



School of Business,
Economics and Law
GÖTEBORG UNIVERSITY

The private equity industry

**Post-IPO performance of companies floated by private
equity firms on the Stockholm Stock Exchange in 2002**

School of Business, Economics and Law

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PREFACE

This thesis has been written during the spring semester of 2007 at the School of Business, Economics and Law - Gothenburg University. We hope that we can share what we have learned during the process it took to develop the thesis, and that you as a reader find the topic interesting.

We would like to thank our tutor Senior Lecturer Gert Sandahl and Tobias Lerner at the Nordic Exchange. They have been very helpful and their knowledge has been necessary to conclude this work.

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ABSTRACT

This study's purpose is to investigate what happens economically with companies that are floated on the Stockholm Stock Exchange by private equity firms and if their remaining ownership share can be linked to the floated company's development. We found this interesting to investigate from an investor's point of view to find out how these kinds of IPOs perform on the stock market. We also found it interesting to see how changes in the company co-vary with the private equity firms remaining voting power. Because of time and cost limitation we couldn't conclude our first idea and we had to narrow the study down to four companies.

The data we collected was share prices gathered from the Stockholm Stock Exchange and for the company specifics we gathered the information from financial annual reports. We use the DuPont model to evaluate the companies and a CAR test to compare the long run share price performance to a sector index.

We didn't find any evidence that the private equity firms remaining voting power had any influence on how the company developed neither economically nor on the stock market. On the other hand neither of the companies performed worse after the private equity firms had sold out their shares.

The conclusions drawn in this study are that companies floated by private equity companies do perform better than comparable stock index in the long run. We also conclude that the private equity firms remaining voting power has no effect after the floating on the floated company's economic status.

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1. Introduction

In this chapter we will start by giving a background of the topic, followed by a discussion of the problem and a purpose of the thesis. The chapter ends with delimitations and a disposition of the thesis.

1.1 Background

The role of the private equity industry is subject to an intense media debate today. Critics argue that the private equity industry act as asset-strippers, that they are axing away jobs and there exist a doubt about whether or not they actually create value in their portfolio companies. Private equity firms, meanwhile, are growing in size, reputation and power and have become more sought-after as an asset class among investors. The ever-increasing interest in the private equity industry has encouraged the evaluating of private equity fund performance and the performance of private equity backed companies. The latter is a matter for both the venture capital segment and the buyout segment of the private equity industry. The venture capital segment is more focused on raising capital to early stage financing in growth companies, whereas the buyout segment primarily invest in more mature companies with lower operational risk and strong cash-flows. A common form of exit strategy for both the venture capital segment and the buyout segment of the private equity industry is an initial public offering (IPO) of the backed firms. An IPO is the first sale of a company's common shares to investors on a public stock exchange, the main purpose of it being to raise capital for the company.

Three well-documented "anomalies" associated with IPOs are underpricing¹, hot issue markets² and long run underperformance. The phenomenon of underpricing has been discussed in Smith (1986) and Ibbotson, Sindelar and Ritter (1988), the latter also displaying evidence of the hot issue market. However, much of the academic work and the popular press focus on the long run performance of IPOs in general. Ritter (1991) and Loughran and Ritter (1995) display evidence about US IPOs underperforming a number of benchmarks in the long run. The emergence of private equity firms led Jain and Kini (1995) and Brav and Gompers

¹ Underpricing is usually measured by the initial return on the first day of trading of the IPO. Ritter (1991) estimates that IPOs produce an average initial return at 16.4%.

² A highly cyclical underpricing phenomenon, in which the average initial return is much higher and can last for months at a time.

(1997) to document evidence of venture capital backed IPOs outperforming non-venture capital backed IPOs in the US market. Academic work on private equity backed IPOs in the European market are relatively scarce. The European Private Equity and Venture Capital Association (EVCA), however, paints a very positive picture for the private equity industry in Europe, with a new record of €90 billion of funds raised by European private equity firms in 2006.

Much of the previous work has focused on the performance of venture capital backed IPOs, but we focus on the other segment of the private equity industry – the buyout segment. A buyout is an investment transaction in which an entire company or a controlling stake of its shares are sold; in this case to a private equity company. Our thesis aims to examine the long run performance of four buyout backed IPOs on the Stockholm Stock Exchange in 2002.

1.1.1 Market background

The United States is the world's biggest private equity market and the industry has been growing at an incredible pace since the early 1990s. Investors committed less than \$10 billion to the private equity asset class in 1991, but that figure had increased to approximately \$180 billion by the year 2000 (Kaplan and Schoar, 2002). After the peak in the year 2000, the private equity industry experienced a downturn in conjunction with the overall condition of the world's markets, but the last few years have seen new records of amount raised and invested by the private equity firms. In Europe, the evolution of the private equity industry has been similar to that of the US. The European private equity firms raised a record of €90 billion in funds in 2006, an increase with 25% compared to the previous record year of 2005 (EVCA).

The private equity firms are buying ever bigger companies, usually in so-called leveraged buyouts (LBOs). An LBO is a buyout in which the target firm's capital structure incorporates a high level of debt, much of which is secured against the firm's assets (EVCA). The recent development on the private equity market has caused a lot of media attention. On February 7th 2007, Blackstone Group set an all-time high of \$39 billion for the private equity acquisition of Equity Office Properties. Blackstone's purchase exceeded Kohlberg Kravis Roberts (KKR) infamous hostile takeover of RJR Nabisco in 1988, portrayed in the bestselling book

“Barbarians at the gate”³. However, the record only lasted until February 25th when Texas Utility Corp. agreed to an LBO by a group led by KKR. If cleared by regulators, the deal, valued at \$45 billion, will be the biggest LBO in history (Marketwatch).

1.1.2 The private equity industry in Sweden

The history of the Swedish private equity industry stretches back to 1986, when Procuritas was founded. A few years later, in 1989, Industri Kapital and Nordic Capital were established. In Sweden, as in the entire developed world, the role of the private equity industry is important to the economy. In the end of 2006, Swedish private equity companies administered capital of more than SEK 300 billion, of which about half was invested (SVCA). The Swedish Venture Capital Association estimate that companies owned by private equity firms contribute to around 10% of GDP and employ more than 150,000 workers in Sweden.

1.2 Problem discussion and problem formulation

A study of the 100 largest exits in west Europe that have been made by private equity firms during 2005 by Ernst & Young (2006) shows that companies with private equity owners increase their value almost twice as fast as similar companies on the public stock market. The research identifies four reasons why this is the case; careful buying, delivering the business plan, using right management team and selling well. The study finds that private equity is good both for the business as well as the investors and the close alignment of incentives between investors and management helps this to happen. Therefore it is interesting to find studies such as Ritter (1991) and Bjugert & Johanson (2004) that shows that when the companies go public they perform poorer in the long run than their comparable sector index. These studies are based on a five year period after the IPO. A study by Ritter & Welch (2002) shows the same effect on the long run performance over a three year period.

