Private Equity (BVCA), and the Swedish Venture Capital Association (SVCA). The structure and function of these associations is roughly the same. In addition, they are member-based associations.

The purpose of these associations is to represent private equity and venture capital on each market, and on a global level respectively. Their objective is to enhance all member firms involved in this kind of businesses. Moreover, they provide a certain set of guidelines and restrictions for the private equity and venture capital industry. These guidelines aim at increasing the transparency so investors better can evaluate the performance of their investments. It also gives accountants and auditors a set of recommendations to hold on to. However, these guidelines are not an obligation for the managers of the fund.

The EVCA has delivered a set of recommendations for how the investments performance shall be measured by the company. They strongly advocate the Internal Rate of Return method (IRR). (See definition below) Other possible methods include measurements of the payback period and the book rate of return. The first method measures the number of years that are required in order to have outlays for the investment repaid. The latter method measures the average annual profit made by an investment as a proportion of the original outlay. Although, both these methods, are related to some implications. For example, the payback method does not consider the total profit that may be earned.

The IRR method is, however, the most common method. The IRR basically consists of the present value of the cash outflows, and the cash inflows associated to an investment. To this the present value of the unrealised portfolio is added. The final IRR figure expresses the return as a percentage figure, which can be used as a performance benchmark.

The EVCA guidelines also include valuation principles for both quoted investments and unquoted investments. The overall directives conclude that the valuation should be prudent and applied consistently. Also, methods used shall be disclosed. The advanced form of recommendations even requires the work sheet used by the manager to calculate the value of the assets. It should also include a set of comparable companies and a justification of the valuation methods chosen.

Investments in quoted stocks, as mentioned above are valued from the mid market price on the last trading day in the valuation period. The EVCA proposes that these values shall be discounted by approximately 10 percent to 30 percent. The discount figure depends on whether there exists a sales restriction, the liquidity in the shares, or the size of the stake in the shares.

On the other hand, we have investments in unquoted stocks. The recommendation reads that both a conservative value and a fair market value

shall be provided. Both EVCA and BVCA for example, recommend that all investments shall be valued at cost during the early years. Upward adjustments shall be performed first when the investment shows a substantial increase in value, and usually after that the financial statements have been audited. In contrast, investments performing poorly are written down as soon as the problems are recognised.

The fair market value is considered, as the amount an asset would sell at between a willing buyer and a willing seller. An indication of a fair market value could be an independent third party transaction within the valuation period. If there is no such transaction, the company has to define whether the investment generates revenues, or has a positive cash flow or none of these. In the first case a number of valuation tools are open to the company:

- P/E, price to earnings ratio
- P/CF, price to cash flow ratio
- EV/EBIT, enterprise value to earnings before interest and taxes
- EV/EBITDA, enterprise value to earnings before interest, taxes, depreciation, and amortisation

Enterprise Value = Value of Equity + Net Financial Debt

Finally, the obtained value, whichever method being used, shall be discounted due to the illiquidity of the investments. It is recommended that at least a 25 percent discount rate be implied. If, on the other hand, earnings and cash flow is negative, a conservative value should be used as market value as well.

4.2 Discounted Cash Flow

As suggested above all assets must be valued in order to obtain a fair market value. There are a number of different valuation options available for this purpose. These valuation tools are the same as the ones used for general

company valuation. Below the most common approaches will be explained. Many of these models may seem to be relatively easy to use, and to understand. Nevertheless, most of them are complex in the sense that they involve projections of the company's future operating performance. Herein, among other things, are investment policies, dividend policies, and the company's future financing policy included. Finally, all these factors must be related to the different costs of capital required.

There are some different approaches available in order to calculate the company value (total value of the company, that is equity plus debt value) or the equity value. Levin (1998) points out three factors that are used in the literature:

- The dividend (DIV) valuation approach implies that forecasted future dividends are discounted by the equity capital cost (k_e). In contrast to the previous model this calculation ends at the equity value. The company value is consequently obtained by adding the market value of the debt.
- The free cash flow (FCF) valuation approach implies that forecasted cash flows are discounted by the weighted average cost of capital (WACC). The sum of this calculation corresponds to the company value. If the market value of the debts is deducted the equity value is obtained.
- The net profit (NP) valuation approach includes several models. Basically, forecasted future net profits are calculated and capitalised, after having considered a charge for the use of capital. These models, though, will not be further discussed in this thesis.

The discounted cash flow model has its origin in the value theory. The main purpose of this model is to give a value of the stock based on the discounted present value of future expected net cash flows. A commonly used approach is the Present Value of Future Expected Dividends (PVED). Decisions based only on the PVED-model may be misleading, because much of the dividend payouts are a question of policy. Moreover, only one cost of capital is required, the cost

of equity capital. Still, it is argued that the PVED-model is a good benchmark for calculations of the equity value. According to this model the company value is derived by adding the market value of the debt to the discounted dividends. However, the model can be used for (1) companies with an infinite lifetime as well as for (2) companies with a finite lifetime. The formulas for the two alternatives of the PVED-model differs somewhat, see below:

$$P_0 = \sum_{t=1}^{\infty} \frac{DIV_t}{(1+r)^t}$$

Source: Brealey and Meyrs p 66 (2000)

Source: Brealey and Meyers p 65 (2000)

First and second expression:

 P_0 = corresponds to the equity value

DIV = dividends in period t (expected)

 ∞ = indicates a going concern, that is, infinite life

 $(1+r)^{t}$ = discount factor, corresponds to the cost of equity, k_{e}

Specific for the second expression:

H = future point in time where a finite forecast is ended

$$\frac{P_{H}}{(1+r)^{H}}$$
 = present value of the expected equity value at the horizon

Another often used approach is the DCF model, which is advocated by Copeland, Koller, and Murrin (1996). In this model, the sum of the free cash flow is divided by the weighted average cost of capital. The sum of this calculation gives the company value. As shown below, the market value of the debt is deducted for the same time, which provides us with the equity value.

$$\begin{array}{ccc}
\infty & FCF_t \\
P_0 = -D_0 + \sum & \underline{} \\
t = 1 & (1+r)^t
\end{array}$$

Source: Brealey and Meyrs p 66 (including own adjustments)

 P_0 = corresponds to the equity value

 $FCF = free \ cash \ flow \ in \ period \ t$

(1+r)^t = discount factor, corresponds to the average weighted cost of capital, WACC

 ∞ = indicates a going concern, that is, infinite life

The formulas above are good valuation tools, especially from a theoretical perspective. Yet, a few implications remain. Although, our intentions are not to get into debt on this issue but to give an insight to this valuation model. Still, some aspects need to be mentioned. First, accurate predictions about the future are important. A preferable way of achieving this is to explicitly forecast the

individual items of the company's balance sheet and income statement. By that approach any decision maker has the possibility to assess the validity of the figures used for the calculations. Moreover, these forecasted financial statements provide tremendous opportunities to derive a number of other useful valuation models. For example, return on equity, return on assets, profit margins and so forth.

Second, it is difficult to make use of an appropriate discount rate, as it involves different costs of capital. Copeland, Koller, and Murrin (1996) among others have proposed the Capital Asset Pricing Model (CAPM) as the best tool for estimations for the cost of equity capital. There are also other models available for this purpose, for example, the Arbitrage Pricing model (APT). Whatever method chosen, it is important to be aware of the impact differences in the discount rate may cause.

Third, as suggested above, all predictions regarding the future are related to some kind of uncertainty. Therefore, forecasts for periods in the distant future are extremely difficult to handle. One approach to this problem is to divide the future into two different periods. The first period is the explicit forecast period, mentioned above. The second period contains the time after that period, also called the horizon value. There are a number of problems connected to the horizon value, but in this report we remain by concluding that it is often solved by calculations with the Gordon formula, described in Brealey and Myers (2000).

4.3 Price to Earnings Ratio

A commonly used valuation method is the Price to Earnings (P/E) ratio. This ratio shows how the market is pricing the company's stock. The P/E ratio relates the market value of the company to the earnings and implies that the higher P/E, the more the investor are willing to pay for the company's earnings. Furthermore, an investor is also looking for P/E ratios that are increasing over

time, because higher multiples usually translate into higher stock prices. On the other hand, investors need to be cautious if P/E ratios are becoming too high, which could be a sign that the stock is overvalued. However, the common way of using P/E ratios in valuing companies is to relate it to future Earnings Per Share (EPS) figures. This is conducted by multiplying the expected EPS by an estimated P/E.

One problem related to the P/E ratio is how to handle negative earnings as it implies a negative P/E multiple. The analysts most often tackle this problem by changing their valuation approaches. Therefore, a number of alternative valuation methods have been developed, most of which are not applicable on closed-end funds. (Gitman, L.J., and Joehnk, M.D., 1999)

4.4 Relative Price to Earnings

In order to evaluate the stock's P/E relative to the market, investors can use the relative P/E multiples. These measures are calculated by dividing the company's P/E by the overall market P/E. This ratio shows how aggressively the market prices the stock compared to the average market, which concludes that very high relative P/E could imply risky investments. Moreover, a relative P/E above 1 indicates that the stock is priced higher than the market. Again, a negative absolute P/E is not preferable for this valuation method. (Gitman, L.J., and Joehnk, M.D., 1999)

5. Empirical Study and Analysis

5.1 Reflections about Net Asset Value

In Chapter 4.1, 'Net Asset Value', valuation methods that are proposed by the venture capital organisations are described, and utmost by the EVCA. We believe though that these need some further reflections. Before beginning it should be pointed out that the net asset value figure might differ depending on who the provider of the calculation is. The investment companies themselves provide one set of numbers, which are usually further adjusted by every analyst. Therefore, it can be somewhat misleading to make comparisons between different kinds of investment companies, without having looked at what kind of valuation methods that are used.

From our own observations and interpretations, we have found substantial differences in how the net asset value figure is presented by the investment companies. The Swedish investment companies prepare the balance sheets at book value, which has to be transformed into market value. All Swedish investment companies included in our study, however, provide these calculations separately. In the US and the UK, on the other hand, the investment companies make these adjustments on the balance sheets. The adjustments made are than reflected in the income statement. Consequently, the shareholders' funds given on the balance sheets corresponds to the net asset value figure.

From the analyst perspective differences in how the net asset value is presented is probably the least problem. More important to the analyst is to get accurate and timely information as they do their own estimations. However, John Hernander at Alfred Berg commented the approach proposed by both EVCA and BVCA as rather passive when transforming the book value into market value. Again, this statement is derived from an analyst perspective, whereas these recommendations are developed for its members. Still, the effects of

lower valued assets imply a lower value of the net asset value figure, which in turn decreases the discount on net asset value.

As mentioned above the analyst is fairly dependent on the availability of information when valuing the portfolio of investment companies. Yet, there is another problem. Assume that the portfolio consists of more than a thousand investments, like the portfolio of 3i. Although sufficient information is provided it is not reasonable that the analyst values all these investments. In cases like this the analyst may have to use the estimates provided by the company. On the other hand, larger companies are likely to have more analysts following them. Thus, these companies may be very well analysed. However, the valuation process gets even more blurred when figures used are provided by the company, as they are always related to an essential time lag.

Investments in listed companies are the easiest asset class to assess. The reason for this is that a fair market value is given on a daily basis at a Stock Exchange. Therefore, the transformation from book value to market value is obtained by multiplying the number of shares by the current stock price. This procedure is normally not questioned by anyone, and is consequently accepted as a fair method.

The second asset class, investments in unquoted stocks, on the other hand do provide a larger degree of confusion. The valuation of these assets is of a more arbitrary character, resulting in differences in the figure presented by the company itself and among the analysts. From the analyst perspective the transformation into market value for this asset class is to a large extent dependent on how much information the company provides. If there is sufficient information available the analyst has the opportunity to conduct a more in-depth valuation. This could include some kind of discounted cash flow analysis or any other sophisticated valuation tool. On the other hand, if there is no or little information available, the analyst has to rely either on the figures provided by the company itself or make usage of the book value. The latter example provides that the market value is higher than the book value, leads to a

relatively low net asset figure. Consequently, the discount on the net asset value will narrow.

5.2 Attempts to Reduce the Discount to Net Asset Value

Many of the investment companies are in general struggling with a discount to net asset value, and in Sweden this subject is a well-known fact. This part aims at highlighting some of the efforts undertaken in order to reduce the discount. The information below is derived from some annual reports.

Synthetic buy-backs of own shares (Custos, 2000). This strategy is described as an attractive investment alternative for all shareholders as long as a discount to net asset value exists. The idea is that investors planning to sell their shares are offered liquidity, whereas the remaining shareholders can enjoy the surplus the sellers give up. The largest objection to buy-backs of own shares is that any company that follows this strategy will have to reduce its portfolio. The final effect of this, if continued, is therefore a strategy leading to self-liquidation.

Liquidation clauses can be decided upon (Custos, 2000). Basically, this means that a maximum discount to net asset value is set up. If this level is exceeded the company has for example to redeem its own shares at full net asset value. Of course, these liquidation clauses differ somewhat between different companies, but the purpose remains the same.

Widening of operating activities (Custos, 2000). The active ownership strategy could be looked upon as an attempt to reduce the discount at least if the shareholder value is the company's primary objective. Beside this strategy, investments together with suitable partners could be a complementary strategy. The idea behind this is that investments can be performed without burdening the balance sheets as much as when doing own investments. In addition, the investment company can charge management fees, from identifying the investment object as well as managing it.

Focus of investment strategy (Svolder, 2000). The investments shall be focused on listed companies. Moreover, the companies subject for the investments are considered to run their business in the best possible way themselves. Therefore, Svolder does not ask for any representation in the board of the companies and consequently an active ownership of the holding is disregarded.

Transparency of the portfolio has a positive effect provided that sophisticated equity analyses are carried out for the potential investments (Custos, 2000). Opportunities for value creation shall also be pointed at. If these requirements are fulfilled, the transparency gives the analysts and the market better grounds for their future estimations of the company. As the market punishes risks this could have positive effects on the valuation of the company.

Maintain such a high dividend that a situation of tax exemptions is attained (Custos, 2000). In order to achieve this, the dividends must at least cover dividends received, plus a standard revenue of two percent of the portfolio value as well as net financial items minus management expenses.

Change of strategy. Both Bure Equity and Ratos believe that a change from investments in quoted shares to a strategy of investments in unquoted companies to be the recipe in order to reduce the discount. This business idea is called private equity, and both firms claim themselves to be active in that segment. In the annual report of Bure (2000) it is stated that this strategy provides the investor with opportunities, which would be difficult to achieve otherwise. That is, these investments are often difficult to invest in for the private investor and even more difficult to analyse as the information is limited. Therefore, it is argued that the management adds something new, which in turn should be taken into account when pricing these companies and consequently the discount should narrow.

Strong performance is argued to reduce the discount to net asset value (Bure Equity, 2000). If the company continuously outperform the market it would

lead to lower discounts or even a premium, which is the goal of Ratos. In the annual report of Ratos (2000) one can read that the company has outperformed the requirements of return set up by the market. However, the company is still traded at a substantial discount. According to Arne Carlsson (Ratos' CEO) this is because the market needs a longer record for these achievements before valuing the company as successful private equity company.

The various attempts described above in order reduce the discount is a further sign of this issue being complex. First, the wide spread among the different approaches can be interpreted as a proof of that no one knows how to solve this problem. Svolder on the one hand claims the strategy of investing in listed companies without an active holding strategy to be a solution to the discount. On the other hand, Custos claims the active ownership strategy to be a good concept in achieving reduction in the discount. One can at least conclude that no common solution exists. Second, many of the attempts must be considered as rather passive, as the side effects of the attempts reduce the company's size. The implemented liquidation clauses and the different buyback programs of stocks are an example.

5.3 Definitions of Investment Companies

5.3.1 Swedish Investment Companies

According to Ulf Myrberg (1987), a company, which has as its only business to hold securities, is a holding company. A holding company that has a diversified ownership structure and diversified securities holding, is according to Swedish law an investment company (Myrberg, 1987).

Pure Investment Companies

At the beginning the pure investment companies were seen as an investment alternative for small savers that wanted to invest their money, but it has grown more and more to be a instrument of power (Myrberg, 1987). Today the long-

term ownership structure is of great importance. Examples of pure investment companies are Investor, Svolder and Öresund.

The business idea of Swedish investment companies has been the same for a long time. Myrberg (1987) describes it as a long-term holding of large amounts of equity interests of controlling character. Important for Swedish investment companies is the power factor. Therefore, Board member duties are most often included in the concept of holding. Pure investment companies have tried to stay away from owning and/or developing large wholly owned businesses.

Diversified Investment Companies

The diversified investment companies, in contrast to the pure investment companies, have other activities in form of subsidiaries, in combination with their portfolio (Myrberg, 1987).

During 1986 and 1987, some of the diversified investment companies turned to operating status instead of investment (company) status. This was realised by starting an operating parent company. The advantage of organising the company in such a way is that bigger investments that are made with borrowed funds (money) can be put under the parent company. Interest can thereafter be matched with group contributions from the wholly owned subsidiaries. The disadvantages are that the exemption from taxes on dividends is lost (Myrberg, 1987).

From a historical view there are two kinds of diversified investment companies, the companies that were started by banks and the other diversified investment companies. The investment companies that were started by a bank, usually started by having some wholly owned businesses and a smaller portfolio. In some cases the wholly owned companies did not perform to well, which lead to that the portfolio was expanded and the operating business decreased. The other diversified investment companies have developed to investment companies because their main business was not doing well, maybe not expanding fast enough. Because of this, the companies turned more and more to holding a

portfolio. For many of these companies it has shown to be strategically wise to invest in a portfolio of stocks instead of continuing to invest in the main business of the company. Besides, portfolio management does not require many employees, and the investments have good liquidity. (Myrberg, 1987)

5.3.2 Investment Trusts

In 'The Investment Guide', a information brochure about trusts made by the Association of Unit Trusts and Investment Funds (AUTIF), it is said that the price of a trust is a reflection of its net asset value, and is calculated on a daily basis. A trust's value fluctuates with the demand on its stock.

Investment Trusts are similar to Unit Trusts in providing a means of collective investment but with a different structure governed by different regulations. The price of an Investment Trust does not necessarily equal the price of its underlying assets (AUTIF). This category of companies exists in the UK, and from the structure, and how it acts on the markets, it is best compared to the US closed-end funds.

Unit trusts are similar to open-end investment companies. Both types of companies are managed by professional fund managers. A fund is divided into shares or units. The funds divided into units are very similar to the Swedish so called Funds (a sort of open-end fund). To get a clearer picture, two definitions will be made. An investment fund is only a more general term for an open-end investment company or unit trust. Investments trust on the other hand have a different structure than a unit trusts, and is governed by other regulations. Investment funds are very regulated (AUTIF).

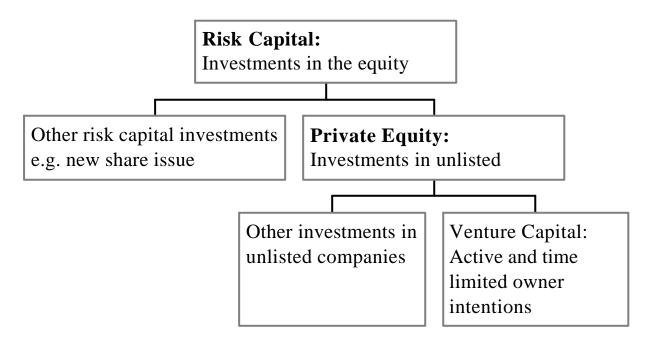
5.3.3 Closed-end Funds

The first closed-end fund was started in 1893 in the US. Today more than 500 closed-end funds are operating in the US. Closed-end funds are investment companies that are managed by professionals. These shares can be bought on the stock exchange on which they are traded throughout the day. The price of the shares is not set in advance or at the day-end, but is decided by the market (demand-supply). The shares of closed-end funds are traded in relation to their net asset value. Closed-end funds many times have a clear objective, and sometimes they are specialised on certain areas. Closed-end funds are as the name tells, closed. In contrast to open-end funds, the closed-end funds have a stable pool of capital. A closed-end funds in the US are not allowed (by the law) to operate as an active business enterprise. Their business must strictly be to invest in other companies. (Closed-end Fund Association Inc.)

5.3.4 Private Equity

Private equity companies act similarly to venture capital companies. The venture capital companies invest in companies that are not listed on any public stock exchange. The investments are normally combined with active ownership of the holdings. In addition, the investments are characterised by a limited holding period with the aim of exiting the investments. Private equity companies differ from venture capital companies as they primarily invest in a later stage of the business lifecycle. Moreover, private equity does not require an active holding strategy. The boxes below are intended to give a clearer picture of the divisions, functions and connections between and within these groups.

Graph 2



Source: Isaksson A., *Venture Capital – begrepp och definitioner*, Handelshögskolan at Umeå University

The figure points out the differences between risk capital, private equity and venture capital.

The classical venture capital organisation in the US consists of a management company that manages one or more venture capital funds. These funds are than open to external investors. The risk capital is invested in chosen portfolio companies. The revenues for the management company normally consists of partly a fixed management fee (depending on the portfolio and the size of the company), as well as part of the returns the investment generates. In addition, the management company as well as the partners are free to provide money to the venture capital fund (http://www.nutek.se/riskkapital/pdf/riskkapdef.pdf).

5.3.5 Asset Management Group

The main task for asset managers is to manage funds on behalf of both institutional and private investors. Fund managers' asset allocation decisions have a major effect on the flow of funds to industry, on the balance of payments and on the exchange rate. Despite the large sums that it manages on behalf of clients, and its role as a customer of other parts of the financial services sector, the investment management industry is small in terms of direct employment. (www.ifma.org.uk)

From our understanding this category of companies do not invest for their own purpose. Therefore the managed portfolio cannot be considered on the balance sheets. Yet, some asset management companies have their own investments. For these companies it might be possible to make net asset valuations. For those with little internal investments other valuation methods are more appropriate.

5.4 Companies Included in the Study

A brief description of the companies included in our study will be given below. For more detailed information see Appendix 1. All the below information is gathered from the companies' annual reports and official home pages.

3i Group is a venture capital company. They invest in unquoted companies. These companies have high growth potential, strong management and are ambitious. 3i invest in many different industry sectors.

Aberdeen Asset Management is an independent fund manager, which provides asset management services. The company is an international investment management group. They manage assets for both retail and institutional clients. The only business of the group is to provide asset management services to clients. They manage a large variety of funds.

Affiliated Managers Group's business is to focuses on mid-sized investment management firms. Currently, it is from there, that all revenues come. The only industry segment that Affiliated Managers Group operates within is that of being a provider of investment services, to institutions, private clients, mutual funds and partnerships, mostly in the UK and the US.

Alliance Capital is a provider of investment management services. Their clients are institutions, private clients and individual investors. The company is most known for their growth style of equity investing. Alliance Capital is listed on the NYSE.

Alliance Trust has been operating since 1920. Alliance Trust is self-managed. The trust invests in a wide spread of equities in many different activities. The trust operates all over the world, but mostly in the UK and the US. Alliance Trust is listed on the LSE.

Amvescap is a fund management group. As one of the largest fund managers in the world, they offer a wide range of products and investment styles to both individuals and institutions. The strategy applied by the group is organic growth and acquisitions. This independent global investment manager operates under the AIM and INVESCO brand names.

Berkshire Hathaway is a holding company. They own subsidiaries that operate a wide range of businesses. The most important of these is the property and casualty insurance business.

Bure Equity was founded in 1992, but it was not until 1999 that they started to concentrate their investments to unlisted companies within the TIME² sector. Bure Equity is active in the companies it has securities in. They do not only contribute with capital, but also with financial and industrial competence to the companies. Bure Equity has as its strategy to invest in knowledge-intensive growth companies.

Caledonia Investments pursue diversified trading, and deliberately seeks to have a diversified portfolio. Caledonia Investments builds its shareholder value through participating actively in their strategic investments.

Candover Investments were established in 1980. The company's investment focus lies in large buyouts. They are an independent company. Candover Investments' objective is to earn sufficient income, and to achieve investment capital gains that are above average.

Custos is what can be called a diversified Swedish investment company. They invest mainly in listed companies, within the area of biotechnology and chemistry. Custos aims at investing in companies that have big value increase potential. Custos is an active owner, and through this, they create additional value.

Duff & Phelps Utilities Income focus on the utility sector, even though it is diversified. The company owns mostly stocks, and a few bonds. This is a closed-end management investment company. They invest in fixed income and equity securities.

Edinburgh Investment Trust invests in UK equities, both small and large companies. The trust was formally established in 1969.

Electra Investment Trust invests mainly in unlisted companies. The shareholders approved in 1999 a proposal to restructure the company during a five-year period. This restructuring program is now ongoing.

Franklin Resources started its financial service business in 1947. The company's main business is to provide management services and investment advisory. Franklin Resources also operates within a secondary business segment, banking/finance.

² Telecom, IT, Media and e-Knowledge sector = TIME

Industrivärden has a diversified, but concentrated stock portfolio, mainly in Swedish stocks. The company only has a smaller amount of foreign listed companies, subsidiaries and unlisted companies in its portfolio. Industrivärden is a diversified Swedish investment company.

Investor is Sweden's largest investment company. They invest on a long-term basis. As an active owner, they have Board members in the companies where they have their key holdings. Except their key holdings Investor has a growing securities portfolio consisting of companies in the information technology and health sector.

Latour is a Swedish diversified investment company. The company has its own portfolio, but also trading operations and wholly owned industrial operations.

Liberty All-Star Equity Fund is a closed-end investment company, that is diversified and multi-managed. The fund was started in 1986. The fund manager is Liberty Asset Management Company. The portfolio is diversified and is primarily composed by equity securities. Liberty All-Star Equity Fund invests mainly in stocks.

Ratos is classified as a Swedish investment company. However, their strategy is to invest in unlisted companies, which makes it similar to private equity companies. They want to have an active role in the Board of the companies they hold.

Schroders Plc is an asset management company. They provide services to pension funds, unit and trust holder, insurance companies, corporations and individuals. A controlling interest in Schroder Plc is still held by the Schroder family.

SEI Investments was founded in 1986. SEI Investments provide investment technology solutions and asset management to its clients.

Stilwell Financial is a provider of asset management services through its subsidiaries Berger LLC, Janus Capital Corporation and Nelson Money Manager Plc. The company also has a 32 percent interest in DST Systems.

Svolders business idea is to invest mainly in small Swedish listed companies. A maximum of ten percent of Svolder's net asset value is to be placed in unlisted companies. Svolder is not as active owner in its holdings as for example Investor, since they believe the company is best run by its management. They wish, in the standard case, no representation on the Board of the companies in which they own shares.

The Gabelli Equity Trust's investment operations started in 1986. This trust is a closed-end fund, which mainly invests in stocks. The trust is non-diversified.

Tri-Continental Corporation is in a repositioning phase, to being more oriented toward total return. The company portfolio is composed mostly of stocks.

Witan Investment Trust invests mainly in a carefully selected and diversified portfolio of large and well-managed multi-national companies. They also invest in some smaller companies. These are chosen because of their long-term growth prospects.

Öresund Investment AB is a pure Swedish investment company. The going concern operates the wholly owned subsidiary VenCap AB. Öresund invests mostly in listed holdings.

5.5 Classification

In the following classification the companies are divided according to the grouping in chapter 5.2, 'Definition of Investment Companies'.

52

Table 2

Pure Investment Companies	Premium (+) / Discount (-) 2000
Investor (Swe)	-24,2%
Svolder (Swe)	-19%
Öresund (Swe)	-16,7%

To qualify for the group of pure investment companies it is required to have the majority of the net assets invested in listed companies. Within this group we have also chosen to keep the Swedish companies apart from the others. The reason for this is that the Swedish companies to some extent have interests in the companies subjected for the investments. In the annual report of Investor (2000) it is stated that corporate governance is a central part in order to create value from the different investments, as well as improving the shareholder value.

Svolder though, is an exception to the others, as it has rather little interest in active holdings. Their beliefs are based on that the companies subject for the investment knows best how to run the company.

As can be seen in the table above, the three companies are traded at a substantial discount. Svolder though, has experienced periods of premium. As pointed out above, Svolder is the only company included in this group that do not ask for active holdings. Based on this single factor, one can conclude that Svolder, with its unique strategy for Sweden is the only company that from times to times are not punished with a discount by the market. At the moment of writing 2001-11-16, Svolder has presented a net asset value figure of 59 SEK per share. The closing price for the same day was 59,5 SEK. Consequently, Svolder is traded at a very small premium at the moment.

In Chapter 3.4.4 'Noise Trader', we pointed out that two different kinds of investors might be active on the market, either the rational or the irrational one.