If Ernst & Young’s results are right and the private equity owned companies are increasing their value faster than their competitors it indicates that something happens with the companies when they enter the public stock market. Which factors that lead to this increase in stock price is interesting to investigate. If there is a pattern showing that companies floated by

³ Bryan Burrough and John Belyar

private equity companies perform better than similar companies, it is a sign for investors to invest in these companies. This has led us to our main question:

How does the company change economically after a floating by a private equity firm?

To be able to answer this question we have chosen to divide it in to three sub questions that will explain different variables that we believe are of importance. These questions are:

- 1. How does the floated company's share price perform compared with the stock sector index?*
- 2. How has the company developed internally?*
- 3. How does the private equity company's voting power influence the floated company economically?*

The first question is necessary to describe how the company's stock has performed compared with sector index. This is the base variable in our study to investigate how the company has performed externally. We use it to see if there can be a common pattern in how the company's stock performs and how the other internally investigated variables change with start at the date of the IPO and five years ahead. As several studies have mentioned, companies floated by private equity firms perform poorer than sector index. Therefore, this parameter will be the dependent parameter in the study.

The second question can be of importance because when the company goes public it normally has some effect on the capital structure. The former private equity firm choose to diminish their share of the company and other investors take over. The proportion of debt contra the proportion of equity explains capital structure and an increased proportion of debt can increase the return of equity, but this will also mean weaker owners. This would indicate that the close relationship and governance the private equity company had disappeared. A company that has been floated by a private equity firm goes from one very active owner to several different owners. The new owners can be large owners that do not have any interest in how the company is managed as long as they get their return on their investment. The private equity firm on the other hand has had a close relationship to the management and has come with suggestions and plans. The authors believe that if the private equity firm remains in the

company in form of chairs on the board or if it has a big proportion of the votes in the company it can have a positive effect on how the company develops.

The third question is an examination of the return on equity and the return on assets. The DuPont model was developed by a finance executive at E.I. du Pont de Nemours and Co., of Wilmington, Delaware, in 1919 (Blumenthal, 1998). The model is used to examine the components that make up the return on equity. The return on equity is interesting in the investors' viewpoint, because it explains how big the return is on their investment. The higher the return is the more the investor can gain in form of dividend and increased share price.

We believe that these variables are of great interest to study regarding the long run performance of IPOs. However, when it comes to the stock market and how the stock price develops several more variables can be of importance. It is not just how the company performs that is important, but also how the investors think the company will perform. Since these variables are harder to explain and measure, we have decided just to measure how the company performs.

1.3 Purpose

The purpose of this study is to investigate how companies that have been floated on the Stockholm Stock Exchange by private equity firms perform in the long run compared with their respective sector index over a five year period, how the company develops internally and how the private equity firms remaining ownership influent the company's development.

1.4 Disposition

The first chapter presents the reader with background information of the chosen topic as well as a brief overview of the private equity industry and its history. It also describes the underlying problem and the purpose of the thesis. Chapter two contains a discussion concerning the methodological issues of the thesis and how they were handled. A method approach that corresponds to the underlying problem is chosen and investigated. Chapter three presents the existing theories regarding long run performance, the DuPont model and ownership structure. Chapter four presents the results and an analysis of the empirical data

which is linked to the theories in the third chapter. Chapter six concludes our findings and presents the reader with future research that can be of interest.

2. Method

This chapter starts with a description of the problem, presents which data that is used and how the data is collected. Thereafter follows a description of how companies are selected and how the data is analyzed. The chapter ends with a discussion of the study's credibility.

2.1 Method approach

The method is a description of how the researcher will do in order to collect and analyze the data to get answers for the problems that the study aims to investigate (Holme & Solvang, 1997). The idea of writing about the private equity industry was developed at an early stage. The ever bigger deals done by mainly American private equity company's was getting a lot of media attention at the point of starting our research. The question of whether or not the private equity firms created value in the company's they purchased was intensely debated in media. Since a lot of research about the topic had been done on the American private equity industry, we decided to deepen our knowledge about the Swedish private equity industry, where previous research was sparse, and look into potential research problems. After a great amount of research on the topic, the idea to investigate the post-IPO performance of companies backed by private equity firms was formed and this study tries to explain what variables are of importance when it comes to floating of companies made by private equity firms. According to Lekvall & Wahlbin (2001), an explanation study is used when the writers wants to explain a relationship between different variables. We have therefore chosen to do a descriptive study that tries to explain the relationship between a floated company's stock development and internal changes within the company, both according to the DuPont model and in terms of voting power retained by the private equity company.

2.2 Quantitative and qualitative data

The method approach is decided by two main dimensions, the qualitative and the quantitative method (Lekvall & Wahlbin, 2001). The difference between the approaches is that a quantitative method normally has a larger population to investigate, and therefore the investigator is able to make statistic generalizations while the qualitative method normally is based on oral information (Eriksson & Wiedersheim-Paul, 2006). To be able to make an

analysis of how the companies' stock develops compared with sector index and the investigated variables, we have to collect the data from annual reports and analyze them numerically. The most common method approach for this is to use a quantitative study that this study will use. Due to the number of data that we have accomplished to get, the study will focus deeper and therefore even has a qualitative touch. The ability to compare them in a statistical way has gone lost because the small amount of companies. We can not draw any statistically significant results of this small selection. We will use both these approaches for the study. This method is also described by Holme & Solvang (1997).

2.3 Data collection

There are two different types of data; primary and secondary. Primary data is the data that the researcher is collecting from the original source. Secondary data is data that already exists and can previously has been put together for a different purpose (Lekvall & Wahlbin, 2001). We will use secondary data for this study in form of annual reports and market statistics. The annual financial statements are collected from the company's web pages and the share prices as well as the sector indices are collected from the Stockholm Stock Exchange. We have used these data sources because it is the official annual financial statements and we expect them to be correct because of the demands the companies are under and the accounting laws and they are also the only way to collect information from the companies. Because of the accounting regulations we don't expect them to be to bias. For the theoretical frame we will use libraries and databases such as Jstor and Academic Search Elite. These databases have many different sources that can give different valuable aspects of the problem and analysis.

2.4 Selection of companies

Our sample of private equity firms is chosen from a selection criterion where only Swedish private equity companies that are predominantly active in the buyout segment of the business were to be included. Based on these criteria five Swedish private equity firms are identified. The firms included are Industri Kapital, EQT, Nordic Capital, Procuritas and Ratos. The IPOs used as an exit strategy by each private equity company are then identified and a table of the IPOs is put together.