Provided that these assumptions are valid, the premium that Svolder currently (2001-11-20) is traded at may be explained by the theories proposed by Lee, Schleifer, and Thaler (1991). They speculate that if the trade would be performed by a large group of small individual investors, the chances for noise traders would increase. In addition, the closed-end fund itself must be affected by the investor sentiment to a larger degree than the underlying assets. Note that the reasoning below is based on a number of assumptions made by the authors of this thesis. Svolder differs substantially from the other Swedish investment companies regarding the ownership structure. Svolder has only three main owners and beside these a large number of small individual shareholders (Finans Tidningen 2001-11-20). Hence, we assume the requirements for noise traders are fulfilled. Although, Lee, Shleifer, and Thaler (1991) suggest that the risk from this sentiment cannot be diversified and therefore should be priced, we are tempted to reverse this reasoning.

Assume that a lot of the individual investors that trade the shares of Svolder are so called noise traders. Moreover we assume that these irrational investors, at the moment, are pricing the stocks of Svolder is fairly overoptimistic. Consequently, these assumptions are capable to explain and justify a premium to the net asset value.

But some implications. The rational investor would obviously use this opportunity to sell out his/her stake in Svolder. Provided that a large number of rational investors exist, their actions would result in a sell pressure, which in turn would push the share price to a lower level than the current.

Another explanation of the premium that Svolder is traded at would be that Svolder is the investment company that is most similar to the open-end funds in Sweden. According to Ulf Hedlundh, CEO of Svolder, the investors look at Svolder more as an open-end fund and therefore, they are willing to price the company more like that industry than the investment company industry (Finans Tidningen 2001-11-20).

Table 3

Diversified Investment Companies	Premium (+) / Discount (-) 2000
Custos (Swe)	-66,88%
Latour (Swe)	-32,1%
Industrivärden (Swe)	-31,8%
Caledonia Investments Plc (UK)	-28,8%

The diversified investment companies mainly consist of Swedish companies. The reason for this is that these own subsidiaries, which conduct operating activities. Industrivarden owns three subsidiaries and their industrial and trading operations corresponds to 6,5 percent of the total assets. Moreover, for the year 2000, 78 percent of the total revenues could be related to the operating activities.

Latour functions similarly to Industrivärden in the sense that it has three wholly owned subsidiaries. These contributed with approximately 35 percent to the final result for 2000. In addition, all these companies have in common that they exercise active ownership over the investments. This strategy is believed to generate excess values compared to the market.

Also Caledonia, as a British company, seeks to build value through active participation in strategic investments. These investments can be divided into five broad sectors through majority, substantial minority, and other strategic holdings. A substantial part of the net asset value, 47 percent, was directed to investments in associates (2001).

When observing this category of companies the similarities pointed at above regarding the business structure are evident. These factors may influence how the market prices these stocks. However, all of the companies are traded at a substantial discount.

Table 4

Private Equity	Premium (+) / Discount (-)	Market Capitalisation
	2000	
3i (UK)	+56%	£ 4 889M
Bure (Swe)	-25,4%	SEK 5 619M
Candover (UK)	-4,1%	£ 206M
Electra (UK)	-6%	£ 397M
Ratos (Swe)	-36,8%	SEK 6 856M

The characteristic for this group of companies is that a substantial part of the investments and holdings shall be focused on unquoted companies. In the case of Ratos, the company has changed its strategy towards private equity since the new CEO Arne Karlsson was appointed 1999. Ratos mainly have two sources that generate revenues. The result from the active holdings amounted to 1 046 MSEK, which correspond to 51 percent of total revenue. The remaining part is related to the asset management. The asset management, however, is said to mainly exist as a source of the required liquidity for new investments in active holdings. Ratos also have investments in Industrikapital, which is a venture capital company. In our opinion the structure of the holdings in Industrikapital is fairly similar to the classical American venture capital organisation described in Chapter 5.3.4, 'Private Equity'.

Bure, the other Swedish private equity company has 47 percent of its assets at book value invested in unquoted companies (annual report 2000). About 28 percent of the investments were directed to quoted companies although this figure is expected to decrease. Thus Bure's new strategy is focused on increasing its investments within the TIME³-sector. Bure also carry on indirect investments through different funds as well as venture capital companies. These investments comprised about 18 percent of Bure's invested capital.

³ Telecom, IT, Media, and e-Knowledge

Electra and Candover have 95 percent and 74,4 percent respectively of their invested capital invested in unlisted companies. The majority of Electra's investments are made in limited partnership funds managed by Electra Partners (annual report 1999). The profit is paid out in the form of management fee, which is recognised on an accrual basis. Candover invests on its own as well as under a co-investment agreement with third party managed funds, which are managed by the Candover Group subsidiaries. The net income from managed funds, and the income from own funds, contributed with 26 percent and 21 percent respectively to the total revenues of the group whereas the unrealised gains of the portfolio corresponded to 46,6 percent of the revenues.

3i have 75,7 percent of its investments in unlisted companies and 63 percent of the revenues are related to the same category of investments. This company differs in a substantial way from the others included in this group as it is traded at a premium of as much as 56 percent (March 31 2000) whereas the other four companies have to struggle with a discount.

Private equity companies seem to be traded at both discount and premium (see Appendix 1 for a three year overview). Remarkable is that 3i has been traded at a premium on their balance sheet date in 1998, 1999, and 2000. From the list above the only obvious difference would be that 3i is a much larger company regarding the market capitalisation than the others.

The change of strategy towards private equity that both Bure and Ratos have chosen to follow has resulted in a quite different development of the two companies. Since the year-end 2000, Ratos has had a positive growth of approximately 19 percent, where as Bure has experienced a drop of approximately 46 percent. Still the discount of Ratos and Bure amounts to 36 percent and 39 percent respectively. In addition the discount of the two is remarkably large.

The figures above suggests that management performance has very little to do with the discount. Consequently, there must be other factors that influence the

discount/premium figure. Again, this result supports the evidence that Malkiel (1977) provided. Malkiel (1977) stated that no correlation between past performance and the discount could be confirmed.

Table 5

Closed-End Funds	Premium (+) / Discount (-) 2000
Duff & Phelps Utilities Income (US)	-0,01%
The Gabelli Equity Trust (US)	+5,1%
Tri Continental Corporation (US)	-18,1%
Liberty All-Star Equity Fund (US)	-9,1%

Closed-end funds per definition are described earlier in the thesis. These companies are most often a part of a larger group although they act on an independent basis. Their investment focus varies, but for the four companies chosen above the main focus is common stocks. Most of the closed-end funds have in common that they do not exercise any corporate governance over its investments.

The closed-end funds try to diversify themselves compared to other closed-end funds. For example, Liberty-All Star Equity Fund offers a multi-managed portfolio of growth and value stocks. However, all in all the strategy of the four companies above are very similar and the income sources are fairly equal to each other. Dividends received correspond to between 76 percent and 86 percent of the total investment income. Still the discount/premium varies a lot among the closed-end funds in an unexplainable fashion.

Table 6

Investment Trusts	Premium (+) / Discount (-) 2000
Alliance Trust (UK)	-18,7%
Edinburgh Investment Trust (UK)	-1,19%
Witan Investment Trust (UK)	-8,3%

The three investment trusts in the table above do, almost exclusively, invest in listed companies. In addition they provide a very diversified portfolio with investments in many different sectors. The strategy of Witan Investment Trust differ somewhat compared to the other two as it invests in the global market.

The investment trusts are most similar to the closed-end funds in the US. In Sweden these kinds of companies do not exist. However, many studies have been made regarding these companies out of which a number have been reviewed in the Chapter 3, 'Previous Research'.

Table 7

Asset Management Group	Asset under management (2000)
Aberdeen Asset Managers (UK)	£ 21 900M
Affiliated Managers Group(US)	\$ 57 700M
Alliance Capital Management (US)	\$ 453 679M
Amvescap Plc(UK)	£ 27 200M
Franklin Resources (US)	\$ 229 900M
Schroders Plc (UK)	\$ 172 400M
SEI Investments Company (US)	-
Stilwell Financial Inc. (US)	\$ 257 800M

All eight companies above are mainly focused on providing investment management services. In general these companies derive their revenues from their subsidiaries. Franklin Resources differ somewhat as it offers banking and finance services in addition to the asset management services.

In the case of Schroders three different business activities are allocated to the shareholder's funds. Asset management represents 35 percent, private equity 11 percent, and group costs and interests 51 percent (return on investment of surplus capital and group costs). If the net asset value per share presented by Schroders itself were used in order to calculate the premium to net asset value, it would be 258 percent.

For the other companies within this group no net asset value figure is provided. If the shareholders' equity were to be used instead, an extremely large premium would arise. For example the premium of Stilwell Financial would en up at 732 percent (2000). This does not seem to be a realistic figure, which is why these premiums are not calculated.

Table 8

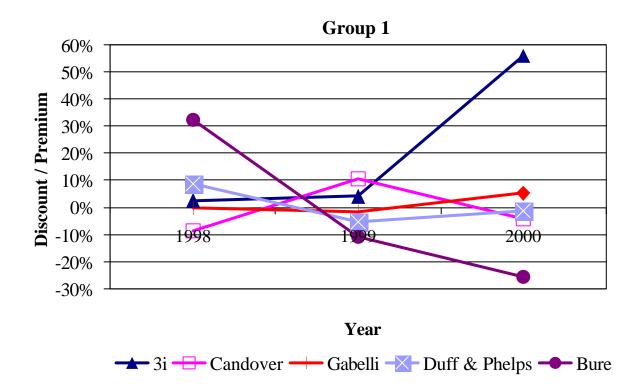
Berkshire	Main business is within insurance, and therefore the company	
Hathaway	is presented in its own group.	

Berkshire Hathaway is a holding company. It owns a number of subsidiaries that are involved in various businesses. The main bulk of the business is directed towards the property and casualty insurance business. Most of the revenues are received from this source. The premiums earned amounted to 57 percent of the total revenues (2000). Realised investment gains corresponded to 12 percent.

5.6 Discount / Premium Grouping

In this section the companies have been divided into three different graphs. This was a natural division according to the premium/discount of the companies. The asset management groups have been excluded from this section, since no net asset value figure is available.

Graph 3

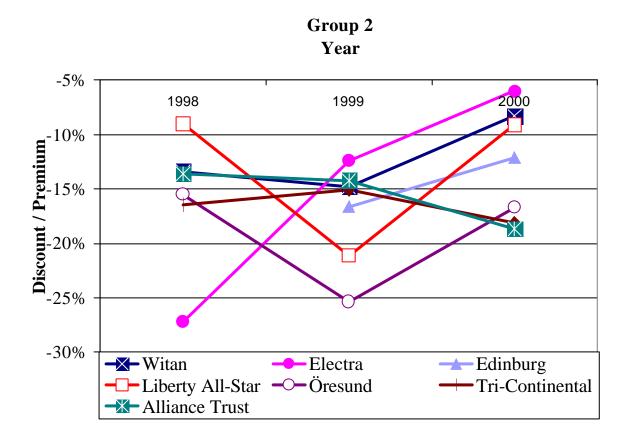


Group 1: The companies in group one are those that between the year 1998 to 2000 have had a premium up to 60 percent or a discount no lower than -30 percent.

The companies in this group have certain features in common, but it cannot be said that they are homogenous. For example, Bure as well as 3i and Candover Investment are private equity companies that invest in unlisted companies. The Gabelli Equity Trust and Duff & Phelps Utilities Income, on the other hand, are

closed-end funds that hold mostly stocks. When it comes to the industry within which these companies' holdings are most intense, it can be seen from Appendix 1 that all of them invest in services and information technology. However, this does not actually tell us anything about why these companies have a higher premium/discount than other companies, because many of the companies within Group 3 (see graph below) also invest in these industries. Besides, as was mentioned before, since the companies are not comparable, it is hard to form patterns, because there are probably none.

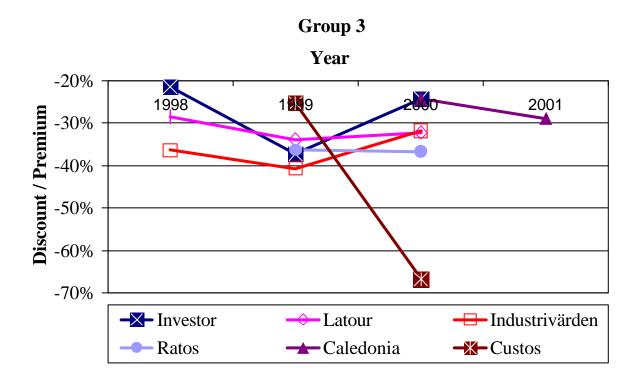
Graph 4



Group 2: In this group companies that have had a discount between –5 and –30 percent are represented. All of these companies are either trusts or closed-end funds. Besides, all companies, except Öresund and Alliance Trust, are managed by another company. Another common feature is that all these companies invest in financial services, but as just mentioned before this does not imply

anything. Most of the companies are gathered in this group. This is probably because the average discount is around these numbers. Another similarity is that all companies, except Electra Investment Trust, have an 89 percent or more of their holdings in listed companies. All companies showed in Group 2, except Öresund and Alliance Trust, are managed by someone other than but themselves. None of the companies perform in a certain way, and no trend can be seen in revenues or profit/loss.

Graph 5



Group 3: This group contains the five companies with the biggest discount. It ranges from around -20 percent to just above -70 percent. In this category are only Swedish companies, except Caledonia. The companies that ended up in this group are quite different in their nature. Ratos is, as mentioned previously, turning to a private equity company, and Latour is a mixed investment company that has other operations to contribute to its revenues. And then we have Investor - Sweden's largest listed Investment Company - and

Industrivärden, who both invest mainly in Swedish listed companies and whose other activities are of little importance for the result of the company. Neither in the ownership structure can any similarities be seen. For example Ratos is held mostly by Swedish institutions and Investor by foundations. In Caledonia and Latour the mayor holders are the Cayzer respective Douglas family.

5.7 Content of the Invested Portfolio

The three companies traded at a premium come from either the US or the UK, but they are not classified into the same categories regarding their business activities. Therefore we have to search for any other similarities. In the case of Schroders the company is not fully comparable to the other mentioned above, but rather to the asset management group. It can be argued that 3i in its capacity as private equity company has the possibility to offer the investors indirect investments in unquoted companies, which would be difficult otherwise and therefore should be traded at a premium. This is, however, the same strategy that Ratos and Bure try to exercise. Still, they are traded at a substantial discount of 37 and 25 percent respectively.

The portfolio of 3i differ from the other private equity companies in the sense that it is invested internationally, although approximately 70 percent of its investments are maintained within the UK. The portfolio of 3i is also very diversified with about one fifth of its value placed in industrials, consumer goods, services utilities, and information technologies respectively. The remaining part of the value is invested in resources and financials. In contrast to 3i both Bure and Ratos emphasises the importance of exercising corporate governance over their holdings. In addition, these two companies have recently changed their strategies towards private equity. Bure states that they are focusing on the TIME-sector, which represents about 70 percent of the net asset value. Ratos states that their active portfolio shall consist of 10 to 20 companies. No specific branch focus is strived for.

From our point of view there are some differences between the private equity companies that possibly could influence the premium/discount to net asset value. First, 3i is a much larger company with a portfolio that by far exceeds the others. Second, 3i has a longer record of investments within the private equity industry. According to Arne Karlsson (Ratos CEO) this is the main reason for why the market does not fully price Ratos as a private equity company.

The companies from our sample that mainly invest in listed stocks are in general the ones that are traded at a discount. The only exceptions are The Gabelli Equity Trust (US) and Duff & Phelps Utilities Income (US), which are traded at premium and at par respectively. These two companies function very similar to both the other two closed-end funds from the US, as well as the investment trusts from the UK. Duff & Phelps Utilities Income differ in the sense that it has about 20 percent invested in bonds and approximately 8 percent invested in preferred stocks. Their investments in common stock amounts to some 70 percent. Also, Tri-Continental Corporation differ with some 10 percent invested in foreign stocks.

The investment trusts from the UK are fairly similar, with the exception of Witan Investment Trust. This trust has dedicated some 40 percent to investments outside the UK. There are some theories that suggest that companies investing globally should be traded at a smaller discount alternatively a premium compared to those, which only invests on domestic basis. The reason for this would be that the investor could enjoy markets, which could be difficult to invest in on an individual basis. Malkiel (1977) on the other hand, states that most of these markets are not that restricted and that the investment in most cases can be duplicated. We strongly support Malkiel (1977) in the case of Witan Investment Trust, as most of the investments are made in big companies as well as on open markets. Moreover, the company is traded at a discount, although the discount is lower than the other two investment trusts included in our study.

5.8 Ownership Structure

The ownership structure is only important for certain companies. The closedend funds and trusts in the UK and the US neither have a strategic ownership structure, nor is it composed in a certain way to exercise power on the company's holdings. This is the case in Sweden on the other hand. In Investor for example, the Wallenberg family holds a majority of the shares. They hold the controlling power. Besides they play an active role in their key holdings, by exercising power, by giving advice, and by contributing with industrial expertise. Besides, Investor has Board members in its key holdings.

Studies made on Swedish investment companies have shown that the power factor is of importance at least in Sweden, even though researchers have not found any direct connection between the power factor and the premium/discount issue.

5.9 Valuation of the Companies

The purpose of this part is mainly to get an insight into how the various companies included in our study are valued. In order to answer these questions, we are going to make use of several analyst reports. It is important to note that our focus is neither aimed at providing a target price nor questioning the prices provided by the analysts. Before beginning, we would like to point out a number of problems related to this kind of observations. First, all facts or statements gathered from any analyst company might be coloured by the methods used and recommended by the company. Certain influences can probably also be related to the analyst himself/herself. Second, our sample of the analyses is very small and cannot be said to offer a fair and true picture of how investment companies in general are analysed. Therefore, our intentions are not to give a general statement of how the different companies are valued, but rather to give a hint to what it may look like.

As a point of departure we are going to observe the companies from the perspective of our classifications made in chapter 5.2, 'Definitions of Investment Companies'.

- Swedish Investment Companies
 - Pure Investment Companies
 - Diversified Investment Companies
- Private Equity
- Closed-End Funds
- Investment Trusts
- Asset Management Groups

In order to value pure investment companies it seems to be very important to calculate the net asset value. This suggestion is based on analyst reports made by Handelsbanken as well as Morgan Stanley Dean Witter. In the analysis of Öresund, made by Handelsbanken, the portfolio investments are valued individually. The market value of all investments is summed up and the net debts are deducted, resulting in a net asset value. The target price seems to be based on expectations of the development of the portfolio together with other strategic moves, such as share buy-back programs. In addition, the discount to net asset value seems to have a central part in the valuation, i.e., historical discount figures are compared with the present.

The analysis of Investor provided by Morgan Stanley Dean Witter is prepared similarly to the one prepared by Handelsbanken. A portfolio analysis and the different actions undertaken by Investor are provided. Beside this, Morgan Stanley Dean Witter has attached forecasts for the income statement. The estimated earnings per share figure suggests that price to earnings multiple analyses may be used in order to come up with a target price. According to Anders Björkman at Swedbank Markets, these kinds of analyses are relatively unreliable, as the earnings of investment companies are extremely difficult to forecast. The reason for this is that the earnings are very dependent on exits of

the holdings during the period. Therefore, the earnings figure may be very misleading.

For the diversified companies we have used two different analyst reports. One for Custos, prepared by Handelsbanken, and one for Caledonia prepared by Bear Stearns. The analysis of Custos follows the same structure as the previous made by Handelsbanken regarding Öresund. Notable is that Handelsbanken believes that the company is heading for liquidation, and that they expect a decision to be taken within the next six months. If this would be related to researches made for closed-end funds, one would expect the discount to narrow further. The rational behind this statement is that the net asset value would be delivered to the shareholders' at liquidation. However, in the analysis nothing is mentioned about this. Instead, the company is downgraded to the recommendation 'reduce' in the short term, based on little or no expected changes of either the discount or the net asset value itself. The discount was relatively low though at the date of the analysis (2001-10-19), 8 percent.

Interestingly, Bear Stearns has analysed Caledonia Investments from a portfolio perspective. In addition, they emphasis the potential for a narrowing of the discount. They point at two reasons for this. First, the current restructuring of the portfolio and second, they claim a general re-rating taking place on the market. Hence, the buy recommendation is based upon a "fair value" discount to net asset value of 10 to 12 percent, which suggests an upside of 17 percent.

The valuation of investment companies that invest in unlisted firms automatically adds a new variable, which has to be taken into consideration. The European Venture Capital Association (EVCA) has provided recommendations for how these investments preferably shall be reported (see Chapter 4.2, 'Venture Capital Associations'). The analyst makes his own estimations of the net asset value for several reasons, for example due to the time lag in-between the reports.

In the analyst report made by Charterhouse Securities of 3i, one can read that the company is divided into different segments, which are analysed separately. The non-private-equity activities are valued to a fixed rate of the funds under management, which comprises the group's pension fund and the four quoted investment companies. The portfolio is also valued, although the methods used are not provided.

According to John Hernander at Alfred Berg, the Swedish investment companies are preferably valued from the parent company's perspective. The assets must be identified and divided into listed and unlisted investments. Depending on the information available, as described in Chapter 5.1, 'Reflections about Net Asset Value', the analyst has to decide whether each single investment can be valued with multiple analysis or any other recognised valuation method. In the case of too little information the analyst may have to use the book value provided by the investment company itself in Sweden. In the UK and the US values stated on the balance sheets are already adjusted in order to reflect the market value. John Hernander points out that Ratos provides a lot of information about the companies subjected for their investments, which makes the net asset valuation much easier.

The closed-end funds seem to be valued from a portfolio basis. At least according to the four different analysis reports provided by Morgan Stanley Dean Witter and Salomon Smith Barney. In all four reports a net asset value figure is provided. Moreover, the grading seems to be extremely dependent on the size of the premium or discount. In the two analysis made by Salmon Smith Barney a downgrading has been recommended primary on the basis of a too high premium to net asset value. It is also stated that they believe that the Liberty All-Star Equity Fund will return to a moderate discount from the current 13,9 percent premium. Also Morgan Stanley expresses the premium of 8,5 percent to net asset value for Duff & Phelps Utility Income, as unattractive compared to other funds traded at a discount.

Interestingly, Malkiel (1977) provided evidence for that no relationship between past performance (measuring net asset value changes) and the discount exists. Based on this statement, we find it reasonable to value closed-end funds on the basis of the discount in combination with estimates of the portfolio. That is, the discount does not seem to be dependent on the performance provided by the management. Instead there must be some other factors that influence the discount.

In the final group of companies we have included a relatively broad range of companies. These provide services within fund management, investment management, corporate finance, commercial lending, and treasury services.

In common for the whole group is that net asset value calculations are not used as a valuation tool. Although, Schroders present a net asset value figure in its annual report neither Merill Lynch nor SG Securities refers to this figure in their analysis reports. Instead, other valuation tools are used in the 14 analyses that we have covered on this group of companies. The methods used are similar though, and will be described below.

The price to earnings ratio is by far the most used method. This method, as described in Chapter 4.5, 'Price to Earnings Ratio', requires estimations of the earnings per share. In all analysis these estimations are provided, although the forecasts in time may vary. The principles, however, are approximately the same, with only small differences. JP Morgan for example refers to "base case" earnings, which basically means that their estimations are valid under the circumstances given.

In a few reports the relative price to earnings ratio is stated. The ratio, though, is not used for any further commentary in the reports. Therefore, we leave it for now and refer to Chapter 4.6, 'Relative Price to Earnings', for consultation of this measure.

Merrill Lynch and JP Morgan refers to Discounted Cash Flow valuations in addition to the price to earnings ratios. In common for both analyst companies are that no further details are given regarding discount rate and so forth. However, Merrill Lynch states that they use a wide range of market assumptions, as well as various levels for the cost of capital. The analysis therefore provides a valuation of the company under several different market scenarios.

To sum up this part one can conclude that valuation based on the net asset value is only made for the Swedish investment companies, the closed-end funds, and for some private equity companies. One potential reason for valuing the asset management groups differently is probably that these companies do not only invest and hold securities. These companies rather provide services that generates revenues on a regular basis, which consequently seem to be considered as a better valuation tool.

5.10 Reasons to Why Our Study was Difficult to Realise

In this study we have tried to point out differences among different kinds of companies investing in other companies. Our point of departure was the Swedish market and the Swedish investment companies. As described throughout the thesis the investment companies in Sweden have consequently been valued at a discount to net asset value. Therefore, our interest was focused towards this phenomenon.

The purpose was to identify a number of comparable companies in the UK and the US. After having spent some time researching these markets, we ended up with a number of potential companies. The selection process is described in Chapter 2.7, 'Proceeding'. However, the chosen companies have differed substantially regarding their activities, which have had an essential impact on the comparability between the companies. Moreover, the Swedish investment companies seem to be unique for the Swedish market, i.e., these may not exist

any counterparts in the UK and the US. Company and country specific issues, as well as other problems affecting the comparability will be discussed below.

The first problem we discovered was that the Swedish investment companies, in old theses and other papers, were referred to as closed-end funds or closed-end investment companies. This was confusing at first, because of the following reasons. Our search for closed-end funds in the US and the UK was a success, since this kind of companies were easy to find. What we did not know at the time was that these companies differed in some important areas. For example the Swedish investment companies often have interests in their holdings, which is not the case for the closed-end funds. Moreover, the market capitalisation of many closed-end funds is low, especially if compared to the ones of the Swedish investment companies. Only after having conducted research about nearly all closed-end funds in the UK and the US, did we come to this conclusion. It is our belief that it is not correct to name the Swedish investment companies as closed-end funds, since confusion is easily made. Besides we believe that these companies are not comparable, because of further differences described below.

The investment companies in Sweden need to fulfil certain requirements in order to be qualified as an investment company. These requirements include that the company's main purpose is to invest and to hold investments in other companies. In addition, there are restrictions for how investments are realised. If the requirements that are set up are fulfilled, the company is entitled to a specific tax-status. Although we have disregarded from tax-differences between the countries, this may bias the results provided.

Characteristic for some of the Swedish investment companies is also the ownership structure. Some of the companies have one family that controls the company, others have institutional owners, and some have a diversified ownership structure. For further details, se Chapter 5.7, 'Ownership Structure'.

The difficulty in comparing investment companies on a cross-boarder level is highlighted by some of the analysts we have talked to. Christian Brunlid (Carnegie), Anders Roslund (Öhman Fondkommision), and John Hernander (Alfred Berg), all of whom pointed out that the Swedish investment companies are a national phenomenon. The main reasons for this would be the two issues discussed above.

The private equity companies are, according to our opinion, the best group suited for a cross-boarder comparisons. In contrast to the traditional investment companies in Sweden this group of companies is a relatively new concept for Sweden. Hence, the American and British private equity markets influence the private equity business concept in Sweden. Consequently, it is easier to find counterpart companies in these countries. Still, we would like to point out that many of the studies that we have come across regarding the Swedish investment companies have been based on assumptions made for closed-end funds in the US and the UK. This may be somewhat misleading and confusing, due to the big differences in the purpose of their activities. Therefore, we suggest that these companies are compared to each other with cautiousness.

As pointed out above, and in Chapter 3, 'Previous Research', several studies have been made with focus on closed-end funds. The discount to net asset value for these companies has been analysed from a number of various perspectives. As we see it, it is extremely difficult to add any knowledge to this issue within the timeframe of a master thesis. Moreover, as suggested above there might not exist any good counterparts on the Swedish market. In our opinion Svolder is the company that has most in common with this group. This is concluded from that Svolder at least invests 90 percent of its net asset value in smaller listed companies. In addition, they perform little or no corporate governance over their investments. However, Svolder still has a limited portfolio of approximately 30 investments, whereas the closed-end funds in the US normally diversify themselves to a much larger extent. This should not be mixed up with the purpose of our master thesis, which is not aimed at solving the discount. Our hope was rather to find counterpart companies or counterpart

equivalent companies, from which similarities and dissimilarities would be compared.

The companies that we have included under the heading asset management group are not comparable with the other four groups mentioned above. The main reason for this is that they have a large portion of operating activities and only a smaller part invested for their own purpose. On the one hand, it may be possible to break out the investments made and value these separately. On the other hand, this would be too large an exercise for a Master Thesis. In our case, the thesis is mainly aimed at being based on public information provided by the companies themselves as well as some analyst reports.

Besides, some of the asset management groups appeared on the same lists in the Financial Times and Baron's, as the other investment companies and closed-end funds. Some of them had a large enough market capitalisation to fit our requirements. They also had the business idea of investing in other companies. The only problem, as was mentioned above, is that only some of them have their own portfolios. We understood that they provide asset management services, but at the time we had not read their annual reports. We believed all along that a net asset value was possible to obtain, and if not stated in the annual reports, perhaps easily calculated. When discovering that the net asset value does not seem to be of importance to these companies, and it was not stated anywhere, we wrote e-mails to the information addresses most companies have. These could not provide us with the requested information. In spite of this, we decided to still include these companies in our study, to establish their role and importance.

On top of the problems described above, there are a number of general problems related to all kind of cross-boarder comparisons. Some of these are accounting policies, laws, regulations, culture and so forth. These will not be discussed further, since the study does not focus on any of them in particular.

6. Conclusion

The purpose of this Master Thesis is to answer the three questions stated in Chapter 1.2, 'Problem'.