The sample in the study is comprised of 17 IPOs in Sweden during the years 1991-2002. However, we are forced to exclude all but four companies from this original sample. The reason for the exclusion is mainly time and cost reasons but also due to a lack of data at the Stockholm Stock Exchange when it comes to the companies Stancia AB and Graphium AB. Because there is no public databases to collect Swedish annual financial reports we would have been forced to order them from Bolagsverket and for the amount they charge for each report we would have needed to get a scholarship to pay for them. After this discovery, we started to search for the annual financial reports on databases and company homepages and found five companies that published their reports and four of them that were floated in 2002 and the other; Lindex, was floated in 1995. The 17 IPOs floated by private equity firms are presented in Table 1 below.

Table 1 Description of IPOs floated by private equity firms in Sweden 1991-2002

Sample firm	Private equity firm	Sector	IPO date
Alfa Laval AB	Industri Kapital	Manufacturing	2002-05-17
Ballingslöv International AB	EQT	Consumer goods	2002-06-19
BT Industries AB	Nordic Capital	Manufacturing	1995-11-27
CityMail Sweden AB	Procuritas	Services	1998-07-01
Dahl International AB	Ratos	Manufacturing	1996-06-04
Graphium AB	Industri Kapital	Manufacturing	1993-12-20
Intentia International AB	Nordic Capital	IT	1996-11-22
Intrum Justitia AB	Industri Kapital	Services	2002-06-07
Karlshamns AB	Nordic Capital	Raw materials	1997-06-05
LIC Care AB	Procuritas	Healthcare	1993-12-28
Lindex AB	Industri Kapital	Consumer goods	1995-04-07
Meda AB	Nordic Capital	Healthcare	1995-06-27
Nobia AB	Industri Kapital	Consumer goods	2002-06-19
PartnerTech AB	Industri Kapital	Telecommunications	1997-06-12
Scandic Hotels AB	Ratos	Services	1996-12-17
Stancia AB	Ratos	Financial services	1991-02-07
Ticket Travel Group AB	Procuritas	Services	1997-04-25

Because problem to gather sufficient information for a large population we are forced to diminish the study as we mentioned above. The companies that are chosen are all floated by the private equity firms, selected as described above, in the year 2002. They have all been at the Stockholm Stock Exchange for five years. We choose these because they can be comparable and also because they have faced the same macro economic factors that have influenced their performance even though they are in different sectors. That they are in

different sectors are taken in consideration through the comparison to the specific company's sector index. The companies in the study, their respective IPO dates and their respective sector index' used as a comparison can be seen in Table 2 below.

Table 2 Description of sample firms

Company	IPO date	Sector index used
Alfa Laval	2002-05-17	OMX Stockholm Capital Goods, SX2010
Ballingslöv	2002-06-19	OMX Stockholm Consumer Durables and Applications, SX2520
Intrum Justitia	2002-06-07	OMX Stockholm Consumer Services, SX2020
Nobia	2002-06-19	OMX Stockholm Retailing, SX2550

The benchmark selected to compare the long run performance of stock prices should ideally have the same exposure to fundamental risks as the investigated firm and also capture the risk characteristics of the firm. One approach is to use an already quoted firm or a group of quoted firms, which exhibits the same characteristics as the IPO firm. This process, however, is rather time-consuming and there is no guarantee for finding a matching firm with the same characteristics and risk exposure as the IPO firm. Another approach is to use a market- or a sector wide index as a benchmark. The authors argue that by selecting a sector index instead of a market wide index, we can capture the risks exhibited by the firms in a better fashion.

2.5 Data analysis and concept

To analyse the collected data we have chosen to use three different concepts to measure against the IPOs development compared to a sector index. We will present our results graphically to give a better overview and simplicity.

Sector index: measured as yearly average based on daily closing prices to get the companies stock development timed to when they have their annual closing day. We choose to compare with sector index to get a more risk adjusted comparison because the companies are in different sectors. All the indices were measured from the day of the respective company's IPO date to 2007-05-18.

Internal performance: we have considered several different models but we have chosen the Dupont model because we believe it provides a good explanation of what happens internally with the company whether or not it is owned by a private equity company or not.

Ownership structure: till what extent the private equity firm remains in the company after the IPO. This is measured by their voting power on the day for their annual report.

2.6 Credibility

Validity and reliability are two important concepts for legitimizing the study's credibility. The concepts treat the process of making the theoretic concepts translated to measurable concepts (Holme & Solvang 1997).

2.6.1 Validity

Validity can be explained as the degree to which a test measures what it was designed to measure (Lekvall & Wahlbin 1993). We believe that the validity of this thesis is high because of the fact that the data we have gathered for the analysis is difficult to manipulate. Share prices and sector index prices were gathered from the Stockholm Stock Exchange and all other data was collected from the companies' annual financial statements. The rigorous framework of rules and laws regarding the annual financial statements and the public scrutiny increases the reliability of the information and in thus also the validity of the thesis. One has to bear in mind, though, that the size of the sample is too small for one to safely generalize the conclusion derived to the population outside the confines.

2.6.2 Reliability

The concepts of validity and reliability are linked in that that a test can not have a high validity unless it also has a high reliability (Lekvall & Wahlbin 1993). Reliability can be explained as the extent to which the measurements of a test remain consistent over repeated tests of the same subject under identical conditions. An experiment is considered reliable if it yields consistent results of the same measure. If the results are inconsistent, then the reliability of the experiment is low.

We believe that a person with knowledge of data gathering on the Internet and a proficiency in Microsoft Excel and using the same framework and concepts as we have, should come to the same results. Therefore, we conclude that the reliability of this thesis is high, with reservation for the reliability of the interpretation of the results which are influenced by the knowledge of the authors.

3. Theory

This chapter presents the theory concerning long run performance, the DuPont model and ownership structure. We use CARs instead of BHRs to calculate long run performance to be able to compare our findings with previous research on the topic.

3.1 Measuring long run performance

A number of different methodologies have been employed in studies regarding the long run performance of IPOs, but there is no evidence of one method being better than the others. Besser, Carlman and Mossberg (2001) illustrate that the long run performance is sensitive to the benchmark used as well as the econometric models employed. This is also in line with Ritter (2001). The methods usually employed in previous academic research to calculate long run abnormal returns are cumulative abnormal returns (CARs) and buy and hold returns (BHTs).

This study focuses on the long run share price performance of private equity backed IPOs and the performance is measured against a sector index as a benchmark. The benchmark selected should ideally have the same exposure to fundamental risks as the investigated firm and also capture the risk characteristics of the firm. We believe that by selecting a sector index we can capture the risks exhibited by the firms in a good fashion. The different indices' used as benchmarks for the four companies can be seen in Table 2. A recurring issue when investigating long run post IPO performance is whether or not to include the initial offer price. We choose to exclude the first day of trading for two reasons. The first reason is that not all investors are allocated shares in the IPO and the second reason is that first day trading may incorporate some effects that not fully corresponds to the true value of the company, such as underpricing (see Smith [1986] and Ibbotson, Sindelar and Ritter [1988]). We calculate CARs in one year intervals over five years to be able to compare the performance with the information from the annual financial statements.

The benchmark adjusted returns are calculated as the return on a share less the benchmark return for each trading day, and the adjusted returns are denoted abnormal returns. The formula for the abnormal returns is defined below,

$$ar_{i,t} = r_{i,t} - r_{b,t}$$

where $r_{i,t}$ is the return for the IPO i and $r_{b,t}$ is the return of the benchmark over time period t .

These daily abnormal returns are then added up through time. Cumulative abnormal returns are calculated according to the formula below,

$$CAR_i = \sum_{t=1}^T ar_{i,t}$$

A buy and hold strategy is a strategy where an investor selects stocks and holds them for a long period of time, regardless of short-term fluctuations in the market. BHRs measures the total return from a buy and hold strategy in which a stock is purchased the day after going public and held for a number of years. To measure long run performance using BHRs a benchmark has to be employed and this is usually done using so called wealth relatives (WRs). Wealth relatives are computed by dividing the total BHR of a single company added by one with that of a set of matching firms added by one, see formula below (Nilsson and Wahlberg, 2005).

$$WR = \frac{1 + \text{average total return of company}}{1 + \text{average total return of matching firms}}$$

A wealth relative of more than one indicates that the company has outperformed the set of matching firms and a wealth relative of less than one indicates the contrary.

Due to the fact that we want to compare our results to those of Ritter (1991) and Bjugert and Johansson (2004) and the fact that it is easier and more commonly used, we only calculate long run performance using the CAR model.

3.2 The DuPont model

The return on equity is one of the most important indicators of a company's profitability and potential growth. It measures a firm's efficiency at generating profits from every dollar of net

assets, and shows how well a company uses investment dollars to generate earnings growth. If a company boasts high returns on equity with a low financial leverage, it means that the company can grow without large capital expenditures thus allowing the owners of the company to withdraw cash and reinvest it elsewhere. However, the return on equity alone is sometimes not enough to determine whether an investment is good or bad. The DuPont system of financial analysis provides a better understanding of the return on equity by breaking down the return on equity into two underlying components; the return on assets, it don't adjust to how the company is financed, and the equity multiplier. The return on assets in turn can be broken down into two components; the net profit margin and the asset turnover. By doing this, it is easier to track down and spot the changes in return on equity over time.

The DuPont model of financial analysis might, according to critics, not be the best model to use for predicting the future, but it has the advantage of being easier to use and interpret than other models in which a considerable amount of time has to be spent to calculate the relevant variables (Blumenthal, 1998).

Net profit margin = Net income / Revenue

Asset turnover = Revenue / Assets

Equity multiplier = Assets / Shareholders' equity

To calculate the return on assets using the DuPont model, we simply multiply the two first components in the formulas above with each other.

Return on assets = Net profit margin * Asset turnover

The return on equity is then calculated using the formula below.

Return on equity = Return on assets * Equity multiplier

3.3 Ownership structure

Hart (1995) describes governance structure as the one who has the right to decide over the company's assets and how they should be used. There is two different kind of governance structure, own ownership or joint ownership. As more parties are joined, the decision making process gets more complex. Pålsson (2001) explains that real ability to control depends on how large the ownership is in form of votes. To have total control, 50 % or more is necessary but often it is enough with less. The ownership is considerable more spread in the US and the UK than in the rest of Europe. According to Jain and Kini (1994), companies perform relatively better after the IPO if the former owner retains a high ownership.

Hart (1995) describes that when the company goes public it increases its group of owners from one owner or a small group of strong owners to several and smaller owners. The floating leads to mainly two new issues that aren't relevant in a small closely held company. Even though the owners have ultimate residual control in form of votes they are too small to be able to exercise their control from day to day and they delegate the control to a board of directors. The board of directors in turn then delegates the control to a management, which leads to a separation between ownership and control. The other issue is that the shareholders don't have any incentive to control the management. This is because the monitoring is a public good and it is costly to monitor the management and, if one shareholder is monitoring, it leads to better company performance and all shareholders gain. This creates free riders that hope that another stockholder is monitoring and the problem is that the most shareholders think the same and almost no control is taking place. Pålsson (2001) describes that for the supervising to be profitable the gains of it have to be larger than the cost of the actual supervising. Because small stockholders don't have the ability to practise the control they will get high costs for the supervising. Therefore they have big incentives to let someone else supervise and act as a free rider.

Hart (1995) says that when lack of monitoring and separation of ownership occurs, it is a danger that the management in a public company will hunt for their own goals, which can lead to losses for the shareholders depending on which goals they have. A possibility for the management to have their own agenda can lead to them overpaying themselves, extravagant benefits and other factors that are inconsistent with maximizing the value for the shareholders. Therefore it is important with checks and control of the management. Pålsson (2001) suggests

that it can be made by going back to a concentrated ownership. This can be done either alone or by forming an alliance with other shareholders. The driving force to supervise and control the management is stronger for large shareholders. Large shareholders also have a greater real possibility to influence the cost for supervising and control per stock is less and the cost can also decrease because the owner that is supervising gets more specialized on the task. On the other hand, Hart (1991) warns that too strong control can be contra-productive.

4. Results and Analysis

This chapter presents the empirical data the study will be based on. The empirical data from the different investigated companies as well as an analysis with help of the theories presented in chapter three.

The tables below show the development of the four companies in the study from year 2001 to 2006. The net profit margin, asset turnover, equity multiplier and return on equity are all developed using the DuPont model of financial analysis. The column denoted “PE-share” is the ownership retained on a year-by-year basis by the private equity firm after the flotation of the respective companies. The graphs describe how the stock versus sector index has developed and also how the return on asset and equity has developed.

4.1 Alfa Laval

Alfa Laval was founded in 1883. They have played an important role in many industrial processes within a number of industries over a long time. Their key technology is heat transfer, separation and fluid handling. Industri Kapital bought Alfa Laval from the Tetra Pak Group in the year 2000.