- According to what factors are the companies best categorised?
- In general, what conclusions can be drawn from the obtained categories?
- More specific, what findings can directly be related to the discount/premium phenomenon?

As discussed in Chapter 5, 'Empirical Study and Analysis', there are different factors that can be used in order to categorise the investment companies. For the purpose of this thesis the structure of the investment company and the investment strategy has been of large importance when organising the various companies into different categories. When looking at the structure of the investment company, it was important, in this case, to get a picture of what kind of businesses that are included in the investment company. Early in the thesis it was stated that, one of the requirements in order to be classified as an investment company, was that the main business should be to invest and hold investments in other companies. From this rather vague requirement, it is clear that many different companies could be included. Therefore, it was decided to look at the purpose of the various investments. From these observations it was apparent that the investment strategies for the various investment companies differ substantially. Some of the companies provide an extremely diversified portfolio whereas some other companies focus on a limited number of investments. There are also investment companies that hold and own whole businesses, which in turn were run as subsidiaries. So far the discussion has only included investments in listed companies. This leads us into another factor, investments in listed or unlisted companies. The investment companies, or better the private equity companies that mainly invested in unlisted companies, formed an own group. The reason for this was that these companies profile themselves differently compared to the other investment companies. In

addition the valuation of the net asset value has to be approached somewhat differently. To some small extent we also considered the ownership structure of the investment company itself. Below are the most important factors used for our grouping pointed out:

- A diversified portfolio versus a limited number of investments
- Wholly own subsidiaries
- Investments in quoted or unquoted companies
- Ownership structure

From these factors we found that an accurate classification of the investment companies could be conducted. We may add that most of our assumptions as well as our grouping of the companies are of an arbitrary character. Therefore, any other grouping according to some other criteria cannot be excluded.

The second question, 'In general, what conclusions can be drawn from the obtained categories', is very difficult to give any simple answers to. The reasons for this will be pointed out below.

In order to understand the problem related to the question, each group will be commented upon. From the criteria discussed above the companies were to be grouped independently of country belonging. Our hope was to find groups with a mixture of investment companies from Sweden, the UK, and the US. To our disappointment most of the companies from the same country ended up in the same groups. There are a number of possible reasons for this, for example the various legislations, regulations, and the different ownership structures of the investment companies. In Sweden an active ownership is mostly used, while the US closed-end funds as well as the UK investment trusts are not subjected to this. However, these things were disregarded from when grouping the companies, but it may still have influenced the grouping.

Due to the low degree of mixed countries in the groups, some parts of the following discussion will proceed from a Swedish perspective. From this point

of view regarding the classification, the pure Swedish investment companies would probably be thought of as comparable to the closed-end funds and investment trusts. As pointed out above there are essential differences in the ownership structure between the countries. Therefore, Svolder is the only pure Swedish investment company that possibly could be compared with the closed-end funds and the investment trusts (Chapter 5.5 'Classification'). Again, from a Swedish perspective, Caledonia Plc (UK) is the only company that is comparable to the group of diversified investment companies, which mainly consist of Swedish investment companies.

The group of private equity companies is, as pointed out earlier, probably the most suitable group for cross boarder comparisons. The activities of these companies can be relatively easy to recognise. Moreover, we have the impression that these companies are more alike, since the American market leads the development within the private equity industry, which tend to be copied to other markets. The asset management groups, which are only included from the UK and the US, are a category by themselves. During our study we discovered that these were not comparable to the other categories, because they do not have own portfolios (sometimes they have own portfolios, but then they are small), but only manage the portfolios of their funds.

Question two is best summarised by pointing at the huge differences among the companies. In addition, we can conclude that the companies seem to be very specific for each country. On top of this the lack of available information has been evident. These things among others have resulted in little findings that can be directly related to our thesis.

The third question, 'what findings can directly be related to the premium/discount phenomenon', is obviously dependent on the degree of the findings in question two. This means, unfortunately, that no new and breaking evidence for the premium/discount was found. However, some findings and reflections will be presented as follows.

Most of the findings provide evidence for a negative relationship between the discount and the various factors discussed, that is none of the factors found can directly be pin-pointed as a reason for the discount. On a general basis for all of the companies included in our study, it can be stated that no evidence is found for a relationship between the performance of the underlying asset and the discount to the net asset value. This finding is supported by the study of Malkiel (1977).

Another reflection, if the Swedish investment companies, except from Svolder, are observed regardless of group belonging, they seem to be traded at a rather high discount to the net asset value. According to our believes, this may suggest that there are country specific factors that influence how these companies are traded. If we may speculate, these factors can include specific matters of legislation for Sweden, such as tax issues. The rather unique ownership structure for the Swedish investment companies could also be a possible reason. From the perspective of behavioural finance one could argue that there is a trend of valuing these companies at a high discount, and that these companies therefore tend to stick together.

As suggested above, also the Swedish private equity companies are traded at a fairly high discount. 3i (UK) in contrast is traded at a premium. Potential reasons to this, except from being a British company, might be found in their relatively longer experience within the private equity industry. Moreover, 3i is a much larger company than the Swedish private equity companies. The company also provides a diversified portfolio invested both within the UK and outside the country. These factors are used in order to explain the premium at which 3i is traded compared to the Swedish private equity companies. However, the question of why the two private equity companies Candover UK and Electra UK are traded at a discount, remain unsolved. Again, one reason could be the size of the companies.

This thesis has hopefully given an insight into the investment company industry in general. It has also provided a classification according to certain criteria of

the various investment companies. On the other hand, difficulties of conducting comparisons cross border has been pointed out as well as the problematic in obtaining accurate information. Finally, this paper has unfortunately not been able to give any further solutions to the puzzle discount on net asset value for investment companies. Nevertheless, this thesis can be regarded as another attempt, among many, to add a small piece to the discount puzzle.

This is a very interesting phenomenon, and we do encourage further studies. In Chapter 7, 'Future Research', there are suggestions on how to approach the problem from a different angle.

7. Future Research

An alternative method to approach the problem would have been to contact a larger amount of companies from each country and ask them to answer an enquiry with well-prepared questions about the company and how they value their holdings. Besides, questions about competitors, key words the company identifies itself with and perhaps the reason to why the company believes it is traded at a discount. This would probably give a better understanding of how investment companies on these markets see themselves, and perhaps these markets can be mapped in a more organised way, in order to make future comparisons possible.

Appendix 1

NYSE = New York Stock Exchange

LSE = London Stock Exchange

SSE = Stockholm Stock Exchange

3i (UK)

Listing date	1994-07-18			
Listed where	LSE			
Year	1998	1999	2000	2001
Net asset value (net assets diluted for	£3554,9 M	£3689,7 M	£ 5174 M	£4973 M
1998 & 1999)				
Net asset value per share (diluted)	582 p	601 p	847 p	-
Share Price (31/03)	598 p	626 p	1318 p	1122 p
Premium (+) / discount (-)	2,7%	4,2%	56%	-
Cash flow	£-2,5 M	£2,5 M	£ 22 M	£40 M
Dividends per share	6,4 p	7,0 p	7,60 p	8,1 p
Earnings per share (diluted)	18,0 p	18,5 p	19,1 p	18,9 p
Market capitalisation	£4889 M			
Listed/unlisted holdings of net asset	Listed: 971 M, 19,5% of net asset value,			
value	24,3% of inv	vested capital		
	Unlisted: 3 030 M, 61% of net asset value,			
	75,7% of invested capital			
Market/industry for the holdings	% of portfol	io:		
	Services and utilities 26%			
	Information	technology 2:	5%	
	Consumer go	oods 21%		
	Industrials 1	8%		
	Others 10%			
Largest holdings	Very diversified.			
Company managers	Self managed			
Revenue Statement	£M			
Interest receivable on loan				
investment	99			
Fixed rate dividend	21			

Other interest receivables	43
= Interest receivables	163
Interest payables	-117
Dividend income from equity shares	123
Fees receivable	72
= Total operating income	241
Expenses and tax	-125
= Profit for the year (before	116
dividends)	

Aberdeen Asset Managers Plc (UK)

Listing date	1991-03-28				
Listed where	LSE	LSE			
Year (30/9)	1998	1999	2000		
Net asset value ⁴	-	£ 80,896 M	£ 99,428 M		
Share Price	91 p (28/9)	155,5 p (27/9)	575 p (12/9)		
Cash flow	-	£ 3,663 M	£ 7,666 M		
Dividends per share	4,50 p	5,50 p	9,50 p		
Earnings per share (diluted)	6,46 p	7,60 p	15,44 p		
Assets under management ⁵	£13100 M	£16100 M	£21900 M		
Market capitalisation	£604 M	£604 M			
Listed/unlisted holdings	Investments £	Investments £28,272 M			
Largest holdings	Phoenix Home	Phoenix Home Life Mutual Ins 21,99%			
(2001-11-02)	Schroder Inv I	Mgmt Ltd 8,96%			
	Life Assuranc	Life Assurance Holding Co 8,68%			
	Barclays Glob	al Inv 3,37%			
	Morley Fund	Mgmt Ltd 3,00%			
	R Scott-Brown	R Scott-Brown 2,24%			
	M J Gilbert 1,95%				
	Other Dirs 2,33%. ⁶				
Company managers	Independent fund manager				
Types of assets under management	Equity 62%,	Equity 62%, Fixed interest 32%, Property 4%,			

82

⁴ Equity shareholders funds
⁵ From analysis of Aberdeen Asset Management made by JPMorgan 2001-07-10
⁶ www.aberdeen-asset.com

	Cash 2%
Profit and Loss Account	£M
Turnover (asset management)	115,721
Total administrative expenses	-81,496
= Operating profit	34,225
Tax & interest	-10,099
= Profit for the financial year	24,126 (EPS diluted 14,71 p)

Affiliated Managers Group (US)

Listing date	1997-11-21			
Listed where	NYSE			
Year (31/12)	1998 (31/12) 1999 (31/12) 2000 (31/12)			
Share Price	\$29,875	\$40,4375	\$54,875	
Cash flow	-	\$22,267 M	\$-30,144 M	
Assets under management	\$57700 M	\$82000 M	\$57700 M	
Earnings per share (diluted)	\$1,33	\$3,18	\$2,49	
Market capitalisation	\$1397 M			
Asset class	92% Equities, 4% Fixed income, 4% Other			
Ownership structure	77% domestic investments			
	23% global investments			
Company managers	Not owned by anyone			
Statement of Operations	\$M			
Revenues (asset management)	458,708			
Expenses	-284,273			
= Operating income	174,435			
Non-operating income and expenses	-13,486			
Tax and other	-104,293			
= Net income	56,656 (EPS diluted 2,49)			

Alliance Capital Management (US)

Listing date	1988-4-14
Listed where	NYSE

Year	1998	1999	2000	
Share Price	\$25,75	\$29,9375	\$50,625	
Cash flow	-	-	\$216,251 M	
Assets under management	\$286659 M	\$368321 M	\$453679 M	
Market capitalisation	\$3 566 M			
Statement of Income		\$M		
Revenues:				
Investment advisory & services fees	1689,817			
Distribution revenues	621,622			
Other revenues	210,660			
=Total revenues	2522,099			
Expenses	-1812,754			
= Income before income tax	709,345			
Income tax	-40,596			
= Net income	668,749			
	(diluted net income per unit \$3,20)			

Alliance Trust (UK)

Listing date	1947-07-17			
Listed where	LSE			
Year (31/1)	1998	1999	2000	
Net asset value ⁷	-	£1737,218 M	£1897,929 M	
Net asset value per share	£30,97	£ 34,25	£37,39	
Share Price	£26,75 (2/2)	£29,37 (1/2)	£30,40 (31/1)	
Premium (+) / discount (-)	-13,63%	-14,23%	-18,69%	
Cash flow	-	£-0,420 M	£8,624 M	
Dividends per share	59,0 p	62,5 p	64,5 p	
Earnings per share (diluted)	64,89 p	65,95 p	68,86 p	
Market capitalisation	£1345 M	£1345 M		
Listed/unlisted holdings	Listed holdings	Listed holdings: 99,8% of portfolio, 98% of net		
	asset value.			
	Unlisted holding	Unlisted holdings: 0,2% of portfolio, 2% of net		
	asset value.	asset value.		

⁷ total shareholders equity

_

Market/industry for the holdings	Resources and Basic Industries 12,1%		
, , , , , , , , , , , , , , , , , , ,	General Industrials and Technology 17,0%		
	Consumer Goods 15,2%		
	Services 36,1%		
	Financials 18,7%,		
	(total equities 99,1%)		
Largest holdings	British Telecom, Shell Transport & Trading,		
	BP Amoco Mannesmann, EMAP, Vodaphone		
	AirTouch		
Ownership structure	Diversified ownership structure		
Company managers	Self managed		
Statement of Total Return	£M		
Investment income:			
Listed	38,411		
Unlisted	0,278		
= Total investment income	38,689		
Other income	7,362		
=Total income	46,051		
Realised gains on investments	100,618		
Unrealised appreciation	56,375		
Expenses	-4,974		
Dividends (on preferred stock)	-0,097		
Tax and other	-6,997		
= Return attributable to equity	190,976		
stockholders	(return per ordinary stock unit 378,92 p)		

Amvescap Plc (UK)

Listing date	1997-03-03			
Listed where	LSE	LSE		
Year (31/12)	1998	1999	2000	
Net asset value	-	£436,661 M	£2103,080 M	
Share price	466,25 p (28/12)	720 p (27/12)	1399 p (1/1)	
Cash flow	-	£98,515 M	£40,179 M	
Dividends per share	8,0 p	9,0 p	10,0 p	
Earnings per share		27,1 p	40,5 p	

Funds under mgmt		£220600 M	£270200 M	
Market capitalisation	£6662 M			
Other activities	Amvescap has five operating groups:			
	Managed products group			
	AIM Manag	ement Group		
	INVESCO Funds Group			
	AIM Funds Management Inc			
	INVESCO Institutional			
	INVESCO Global			
	INVESCO Retirement			
	Private Wealth Management			
Statement of Income	£M			
Revenues		1628,662		
Operating expenses	-1091,555			
Goodwill amortisation	-56,417			
= Operating profit	480,690			
Taxes and other	-192,160			
= Profit for financial year	288,530			

Berkshire Hathaway Inc. (US)