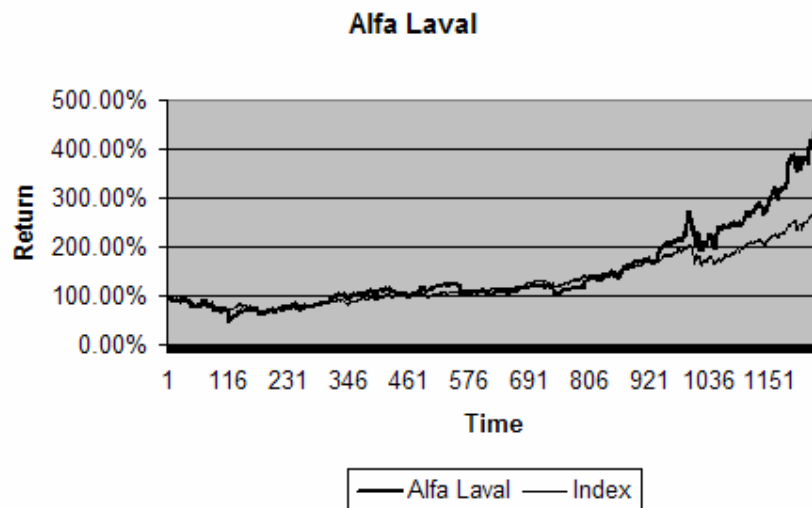
Table 3 The empirical data summarized from Alfa Laval

Year	Net profit margin	Asset turnover	Equity multiplier	ROE	ROA	PE-share	Abnormal returns
2001	0,26%	0,90	12,20	2,89%	0,24%	100%	
2002	2,55%	0,95	3,42	8,25%	2,41%	27%	10,65%
2003	5,88%	0,95	3,00	16,69%	5,56%	18%	24,43%
2004	8,42%	1,08	2,80	25,40%	9,08%	9%	-17,11%
2005	6,73%	1,01	2,79	18,91%	6,78%	0%	12,65%
2006	12,00%	1,06	2,74	34,77%	12,67%	0%	36,12%

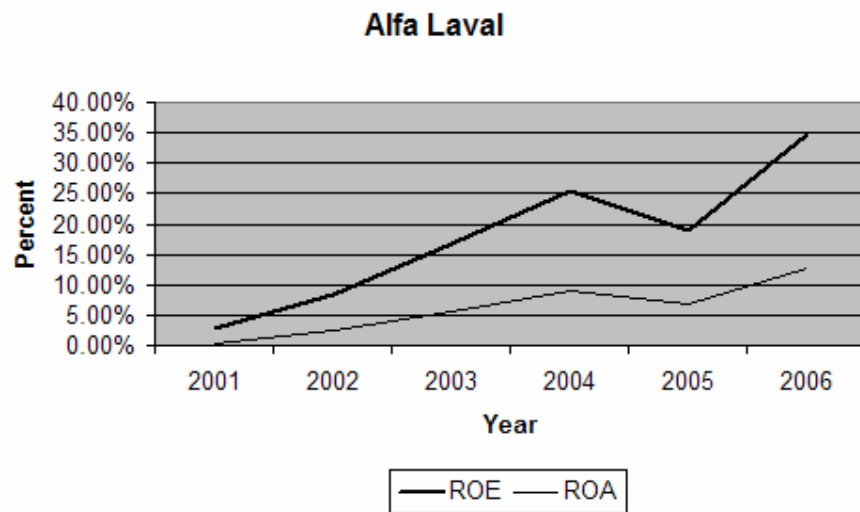
After the floating, the stock has developed similar as its stock index until the last year when the gains of the stock price outperformed the index. The internal development has been better since the private equity firm floated the company. According to Ernest and Young’s (2006) study, companies owned by private equity firms increase their value faster than other companies. In this case it was the contrary and it was floated when Alfa Laval performed

badly with low returns, low net profit margin and a high equity multiplier. The private equity effect may have been lost because Industri Kapital just owned Alfa Laval two years before the floating and their ownership maybe was not long enough to have any significant effect on Alfa Laval's performance. On the other hand, it can neither be confirmed that the private equity effect did not come after the floating.

Figure 1 Alfa Laval's share price performance (days $t=1$ to $t=1256$)



The development of return on assets and return on equity has been increasing since the floating. The equity multiplier decreased after the floating and it would indicate a lower difference between the return on asset and return on equity. The company has increased their net profit margin while decreasing the equity multiplier. Now the company has a high return on assets and a high return on equity and might be able to increase their equity multiplier and thereby increase the return on equity, which is dependent on how high their capital costs are. According to the annual report from 2006, Alfa Laval is increasing their returns because of a focus on profitability, highly satisfactory utilization in their production facilities and high efficiency in their production. They have a strong market position and increased their order intake with 30 percent.

Figure 2 Alfa Laval; development of ROE and ROA 2001-2006

The return on equity increased as longer time went after the floating and when the private equity company sold off their shares. This was a pattern with one exception when the private equity company sold their last shares the return on equity decreased. If this is an effect of the selling can't be confirmed - it was on a high level the year before and it rose again the year after. Other factors could have contributed to this development. There can neither be confirmed that there exists a relation between abnormal stock returns and ownership or return on equity.

4.2 Ballingslöv

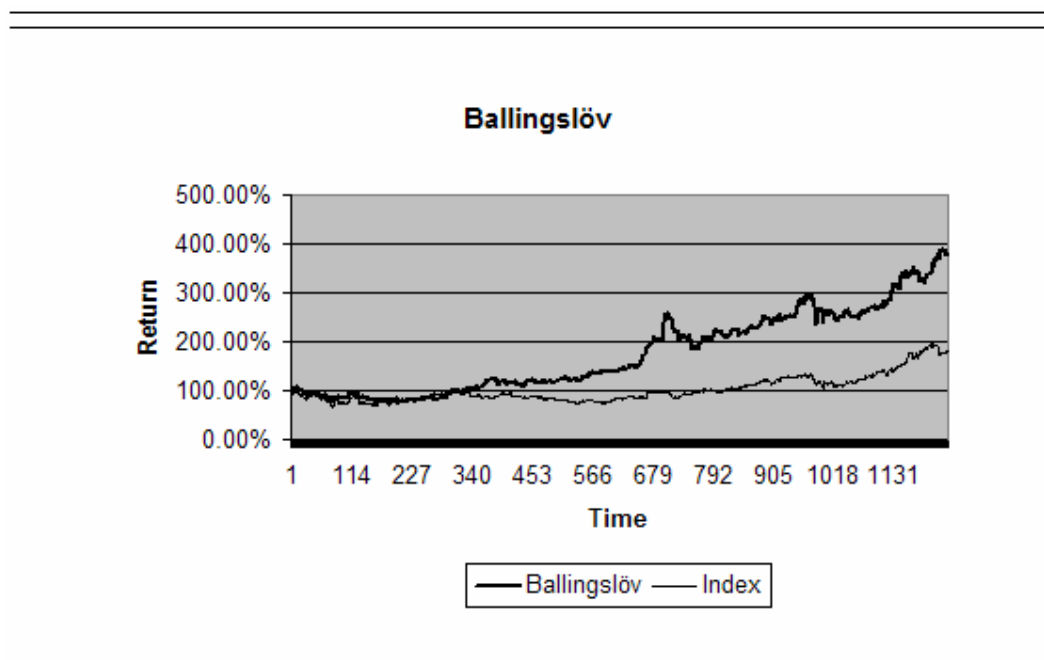
Ballingslöv was founded in 1929 as a small carpentry fabric. The company developed to an international group that is producing solutions for kitchens, bathrooms and storage. Ballingslöv was bought by EQT 1998 from AB Electrolux.

The empirical data summarized from Ballingslöv is summarized in the same way as Alfa Laval. Ballingslöv was owned by the private equity firm EQT under 4 years before their floating 2002. During this time frame EQT has had time to change the company and focus on Ballingslövs development.

Table 4 The empirical data summarized from Ballingslöv

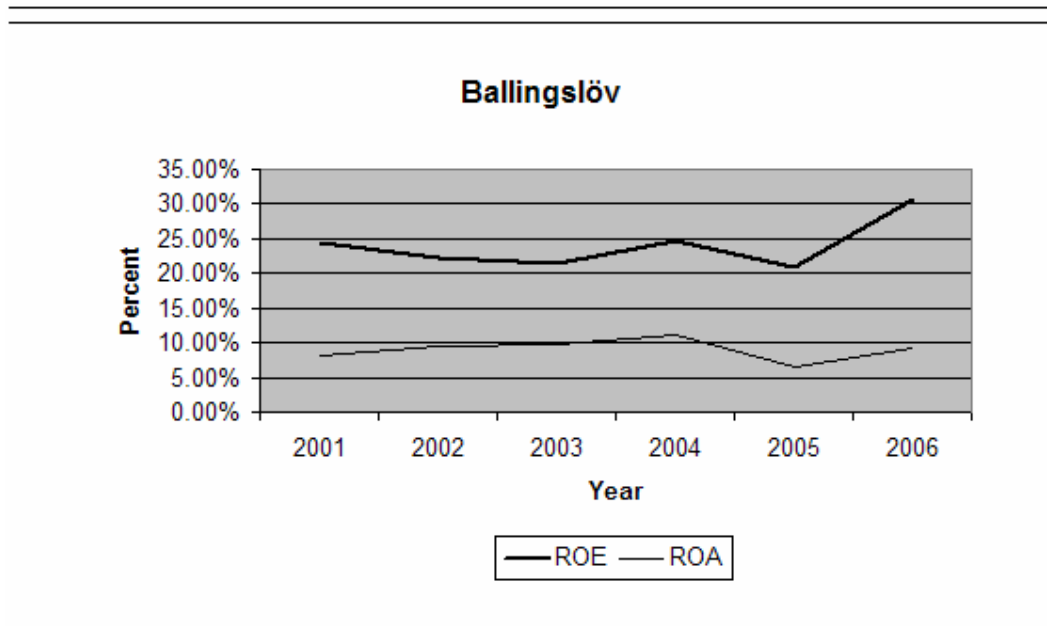
Year	Net profit margin	Asset turnover	Equity multiplier	ROE	ROA	PE-share	Abnormal returns
2001	6,88%	1,20	2,98	24,53%	8,23%	100%	
2002	8,57%	1,11	2,34	22,36%	9,55%	19%	0,89%
2003	8,27%	1,19	2,17	21,44%	9,88%	0%	22,85%
2004	8,86%	1,25	2,23	24,69%	11,09%	0%	2,73%
2005	6,31%	1,02	3,25	20,83%	6,41%	0%	29,48%
2006	8,89%	1,04	3,33	30,73%	9,23%	0%	4,00%

The share price of Ballingslöv developed similar as the sector index during the first year after the flotation, but a year after the floating the share started to develop stronger than the sector index. In 2005 the returns decreased a little but it didn't have any effect on the abnormal returns that rose. The decrease was a result of an acquisition of the Danish store chain Svane Køkkenet. Ballingslöv experienced the integration harder than they thought and decided to shut down the project. This led to a one time shut down cost that affected the result negatively, but it ended any future obligations to Svane Køkkenet according to Ballingslöv annual report (2005).

Figure 3 Ballingslövs share price performance (days t=1 to t=1235)

Ballingslöv has had a high stable return on assets and return on equity both before and after the floating. They haven't had any big drops in the returns. The equity multiplier has increased and as well has the return on equity increased even though they have had some minor decrease on the return on assets last year. The equity multiplier has also increased and that can be an explanation to the higher return on equity.

Figure 4 Ballingslöv; development of ROE and ROA 2001-2006



For Ballingslöv there is no pattern between the private equity company's ownership level and the return on equity during these five years. The company has a high and stable return but compared with abnormal stock returns they do not co-vary. The private equity company sold off their shares in the company under the first two years after the floating. Under this time the return on equity remained on a high and stable level. It can not be confirmed that the result changed in a particular way after the private equity company ended their ownership.

4.3 Intrum Justitia

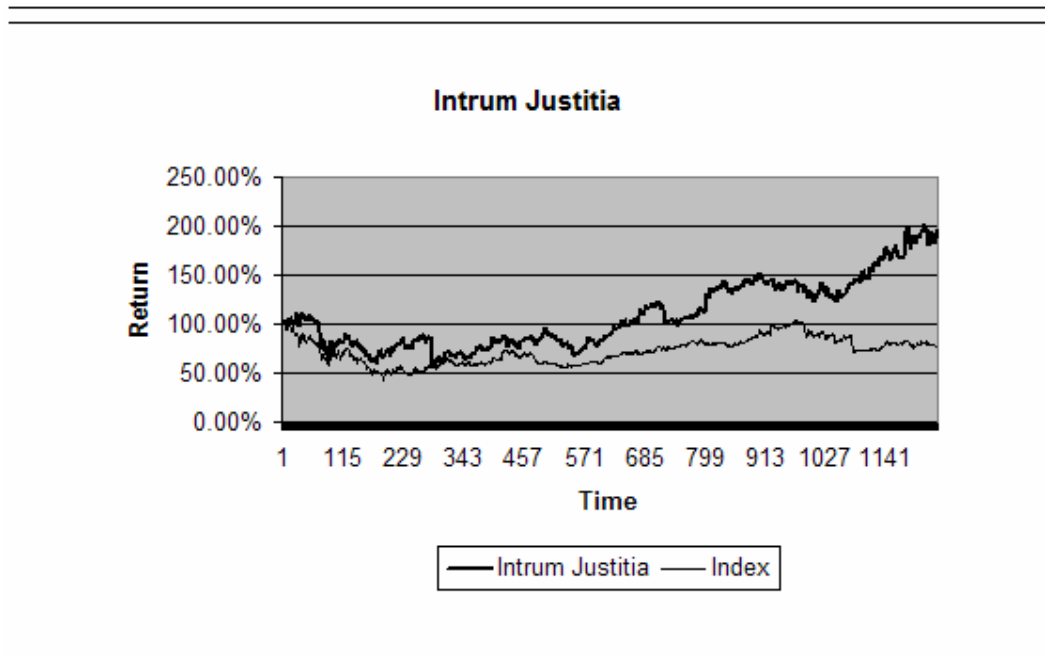
Intrum Justitia was founded in 1923. They offer services from credit information, invoicing, reminders and collection to debt surveillance and collection of written off receivables. They want to improve their customer's cash flow and long-term profitability. Industri Kapital bought the company in 1998.