Listing date	1988-11-29	1988-11-29			
Listed where	NYSE	NYSE			
Year (31/12)	1998	1998 1999 2000			
Net asset value ⁸	57 403 M	57 761 M	61 724 M		
Share Price	70 000	70 000 56 100 71 000			
Cash flow	\$14489 M	\$4458 M	\$5604 M		
Dividends per share	Has not declare	Has not declared cash dividends since 1967.			
Earnings per share	\$2262	\$1025	\$2185		
Market capitalisation	\$99591 M	\$99591 M			
List/unlisted holdings	Equity: 37 619, B	Equity: 37 619, Bonds: 32 567,			
	Other: 1 637	Other: 1 637			
Other activities	Insurance Group	Insurance Group			
	Manufacturing, re	Manufacturing, retailing and services business			

⁸ Shareholders' equity

_

	Finance and financial products business
	Non-operating activities
Statement of Earnings	\$M
Insurance premiums earned	19343
Sales & service revenues	7331
Realised investment gain	3955
Other	3347
=Total revenues	33976
Expenses	-28389
Tax & minority interest	-2259
= Net earnings	3328

Bure Equity AB (Sweden)

Listed where	SSE (A-list)		
Year	1998	1999	2000
Net asset value	-	SEK 7092 M	SEK 7515 M
Net asset value per share	SEK 43,50	SEK 65	SEK 69
Share price	SEK 57,50	SEK 58	SEK 51,50
Premium (+) / discount (-)	32,2%	-10,8%	-25,4%
Cash flow	-	SEK 203,8 M	SEK 392,5 M
Yield	5,0%	47,4%	36,6%
Dividends per share	SEK 2,88	SEK 27,51	SEK 18,83
Earnings per share (parent company)	SEK 5,37	SEK 4,69	SEK 16,19
Market capitalisation	SEK 5619 M		
Listed/unlisted holdings	28% of book value are listed.		
	31% of book value are unlisted.		
	External valued holdings are 34%.		
	Bure Finans 25%.		
Market/industry for the holdings	Media & Information 35%		
	IT Solutions 1	8%	
	Bure Finans 15%		
	Venturefunds 14%		
Largest holdings	Observer,	Dimension, C	ygate, Mercuri,
	International Group, Citat		
Ownership structure	Foreign owners 34%		

	Swedish owners 66%	
	(Private persons 18%, Institutions 38%	
	Stockfunds 10%)	
Company managers	Self managed	
Benchmark	Affärsvärldens Investment & Förvaltningsbolags-	
	index, Affärsvärldens Generalindex	
Income Statement	M SEK	
Revenues:		
Invoiced sales	7478	
Other	75,4	
= Total net sales	7553,4	
Exits	2947,9	
Other	120,6	
= Net operating income	10621,9	
Operating expenses	-8109,0	
= Operating profit	2512,9	
Financial income	212,5	
Financial expenses	-175,5	
= Net financial income and expenses	2549,9	
Tax and other	-549,6	
= Net profit of the year	2000,3	

$\pmb{Caledonia\ Investments\ Plc\ (UK)}$

Listing date	1960-07-18			
Listed where	LSE			
Year (31/3)	1998	1999	2000	2001
Net asset value			£764,3 M	£855 M
Net asset value per share	946 p	951p	960 p	1082 p
Share price	-	-	727,5 p (29/3)	770,5 p (27/3)
Premium (+) / discount (-)	-	-	-24,2%	-28,8%
Cash flow	-	£1,2 M	£-4,9 M	£7,5 M
Dividends per share	20,5 p	22,0 p	23 p	24 p
EPS (diluted)	-	79,2 p	46,0 p	53,1 p
Market capitalisation	£555M			
Listed/unlisted holdings	Investments in associates: 405,3M, 47% of net			

	asset value		
	Listed: 245,6M, 29% of net asset value		
	Unlisted: 143,5M, 17% of net asset value		
Market/industry for the holdings	% of net asset value:		
	Financial 34%		
	Investment Funds 22%		
	Industrial and Services 14%		
	Leisure and Media 14%		
	Property and General 13%		
	Technology 3%		
Ownership structure	Cayzer family are the biggest owners with 34,5%.		
Profit and Loss	£M		
Group turnover	135,2		
Trading profit	9,7		
Income from investments	12,6		
Other	-7,6		
= Group operating profit	14,7		
Share of operating profit of			
associates	40,1		
Amortisation of goodwill	-1,3		
= Total operating profit	53,5		
Taxes and other	-11,6		
= Profit on ordinary activities	41,9		
•			

Candover Investment Plc (UK)

Listing date	1984-12-12		
Listed where	LSE		
Year (31/12)	1998	1999	2000
Net assets	£199,474 M	£225,040 M	£246,060 M
Net asset per share	877 p	986 p	1079 p
Share price	803,5 p (28/12)	1089,5 p (27/12)	1035,0 p
Premium (+) / discount (-)	-8,4%	10,5%	-4,1%
Cash flow	-	£-3,129 M	£1,555 M
Dividends per share	25 p	27 p	29 p

Earnings per share (diluted)	37,30 p	33,62 p	33,37 p	
Market capitalisation	£206 M			
Listed/unlisted holdings	Listed: 29 537M, 12% of net asset value,			
	15,6% of invested	l capital.		
	Unlisted: 139 425	M, 57% of net ass	et value,	
	74,4% of invested	l capital.		
Market/industry for the holdings	Media, Manufact	uring & Engineer	ing, Financial	
	Services, Chemicals, Support Services,			
	Consumer, IT	Consumer, IT		
Largest holdings	% of net assets:			
	Crown Castle Inte	ernational Corpora	tion 6,8%	
	Regional Indepen	dent Media 3,7%		
	Padrol Limited / A	Airtechnology 3,79	6	
	Baxi Holdings Li	mited 3,5%		
	BTG Plc 3,3%			
Ownership structure	% of issued share cap:			
	Schroder Investm	Schroder Investment Management Ltd 10,5%		
	M&G Investment	Management Ltd	6,7%	
	BP Pension Trust			
	Royal Life Insura	-		
Benchmark	FTSE All-Share I	ndex (used by the	company)	
Statement of Total Return		£M		
Gain/losses on investments:				
Realised	2,964			
Unrealised	20,662			
= Net gain on investments	23,626			
Income managed funds	0,026			
Management fees	11,735			
Income own funds	9,144			
Expenses	-13,966			
Taxes	-2,596			
Other	-0,004			
=Return on ordinary activities after	27,965			
taxation	(diluted return	per ordinary share	e 121,83 p)	

Custos AB

Listed where	SSE (O-list)		
Year	1998	1999	2000
Net asset value	-	SEK 7896 M	SEK 4981 M
Net asset value per share	-	SEK 276	SEK 776
Share price	-	SEK 206,50	SEK 257
Premium (+) / discount (-)	-	-25,18%	-66,88%
Cash flow (for going concern)	-	SEK –2059M	SEK –108,8M
Yield	-	5,6%	-
Dividends per share	-	SEK 11,50	SEK 16,50
Market capitalisation	SEK 4309 M		
Listed/unlisted holdings	82% listed ho	oldings. 7% unliste	ed holdings. (9%
	liquid resource	es, 2% other assets))
Market/industry for the holdings	Biotechnology	y 34%	
	Chemistry 199	%	
	Engineering in	ndustry 16%	
	Logistics 10%		
Largest holdings	Perbio Science, Perstorp A, Perstorp B, Svedala,		
	Christian Salv	esen, SCA A, SCA	B, Bilia,
	C. Tybring-Gj	edde	
Ownership structure	Institutions 56%, Foreign Owners 24%		
Income Statement		M SEK	
Share in associated companies' result			
Exits associated companies		8,5	
Other		552,7	
= Profit/loss for securities			
management:	1048,4		
Revenues/expenses from other			
operations	1,3		
= Gross profit/loss	1049,7		
Administrative expenses and other	-99,8		
= Operating profit/loss	949,9		
Financial income/expenses	27,5		
Taxes		-144,1	
= Net profit for the year	833,3		

Duff & Phelps Utilities Income Inc. (US)

Listing date	1987-01-21		
Listed where	NYSE		
Year (31/12)	1998	1999	2000
Net asset value	\$2631,692 M	\$2328,128 M	\$2716,014 M
Net asset value per share	\$10,36	\$8,77	\$10,51
Share price	\$11,25	\$8,31	\$10,50
Premium (+) / discount (-)	8,6%	-5,2%	-0,01
Cash flow	-	-	\$72,61M ⁹
Market capitalisation	\$2334M		
Market/industry for the listing	Common stocks:	73,3%:	
	(Electric 39,5%	, Telecommunic	cation 13,9%,
	Non-utility 10,39	%, Gas 9,6%)	
	Preferred stocks	8,0%,	
	Bonds: 20,9%		
Largest holdings	% of Equity Investments:		
	SBC Communications Inc 5,1% Southern Company 4,2%		
	Verizon Communications 4,2%		
	BellSouth Corp. 3,6%		
	FPL Group Inc 3,5%		
Company owned by anyone	The fund has engaged Duff & Phelps Investment		
	Management Co. to provide professional		
	investment management services for the fund and		
	has engaged J .J	. Hilliard, W. L.	Lyons, Inc. to
	provide administ	trative and manag	gement services
	for the fund.		
Source of income		\$M	
Investment income:			
Dividends (less withholding tax of	84,017		
\$524)			
Interest		25,287	
Securities lending inc		0,663	
=	109,967		
Expenses	17,373		

_

⁹ http://www.duffutility.com/Annual/fin.htm

Net investment income	92,594
Realised gain	23,817
Unrealised appreciation	-169,542
=Net increase/decrease in net asset	-53,131
from operations	

Edinburgh Investment Trust Plc (UK)

Listing date	1952-02-08		
Listed where	LSE		
Year	1999	2000	2001
Net asset value	£1642,6 M	£1636,9 M	£1373,3 M
Net asset value per share	557 p	618,29 p	540,96 p
Share Price	464,5 p	475,50 p	534,50 p
Premium (+) / discount (-)	-16,6%	-23,1%	-1,19%
Cash flow	-	£11,283 M	£-9,353 M
Dividends per share	11,85 p	12,45 p	12,15 p
Earnings per share	11,7 p	9,15 p	12,10 p
Market capitalisation	£949M		
Listed/unlisted holdings	Listed: 1530M, 111% of net asset value, 99,9% of		
	invested capital		
	Unlisted: 0,9M, 0,1% of net asset value, 0,1% of		
	invested capital		
Market/industry for the holdings	Financials 27% (of total equity)		
	Non-cyclical consumer goods 17%		
	Cyclical services 16%, Resources 15%		
	Non-cyclical services 13%		
	Others 12%		
Largest holdings	BP Amoco, Shell	Transport&Tradi	ng, Vodafone,
	GlaxoSmithKline,	HSBC Holdings,	Astrazeneca
Ownership structure	Individuals 45,7%		
	Insurance & Assurance companies 31,0%		
	Pension funds 15,8%		
Company managers	Edinburgh Fund M	lanagers Plc	
Benchmark	FTSE All-Share Index		
Statement of Total Return		£M	

Realised gains on investments	183,567
Decrease in unrealised appreciation	-373,754
= Total capital losses on investments	-190,187
Management fees	-6,246
Dividends	38,454
Other	1,101
= Net return before finance costs and	
taxation	-156,878
Interest payables and taxes	-19,502
Return attributable to equity	-176,380
shareholders	(return per ordinary share 68,74 p)

Electra Investment Trust

Listing date	1976-02-18		
Listed where	LSE		
Year (30/9)	1998	1999	2000
Net asset value	£1145,319M	£987,460M	£874,042M
Net asset value per share			
(fully diluted & adjusted)	676,15 p	950,77 p	1084,96 p
Share Price	492,5 p (28/9)	833 p (27/9)	1020 p (2/10)
Premium/discount	-27,2%	-12,4%	-6,0%
Cash flow	-	£-86,247 M	£79,810 M
Dividends per share	11,175 p	0	0
EPS (basic)	16,030 p	-4,040 p	-19,847 p
Market capitalisation	£397M		
Listed/unlisted holdings	Listed: 5 0163 M, 6% of net asset value,		
	5% of invested ca	apital	
	Unlisted: 965 917M, 111% of net asset value,		
	95% of invested capital		
Market/industry for the holdings	Cyclical Services 26,22% (of portfolio)		
	Financials 21,82%		
	Non-Cyclical Consumer Groups 16,36%		6,36%
	Basic industry 8,88%		
	Cyclical consumer groups 7,35%		
	Others 19,37%		

Largest holdings	Moser Baer, Amtico, Swifty Service, Vendcrown,	
	Capital Safety Group	
Ownership structure	The Equitable Life Assurance Society and its	
	wholly owned subsidiaries the University Life	
	Assurance Society and Equitable Investment	
	Fund Managers Ltd 7,11% of ordinary shares	
	CGNU Plc 3,81%	
Company managers	Electra Partners	
Benchmark	FTSE All-Share Index	
Statement of Total Return	£M	
Gain/losses on investments:		
Realised	168,832	
Unrealised	-2,188	
Other	-9,848	
= Net gain on investments	156,796	
Income of investment trust	23,223	
Income of subsidiary undertakings	4,424	
=	184,443	
Expenses:	-33,589	
Management fees	-3,946	
Finance cost	-13,522	
Other	-19,830	
= Net transfer from/to reserves for	147,145	
the year	(return to ordinary share holders 140,03 p)	

Franklin Resources

Listing date	1986-05-12		
Listed where	NYSE		
Year (30/9)	1998	1999	2000
Share price	\$29,87	\$30,56	\$44,43
Assets under management	\$208600 M	\$218100 M	\$229900 M
Cash flow	\$113,302 M	\$263,201 M	\$-73,239 M
Dividends per share	\$0,20	\$0,22	\$0,24
Earnings per share	\$1,98	\$1,69	\$2,28
Market capitalisation	\$8836 M	•	•

Assets under management	% of total assets under management:	
	Equity 65,9%	
	Fixed-income 27,8%	
	Hybrid funds 4%	
	Money funds 2,3%	
Statement of Income	\$M	
Investment management fees	1399,121	
Underwriting and distribution fees	709,285	
Other	231,734	
=Total operating revenues	2340,140	
Operating expenses	-1676,697	
= Operating income	663,443	
Taxes on income	-101,354	
= Net income	562,089	

Industrivärden AB

Listed where	SSE (A-list)			
Year	1998	1999	2000	
Net asset value	SEK 30597 M	SEK 57027 M	SEK 54081 M	
Net asset value per share	SEK 160	SEK 298	SEK 283	
Share price	SEK 102	SEK 177	SEK 193	
Premium (+) / discount (-)	-36,3%	-40,6%	-31,8%	
Cash flow (for going concern)	-	SEK –35M	SEK –684 M	
Yield	4,1%	3,4%	4,1%	
Dividends per share	SEK 4,50	SEK 6,20	SEK 8,40	
Market capitalisation	SEK 23018 M	SEK 23018 M		
Listed/unlisted holdings	93% of total ass	93% of total assets are listed.		
	0,5% unlisted.	(Biodisk, DJH	Media, Ericsson	
	Venture Partner	rs, Establish)		
	(unlisted: mainl	y biotechnology a	and IT).	
Largest holdings	Ericsson 37,39	% (share of m	narket portfolio)	
	Handelsbanken	14,5%		
	Skanska 13,4%			
	Sandvik 9,5%			
Benchmark	Affärsvärldens	Generalindex		