Table 5 The empirical data summarized from Intrum Justitia

Year	Net profit margin	Asset turnover	Equity multiplier	ROE	ROA	PE-share	Abnormal returns
2001	5,18%	0,69	6,36	22,73%	3,57%	100%	
2002	8,59%	0,74	2,43	15,50%	6,38%	25%	32,04%
2003	-5,12%	0,78	2,97	-11,83%	-3,99%	25%	-2,35%
2004	9,93%	0,80	2,47	19,70%	7,97%	25%	17,60%
2005	16,73%	0,68	3,14	35,88%	11,42%	0%	17,77%
2006	17,93%	0,66	2,99	35,31%	11,81%	0%	24,00%

After the floating the stock has developed similar as its stock index until late 2004 when the Intrum Justitias stock developed better than its sector index. In 2003 the abnormal return, net profit margin, return on equity and assets decreased heavily. The decrease depended on a grave incorrect booking, investigation costs and the goodwill value was forced to be written down. All of these costs that lead to poor returns depended on Intrum Justitias subsidiary company in England according to the annual report (2003).

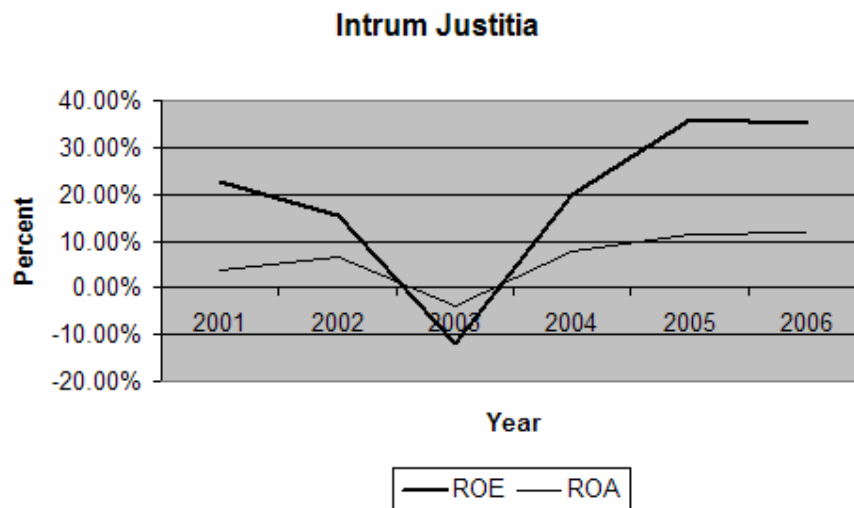
Figure 5 Intrum Justitias share price performance (days t=1 to t=1243)



Even though Intrum Justitia have not had an extremely high equity multiplier their returns has changed dramatically. It shows what can happen if the leverage level is high. When the return

of assets is higher than the capital cost it gives a positive result for the return on equity but if the opposite occurs the negative return increases. 2003 on the other hand was a dark year for Intrum Justitia with both negative returns on assets and equity due to a negative net profit margin.

Figure 6 Intrum Justitia; development of ROE and ROA 2001-2006



For Intrum Justitia the return on equity increased much when the private equity company sold their last shares. If this has anything to do with the ending of ownership by the private equity firm can only be solved by a deeper analysis. It could also depend on other factors. The company had a fluctuating return on equity and this is also experienced when it comes to the abnormal returns. The private equity company sold off their stocks in the company three years after the floating.

4.4 Nobia

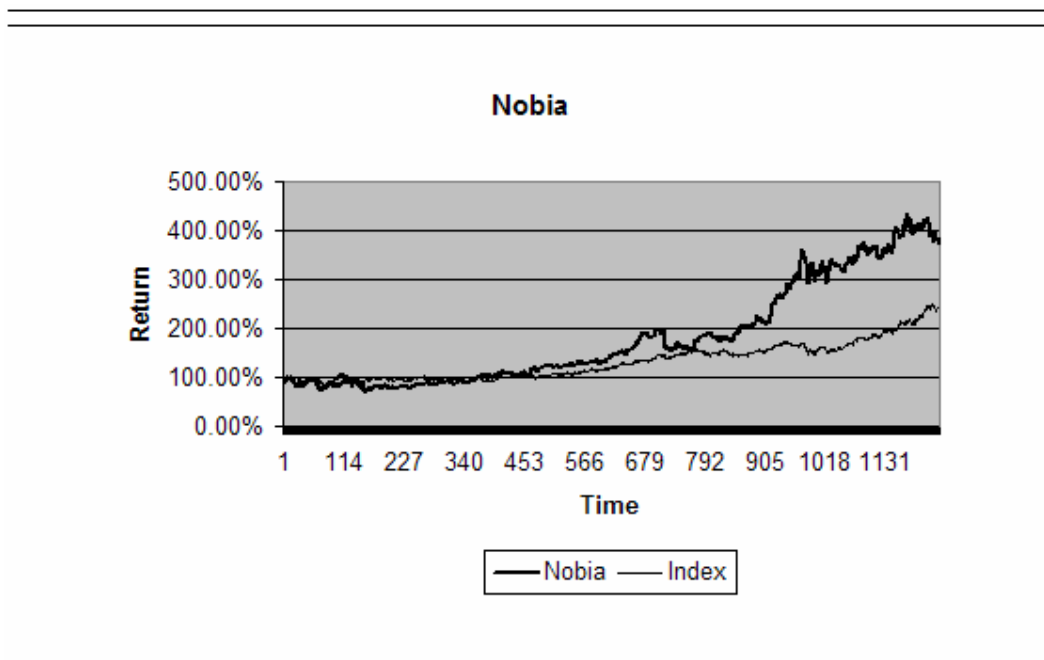
Industri Kapital formed Nobia in 1996 through a buyout from STORA. Nobia develops, manufactures and distributes solutions for kitchens, bathrooms and storage. They claim that they are market leading in Europe.