Other activities	Industry & Trading operations 6,5% of total
	assets. 3 subsidiaries.
Income Statement	M SEK
Operating profit	418
Dividends from listed companies	821
Exits from listed companies	456
Exits of other shares	-90
Financial income and expense and	
other	-433
Taxes	-145
= Profit of the year	1027

Investor AB

Listing date	1919		
Listed where	SSE (A-list)		
Year	1998	1999	2000
Net asset value	SEK 93502	SEK 153,259 M	SEK 149115 M
	M		
NAV per share	SEK 117	SEK 191	SEK 186
Share Price (B-share)	SEK 92	SEK 120	SEK 141
Premium/discount	-21,4%	-37,2%	-24,2%
Cash flow		SEK 884 M	SEK 4697 M
(for going concern)			
Yield	3,0%	2,80%	3,90%
Dividends per share	SEK 2,75	SEK 3,40	SEK 5,50
Market capitalisation	SEK 75950 M		
List/unlisted holdings	91% listed holdings		
	9% unlisted holdings		
Market/industry for the holdings	Healthcare 32%		
	Technology 2	4%	
	Engineering a	and manufacturing	industry 22%
	Financial services 5%		
	Other 10%		
Largest holdings	Astrazeneca,	Ericsson, ABB, S	SEB, Stora Enso,
	Atlas Copco	o, Gambro, Sc	ania, VM-data,

	Electrolux	
Ownership structure	Foundations and Trusts 53%	
	Foreign owners 19%	
	Private persons 12%	
	Insurance companies 8%	
	Unit trusts 2%	
	Others 6%	
Company managers	The Wallenberg Family controls the company	
Other activities	Securities trade, Grand Hotel Holdings, Land &	
	Real Estate (tot sek 2,590 M), (tot: 2%)	
Income Statement	MSEK	
The aquisition cost	method is used in our matrix.	
Key holdings:		
Dividends	2090	
Capital gains	10202	
New investments:		
Dividends	632	
Capital gains	1216	
Securities trade & Other	754	
Operating expenses	-740	
= Operating profit	14154	
Financial income and expense	-676	
Taxes	-19	
= Net profit for the year	13459	

Latour (Sweden)

Listed where	SSE (O-list)		
Year	1998	1999	2000
Net asset value		SEK 10232 M	SEK 11811 M
Net asset value per share	SEK 165	SEK 197	SEK 237
Share Price	SEK 118	SEK 130	SEK 161
Premium/Discount	-28,5%	-34%	-32,1%
P/E-ratio	15	17	9
Cash flow (for going concern)		SEK 85 M	SEK –82M
Yield	2,3%	12,7%	3,1%

		T		
Dividends per share	SEK 2,90	SEK 3,50	SEK 4,90	
Earnings per share	SEK 7,80	SEK 7,60	SEK 18,20	
Market capitalisation	SEK 7540 M			
Largest holdings	Securitas B,	Assa Abloy B, Hol	lmen B, Getinge	
	Industrier B			
Ownership structure	Family and C	Co. Douglas 63%		
	Institutions 1	5%		
	Board Memb	ers 6%		
	Others 16%			
Other activities	Subsidiaries:	Textile, Worksho	p practice, Air	
	treatment.			
Income Statement		M SEK		
Net turnover		3840		
Cost of sold goods	-2957			
Other	-543			
= Income from operations	340			
Interest income/costs and other	689			
Taxes and other	-91			
= Profit for the year	938			
	•			

Liberty All-Star Equity Fund (US)

Listed where	NYSE		
Year (31/12)	1998	1999	2000
Net asset value per share	\$14,22	\$14,02	\$13,61
Share price	\$12,938	\$11,063	\$12,375
Premium (+) / discount (-)	-9,0%	-21,1%	-9,1%
Dividends per share	\$1,40	\$1,39	\$1,42
List/unlisted holdings	Common stocks 97,4%		
Market/industry for the holdings	% of common stocks:		
	Banks 6,1%		
	Drugs & Health C	Care 13,7%	
	Electronics & Electrical Equipment 7,9%		
	Financial Services 11,8%		
	Insurance 9,2%		
	Oil & Gas 6,8%		

	Retail Trade 5,9%	
Largest holdings	Percent of net assets:	
	Citigroup Inc 3,0%	
	Emerson Electric Co 1,9%	
	Countrywide Credit Industries Inc 1,7%	
	The Progressive Corp. 1,7%	
	Pharmacia Corp. 1,7%	
Company managers	Liberty Asset Management Company	
Statement of Operations	\$M	
Investment income:		
Dividends	16,137964	
Interest	2,414223	
=Total investment income	18,552187	
Expenses:		
Management fees	-9,804500	
Other	-3,619265	
=Net investment income	5,128422	
Net realised gains on investment		
transactions	167,110714	
Change in unrealised appreciation-		
net	-70,161986	
=Net increase in net assets resulting		
from operations	102,077150	

Ratos AB (Sweden)

Listed where	SSE (Attract 40)	SSE (Attract 40)			
Year	1998	1999	2000		
Net asset value per share	-	SEK 113	SEK 125		
Share price	-	SEK 72	SEK 79		
Premium (+) / discount (-)	-	-36,3%	-36,8%		
P/E-ratio	5,8	3,4	3,3		
Cash flow (for going concern)	-	SEK 191 M	SEK -168M		
Yield	6,1%	6,3%	7,0%		
Dividends per share	SEK 3,50	SEK 4,50	SEK 5,50		
Earnings per share	SEK 9,78	SEK 20,95	SEK 23,91		

Market capitalisation	SEK 6856 M		
Market/industry for listing	Diversified		
Largest holdings	Active holdings: Camfil, Capona, Dahl, DataVis,		
	Esselte, Exceed, Q-labs		
Ownership structure	% of capital:		
	Swedish institutions 45%		
	Private persons 42%		
	Foreign owners 8%		
	Stock funds 5%		
Benchmark used by the company	Trend in market prices & turnover:		
	Affärsvärldens Generalindex		
	Total return: SIX Return Index		
Income Statement	M SEK		
Active holdings:			
Result from subsidiaries and	320		
associated companies			
Exits	726		
= Profit/loss from active holdings	1046		
Asset management:			
Dividends	103		
Exits	905		
= Profit/loss after active holdings and			
asset management	2054		
Common revenues and costs	-77		
Taxes	-56		
= Net profit for the year	1921		

Schroders Plc (UK)

Listing date	1959-09-30			
Listed where	LSE			
Year (31/12)	1998	1999	2000	
Net asset value	£1170,5 M	£1370,4 M	£1161,2 M	
Net asset value per share	397 p	464 p	391 p	
Share Price	1097 p (28/12)	1246 p (27/12)	1403 p (1/1)	
Premium/Discount	176,32%	168,53%	258,82%	

Cash flow	-	£ -392,4 M	£305,4 M	
Dividends per share	16,6 p	18,5 p	18,5 p	
EPS (diluted)	56,9 p	82,5 p	74,2 p	
Market capitalisation	£1652M			
Funds under management	% of funds under management by asset type:			
	Equities 77%			
	Fixed income 18%			
	Alternative investments 5%			
Market/industry for the holdings	% of funds under management:			
	Institutional 87%			
	Retail 8% Private banking 5%			
	Equities 77%			
	Fixed Income 18%			
	Alternative Investments 5%			
Ownership structure	Vincitas Ltd 20,47%, Veritas Ltd 13,17%			
	One-Forty-Five Ltd 6,08%, Englehall Ltd 4,59%			
Other activities	Asset Management £ 402M, 35% of shareholders' funds			
	Private Equity, £ 124,4M, 11%			
Profit/loss Account	Group costs and interests, £ 593M, 51% £M			
Interest receivables	318,1			
Fees and commission receivables	785,5			
Net dealing income	47,1			
Other operating income	89,6			
=Revenues	1240,3			
Interest payables	-218,6			
Fees & commission payables	-82,5			
= Operating income	939,2			
Other expenses	-717,9			
= Profit attributable to shareholders	221,37			

SEI Investments Company (US)

Listed where	NASDAQ				
Year (31/12)	1998	1998 1999 2000			
Share Price	\$99,38	\$110,01	\$112		
Cash flow	\$36,089 M	\$20,226 M	\$86,370 M		
Dividends per share	\$0,05	\$0,03	\$0,07		
EPS (diluted)	\$0,38	\$0,60	\$0,87		
Market capitalisation	\$3796 M	•	•		
Largest holdings	Very diversifi	ed			
Benchmark used by the company	S&P 500				
	NASDAQ Co	omposite			
Other activities	Technology S	Technology Service 49% (of profit), 37% (of revenue)			
	37% (of rever				
	Asset Manage	Asset Management 44% (of profit),			
	36% (of rever	36% (of revenue)			
	Mutual Fund Service 17% (of profit),				
	21% (of revenue) New Business (-15,5%loss) (of profit),				
	6% (of revenu	ie)			
Statement of Operations		\$M			
Revenues:					
Technology services		222,246			
Asset Management	215,336				
Mutual Fund Services		126,885			
Investment in new business	34,339				
= Total Revenues	598,806				
Operating expenses	-450,847				
= Income from operations	147,959				
Interest, taxes and other	-48,996				
= Net income	98,963				

Stilwell Financial Inc. (US)

Listing date	2000-06-16		
Listed where	NYSE		
Year (31/12)	1998	1999	2000
Net asset value ¹⁰	-	\$814,6 M	\$1057,8 M
Share price	-	-	39,4375
Cash flow	\$28,8 M	\$185,6 M	\$40,2 M
Weighted average diluted common			
shares outstanding (000)	223 M	223 M	222,445 M
Assets under mgmt	\$113100 M	\$257400 M	\$257800 M
(Total Janus AUM)	\$108300 M	\$249500 M	\$248800 M
Earnings per share	\$0,67	\$1,38	\$2,90
Market capitalisation	\$5092 M		
Other activities	3 business units:		
	Janus, Berger, Nelson, 33% in DJT		
Income Statement	\$M		
Revenues:			
Janus	2157,1		
Berger	69,9		
Other	21,1		
= Total revenues	2248,1		
Expenses	-1211,8		
= Operating income	1036,3		
Other	-372,6		
= Net income	663,7		

Svolder AB (Sweden)

Listing date	1993-06-30		
Listed where	SSE (O-list)		
Year	1998	1999	2000
Net asset value	SEK 922,8 M	SEK 948,4 M	SEK 1345,1 M
Net asset value per share	SEK 144,20	SEK 148,20	SEK 210,20

¹⁰ Total stockholders' equity

_

Cash flow (for going concern) Yield 6,7% 6,5% Dividends per share Earnings per share Earnings per share SEK 8,50 Market capitalisation Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests	Share price			B/S-date 170	
Yield 6,7% 6,5% Dividends per share SEK 8,50 SEK 11 Earnings per share SEK 685 M Market capitalisation SEK 685 M Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings W of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Premium (+) / discount (-)	+1%	-15%	-19%	
Dividends per share Earnings per share Market capitalisation Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings We of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Frontec, Haldex, TurniT, Nolato, Gunnebo, JM Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Income Statement M SEK Dividends Za,080 Exit 411,255 Other 0,237 Net securities management 439,572 Management -9,583 Interests 2,463	Cash flow (for going concern)		SEK 4,639 M	SEK 79,304 M	
Earnings per share Market capitalisation Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests	Yield		6,7%	6,5%	
Market capitalisation Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Dividends per share		SEK 8,50	SEK 11	
Listed/unlisted holdings Maximum 10% of Svolder's net asset value can be invested in unlisted companies Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Earnings per share		SEK 5,90	SEK 67,60	
be invested in unlisted companies Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Frontec, Haldex, TurnlT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Market capitalisation	SEK 685 M			
Market/industry for the holdings % of net asset value: Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Income Statement M SEK Dividends Exit 411,255 Other 9,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Listed/unlisted holdings	Maximum 10%	of Svolder's net	t asset value can	
Engineering industry 26% IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management 1-9,583 Interests 2,463		be invested in un	nlisted companies	s	
IT-companies 22,7% Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management 1-9,583 Interests 2,463	Market/industry for the holdings	% of net asset va	alue:		
Other 29,5% Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management 1-9,583 Interests 2,463		Engineering indu	ustry 26%		
Commerce 12% Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463		IT-companies 22,7%			
Real Estate & Buildings 10,8% Largest holdings Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM Ownership structure Swedish owners (many institutions) 42,9% (of capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management 1-9,583 Interests 2,463		Other 29,5%			
Largest holdingsFrontec, Haldex, TurnIT, Nolato, Gunnebo, JMOwnership structureSwedish owners (many institutions) 42,9% (of capital)Foreign owners and trustees 0,7% Others (mostly private persons) 56,3%BenchmarkCarnegie Small Cap IndexIncome StatementM SEKDividends28,080Exit411,255Other0,237= Net securities management439,572Management-9,583Interests2,463		Commerce 12%	Commerce 12%		
Ownership structureSwedish owners (many institutions) 42,9% (of capital)Foreign owners and trustees 0,7%Others (mostly private persons) 56,3%BenchmarkCarnegie Small Cap IndexIncome StatementM SEKDividends28,080Exit411,255Other0,237= Net securities management439,572Management-9,583Interests2,463		Real Estate & Buildings 10,8%			
capital) Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Largest holdings	Frontec, Haldex, TurnIT, Nolato, Gunnebo, JM			
Foreign owners and trustees 0,7% Others (mostly private persons) 56,3% Benchmark	Ownership structure	Swedish owners (many institutions) 42,9% (of			
Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463		capital)			
Benchmark Carnegie Small Cap Index Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463		Foreign owners and trustees 0,7%			
Income Statement M SEK Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463		Others (mostly private persons) 56,3%			
Dividends 28,080 Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Benchmark	Carnegie Small	Cap Index		
Exit 411,255 Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Income Statement	M SEK			
Other 0,237 = Net securities management 439,572 Management -9,583 Interests 2,463	Dividends	28,080			
= Net securities management 439,572 Management -9,583 Interests 2,463	Exit	411,255			
Management -9,583 Interests 2,463	Other	0,237			
Interests 2,463	= Net securities management	439,572			
, ,	Management	-9,583			
= Profit for the year 432,452	Interests	2,463			
	= Profit for the year	432,452			

The Gabelli Equity Trust Inc. (US)

Listed where	NYSE		
Year	1998	1999	2000
Net asset value ¹¹	\$1217,190 M	\$1368,981 M	\$1184,041 M
Net asset value per share	\$11,47	\$12,75	\$10,89
Share price	\$11,56	\$12,56	\$11,44
Premium (+) / discount (-)	0,1%	-1,5%	5,1%
Dividends per share	Distribution poli	cy: 10% of its av	erage net assets
	each year.		
Market capitalisation	\$845 M		
List/unlisted holdings	Stocks 99,5% of	asset allocation.	
	Other 0,5%		
Market/industry for holdings	Services 47,6%		
	Industrial 18%		
	Financials 9,3%		
Largest holdings	Very diversified		
Statement of Operations	\$M		
Investment income:			
Dividends	15,789185		
Interest	4,426192		
=Total investment income	20,215377		
Expenses	-14,813783		
Other	0,051753		
= Net investment income	5,453347		
Net realised gain on investments	139,784787		
Net change in unrealised			
appreciation on investments and	-193,936839		
other			
= Net decrease in net assets resulting			
from operations		-48,698705	

.

¹¹ Net assets attributable to common shares, end of period.

$\textbf{Tri-Continental Corporation} \ (US)$

Listing date	1930-04-10		
Listed where	NYSE		
Year	1998	1999	2000
Net asset value (for common stock)	\$4003 M	\$4110 M	\$3458 M
Net asset value per share	\$34,13	\$32,82	\$25,87
Share Price	\$28,50	\$27,875	\$21,1875
Premium/Discount	-16,5%	-15,1%	-18,1%
Dividends per share	-	-	\$0,33
Market capitalisation	\$2546 M		ı
List/unlisted holdings	% of net assets:		
-	Stock 89%		
	Foreign 9,7%		
	Cash 10,3%		
Market/industry for the holdings	Technology 26,1	% of stocks	
	Health 15,1%		
	Financials 15,6%		
	Services 11,6%		
	Industrials 11,8%		
Largest holdings	Very diversified		
Company managers	J. & W. Seligman & Co.		
Statement of Operations	\$M		
Investment income:			
Dividends	48,984501		
Interests	15,413797		
= Total Investment Income	64,398298		
Expenses:			
Management fees	-15,398779		
Other	-5,748768		
= Net investment income	43,250751		
Net realised gain on investments	352,066264		
Net change in unrealised			
appreciation on investments	-777,024822		
= Decrease in net investment assets			
from operations	-381,707807		

Witan Investment Trust (UK)

Listing date	1950-10-27			
Listed where	LSE			
Year	1998	1999	2000	
Net asset value		£ 2085,465 M	£ 1836,684 M	
Net asset value per share	423,9 p	560,7 p	521,5 p	
Share price	367,0 p	477,5 p	478,0 p	
Premium (+) / Discount (-)	-13,4%	-14,8%	-8,3%	
Cash flow		£ -10,471 M	£ 41,068 M	
Dividends per share	7,40 p	7,60 p	7,75 p	
Earnings per share	8,06 p	7,54 p	7,46 p	
Market capitalisation	£1270 M	•		
Listed/unlisted holdings	Listed: 1 892,8	3M, 103% of net as	sset value	
	98% of investe	ed capital		
	Unlisted: 30,21	M, 2% of net asset	value	
	2% of invested	d capital		
Market/industry for the holdings	% of investments:			
	Non-cyclical c	onsumer products	15,4%	
	Cyclical services 15,7%			
	Non-cyclical services 11,3%			
	Financials 25,6%			
Company managers	Henderson Global Investors Ltd			
Statement of Total Return	£M			
Total capital gains/losses from	-153,837			
investments				
Income from fixed asset investments	37,827			
Other income	1,965			
= Gross revenues and capital				
gains/losses	-114,045			
Management fee	-3,913			
Other administrative expenses	-2,460			
Interests payable	-5,311			
Taxes	-0,963			
Dividends (preferred shares)	-0,083			
Available for ordinary shares	-126,775			
	(loss per ordinary share 34,97 p)			

Öresund AB (Sweden)

Listed where	SSE (O-list)			
Year	1998 1999 2000			
Net asset value per share	SEK 232,03	SEK 335,05	SEK 331,27	
Share price	SEK 196	SEK 250	SEK 276	
Premium (+) / discount (-)	-15,5%	-25,4%	-16,7%	
Cash flow (for going concern)	-	SEK 90,225	SEK -89,571	
		M	M	
Yield	7,5%	6,6%	7,8%	
Dividends per share	SEK 14,75	SEK 16,50	SEK 21,50	
Market capitalisation	SEK 2580 M	-		
Listed/unlisted holdings	95,1% of marke	t value (for the	whole concern)	
	listed holdings.			
	4,9% of market	valued unlisted h	oldings.	
Market/industry for the holdings	Engineering industry 13,7%			
	Investment and I	Investment and Holding companies 52,2 %		
Largest holdings	Custos, Sapa, Hagströmmer & Qviberg, Custos			
	inlösenrätter, PyroSequencing			
Benchmark used by the company	SIX Return Index			
Other activities	VenCap AB (trac	des with securitie	es)	
Income Statement		M SEK		
Management costs	1652,015			
Other operations		-271,820		
Administration costs	-20,915			
= Operating results	1359,280			
Financial income and expenses	9,062			
=Result after financial income and				
expense	1368,342			
Taxes	-0,133			
Minority interest of profit for the				
year	-17,114			
= Net profit for the year	1351,095			

Reference List

Books

- ♦ Brealy, R.A, and Myers, S.C., (2000), 'Principle of Corporate Finance", Mcgraw-Hill, North America
- ◆ Copeland, T., Koller, T., and Murrin, J., (1996), "Valuation: Measuring and Managing the Value of Companies, Second Edition", John Wiley & Sons, Inc., United States of America
- ◆ Ericsson, L.T., and Wiedersheim-Paul, F., (1997), "Att utreda, forska och rapportera", Stockholm: Liber ekonomi
- ◆ **Gitman**, L.J., and Joehnk, M.D., (1999), "Fundamentals of Investing", 7th Edition, Addison-Wessley
- ♦ **Holme**, I., and Solvang, B., (1997) "Forskningsmetodik: om kvalitativa och kvantitativa metoder" Lund: Studentlitteratur
- ♦ Lundahl, U., and Skärvad, P-H., (1992), "Utredningsmetodik för samhällsvetare och ekonomer", Lund: Studentlitteratur
- ♦ Myrberg, U., (1987) "Blandade Investmentbolag", Stellan Stål tryck
- ◆ **Patel**, R., and Davidson, B., (1994) "Forskningsmetodikens grunder: Att planera, genomföra och rapportera en undersökning", Lund: Studentlitteratur

Journals

- ♦ **Brauer**, G.A.., (1984), "Open-Ending Closed-End Funds", Journal of Financial Economics 13, 491-507
- ♦ Brickley, J.A., and Schallheim, S., (1985), "Lifting the Lid on Closed-End Investment Companies: A Case of Abnormal Returns", Journal of Financial and Quantitative Analysis 20, 107-118
- ◆ **De Long**, B.J., and Shleifer A., (1991), "The Stock-Market Bubble of 1929: Evidence from Closed-End Mutual Funds", Journal of Economic History 51, 675-700

- ◆ Lee, C.M.C., Shleifer A., and Thaler R.H., (1990), "Anomalies: Closed-End Mutual Funds", Journal of Economic Perspectives 4, 153-164
- ◆ Lee, C.M.C., Shleifer A., and Thaler R.H., (1991), "Investor Sentiment and the Closed-End Fund Puzzle", Journal of Finance 46, 75-109
- ♦ Malkiel, B.G., (1977), "The Valuation of Closed-End Investment-Company Shares", Journal of Finance 32, 847-859
- ♦ Miller M.H., and Modigliani F., (1961), "Dividend Policy, Growth and the Valuation of Shares", Journal of Business 34,
- ◆ **Pratt**, E.J., (1966), "Myths Associated with Closed-End Investment Company Discounts", Financial Analysts Journal
- ♦ Weiss, K., (1989), 'The Post-Offering Price Performance of Closed-End Funds', Financial Management, 57-67

Thesis

- ♦ Burgel, B., UK Venture Capital and Private Equity as an Asset Class for Institutional Investors: Highlights of the London Business School Report, www.bvca.co.uk
- ◆ Levin, J., (1998), 'Essays in Company Valuation', Stockholm School of Economics EFI, The Economic Research Institute, Printed by: Erlanders Gotab

Papers

- Barron's 2001-09-15
- ◆ Closed-end Fund Association Inc, "Understanding the Advantages of Closed-End Funds" (a pamphlet)
- ♦ Financial Times 2001-09-15
- ♦ Finans Tidningen 2001-11-20

Annual Reports

- ◆ 3i Group (UK) www.3i.com
- ◆ Aberdeen Asset Managers Plc (UK) www.aberdeen-assets.com
- ◆ Affiliated Managers Group (US) www.affiliatedmanagers.com/
- ◆ Alliance Capital Management (US) www.alliancecapital.com/
- ◆ Alliance Trust (UK) www.alliancetrusts.com
- ◆ Amvescap Plc (UK) www.amvescap.com
- Berkshire Hathaway Inc. (US) www.berkshirehathaway.com
- ◆ Bure Equity (Sw) www.bure.se
- ◆ Caledonia Investments Plc (UK) www.caledonia.com
- ◆ Candover Investment Plc (UK) www.candover.com
- ◆ Custos (Sw)
 www.custos.com
- ◆ Duff & Phelps Utilities Income Inc. (US) www.duffutility.com/
- ◆ Edinburgh Investment Trust Plc (UK) www.edfd.com/eit/index.html
- ◆ Electra Investment Trust (UK) www.electraeurope.com
- ◆ Industrivärden (Sw) www.industrivarden.se
- ♦ Investor (Sw)

www.investor.se

- ◆ Latour (Sw) www.latour.se/welcome/_sv_welcome.html
- ◆ Liberty All-Star Equity Fund (US) www.libertyallstar.com
- ♦ Ratos (Sw) www.ratos.se
- ◆ Schroders Plc (UK) www.schroders.com
- ◆ SEI Investments Company (US) www.seic.com
- ◆ Stilwell Financial Inc. (US) www.stilwellfinancial.com/index.html
- ◆ Svolder (Sw) www.svolder.se
- ◆ The Gabelli Equity Trust Inc. (US) www.gabelli.com/funds/products/-111.html
- ◆ Tri-Continental Corporation (US) www.tricontinental.com
- ◆ Witan Investment Trust (UK) www.witan.com
- ♦ Öresund (Sw) www.oresund.se

Analyst Reports

- ♦ **Brewington**, B., Kim M., 2001-11-04, Putnam Lovell, subject for the analysis: Stilwell Financial.
- ◆ Cummings, T., and Tam, H., 2001-06-12, Bear Stearns, subject for the analysis: Caledonia Investments
- ◆ Franklin, G., and Cunliffe, D., 2001-07-11, Morgan Stanley Dean Witter, subject for the analysis: Investor

- ♦ **Heckmann**, P., 2001-10-17, Stifel, Nicolaus & Company Incorporated, subject for the analysis: SEI Investments
- ◆ Katz, W., Kraushaar, J., Whittock, S., Nixon, A., Green, M., Costello, M., 2001-10-02, Merrill Lynch, subject for the analysis: Amvescap
- ◆ **Katz**, W.R., and Kraushaar, J.S., 2001-10-11, Merrill Lynch, subject for the analysis: Alliance Capital Management Holding L.P.
- ♦ **Kronqvist**, H., 2001-10-13, Handelsbanken Investment Banking, subject for the analysis: Öresund
- ♦ **Kronqvist**, H., 2001-10-19, Handelsbanken Investment Banking, subject for the analysis: Custos
- ♦ Lee, R., 2001-10-05, UBS Warburg, subject for the analysis: Stilwell Financial
- ♦ Mazzilli, P., and Duggan, J., 2001-06-25, Morgan Stanley Dean Witter, subject for the analysis: Duff & Phelps Utilities Income Fund
- ♦ Mazzilli, P., Kittsley, D., and Wang, L., 2001-07-05, Morgan Stanley Dean Witter, subject for the analysis: Tri-Continental Corporation
- ♦ McNally, K., and Emanuel, D., 2001-07-26, Salomon Smith Barney, subject for the analysis: Liberty All-Star Equity Fund
- ◆ McNally, K., and Emanuel, D., 2001-07-26, Salomon Smith Barney, subject for the analysis: The Gabelli Equity Trust
- ◆ McVey, H., Patrick, S., 2001-09-28, Morgan Stanley, subject for the analysis: Franklin Resources
- ♦ Ouimet, P.E., and Kim, M.S., 2001-09-26, Putnam Lovell, subject for the analysis: Affiliated Managers Group Inc.
- ◆ **Prestopino**, G., 2001-10-07, Barrington Research Associates, subject for the analysis: SEI Investments Company
- ◆ Russell, N., 2001-05-21, Charterhouse Securities, subject for the analysis: 3i
- ♦ Steenis, H., 2001-10-12, J.P. Morgan, subject for the analysis: Amvescap
- ◆ **Tyce,** J., Hutson, J., Staite, R., 2001-09-03, Equity Research, subject for the analysis: Schroders

♦ Whittock, S., Nixon, A., Green, M., Costello, M., 2001-10-02, subject for the analysis: Schroders

Telephone Interviews

- ♦ Bergkvist, Lars-Georg, Svenska Dagbladet, 2001-10-10
- ♦ Björkman, Anders, Swedbank, 2001-10-26
- ♦ Brunlid, Chrisitian, Carnegie, 2001-10-10
- ♦ Hernander, John, Alfred Berg, 2001-10-10, and 2001-10-26
- ♦ Karlsson, Arne, Ratos, 2001-10-10
- ♦ Roslund, Anders, Öhman Fondkommision, 2001-10-10

WebPages

- ♦ www.adainc.com/approach/rov.html
- ♦ www.bvca.co.uk
- ♦ www.evca.com
- ♦ www.excite.com
- ♦ www.hoovers.co.uk
- ♦ www.hoovers.com
- ♦ www.ifma.org.uk/download/Fundmanagementsurvey2000.doc
- ♦ www.nutek.se/riskkapital/pdf/riskkapdef.pdf (Anders Isaksson, Venture Capital – Begrepp och Definitioner, Handelshögskolan Umeå Universitet)
- ♦ www.nvca.com
- ♦ www.vencap.se