Table 6 The empirical data summarized from Nobia

Year	Net profit margin	Asset turnover	Equity multiplier	ROE	ROA	PE-share	Abnormal returns
2001	5,00%	1,29	3,61	23,31%	6,45%	100%	
2002	7,25%	1,67	2,21	26,88%	12,15%	40%	9,46%
2003	5,39%	1,44	2,42	18,75%	7,74%	25%	3,23%
2004	6,57%	1,59	2,90	30,30%	10,44%	0%	19,17%
2005	7,11%	1,57	2,49	27,80%	11,18%	0%	18,61%
2006	7,76%	1,62	2,58	32,40%	12,57%	0%	31,81%

After the floating the stock has developed similar as its stock index until late 2005 when the Nobias stock developed better than its sector index. Nobia had in 2004 in all their returns and as well the net profit margin. The annual report of 2003 describes that it depends on a closing down of the German line of business, poorer sales in Norway, poorer results in United Kingdom and weaker exchange rate against the British pound which gave considerable higher costs of material.

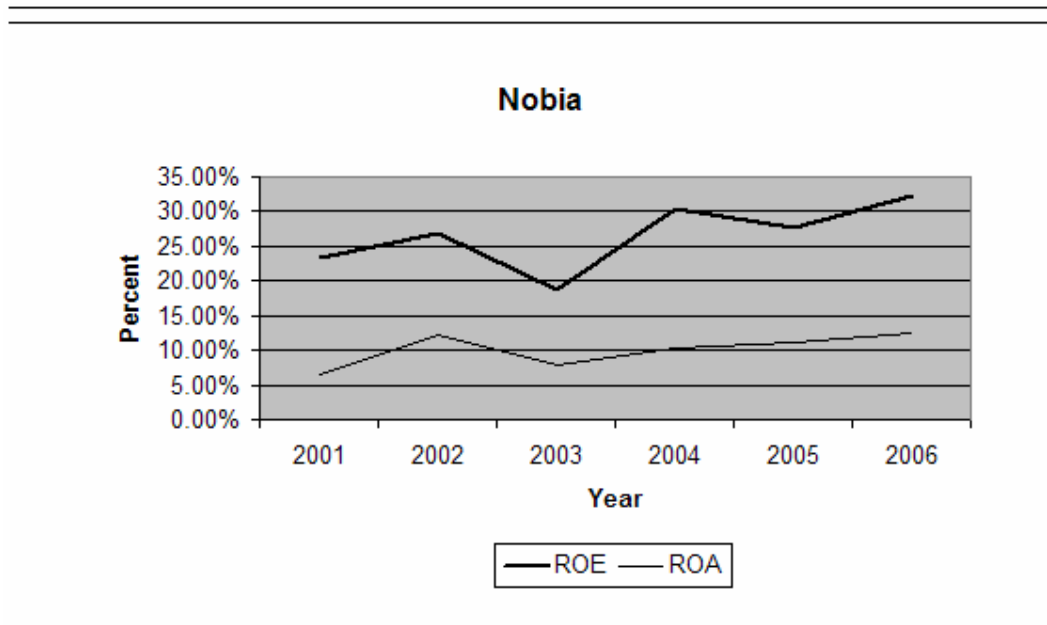
Figure 7 Nobias share price performance (days t=1 to t=1235)



Nobias return on equity rose when the private equity company sold their last shares. If this has anything to do with the ending of ownership by the private equity firm can not be confirmed. The company had a fluctuating return on equity as well as abnormal returns and these

variables did co-vary. The private equity company sold off their stocks in the company two years after the floating.

Figure 8 Nobia; development of ROE and ROA 2001-2006



The company has had a stable and high return on equity as well as return on assets. The company has lowered their equity multiplier since the private equity company floated them. The high difference between return on assets and return on equity indicates low capital costs even though the company has increased their asset turnover and their net profit margin.

According to Ritters (1991) and Bjugert & Johansons (2004) studies, IPO companies do perform poorer than sector index, but our study shows the contrary. Ritters (1991) study focused on all IPOs under a three-year period after the IPO. Neither of our companies performed worse during this period except for some yearly exceptions. It can be said that our companies often increased the difference to sector index after three years. Bjugert & Johansons (2004) study showed that companies that had been floated on the Stockholm Stock Exchange by private equity companies performed worse than comparable stock index. Our study that treats the same segment shows the contrary. All of our stocks performed better than sector index over a five year period. We did not find any evidence for Jain and Kinis (1995) results that companies perform relatively better after the IPO if the former owner retains a high ownership. Our study is more in line with Brav and Gompers (1997) study that showed

that the emergence of private equity firms led to documented evidence of venture capital backed IPOs outperforming non-venture capital backed IPOs in the US market. The difference in our study is that we focus on private equity instead of venture capital, but we find the same results for our companies in comparison with sector index even though we can not make any statistical significant conclusions because of the few investigated companies.

The capital structure mainly changes the first year. The amount of debt is higher for all of the companies except Ballingslöv when the private equity company owned the companies. This could indicate that the private equity firm has a stronger ownership and also control over the company. Pålsson (2001) explains that the driving force to supervise and control the management is stronger for large stockholders. This is also because they can lower their costs for the controlling and they also get more specialized on it.

The results show that there does not exist any co-variation between the private equity firms' remaining ownership and return on equity or abnormal returns in the company after the floating. If Harts (1995) theory that a strong ownership also leads to successful businesses, that also was the result by Ernst and Young's (2006) study, it would indicate that the companies should be more effective before the floating. We do not get a confirmation for this argument because the companies usually perform similarly or even better than before the floating. The higher amount of debt when private equity companies owned the companies also created a possibility for high return on equity because of the equity multiplier. We can neither confirm nor disregard this because the company with the highest equity multiplier, Alfa Laval, was also the company that presented low returns before the floating and has developed its returns the most as the equity multiplier has decreased. This could be an indication of financial distress because of the high equity multiplier. The return on assets and the return on equity co-vary in all companies and all of them show a stable and high return on equity after the floating and after the private equity companies left the companies through a selling of all their shares. An explanation to the development of the companies can also be that new active owners that are supervising and controlling the management have appeared, even though the private equity company does not have any influence on this.

5. Conclusions

This chapter starts with a presentation of the conclusions of the study and it ends with suggestions of topics that can be interesting to study in the future. Our conclusions are that the investigated companies perform better in the long run than sector index and that the private equity firms remaining voting power does not have any influence on how the company performs.

The first conclusion we draw is that the investigated companies' share that was floated by private equity firms performs better in the long run. There was a difference in how fast the companies outperformed their comparable sector indexes but in the long run they all did. This would indicate that investors that are searching to invest in new shares on the stock market could focus of these types of floating. On the other hand, our sample is very small and all have been facing the same macroeconomic developments. With a bigger and statistical significant test sample as well as an investigation stretching for a longer time with different macroeconomic climate affecting the results, could show different results from ours. This could indicate that we were "lucky" with our sample firms, that the investors' have changed their investment policy and value these types of floating higher or this period can't be used to describe a pattern.

The second conclusion we draw is that the remaining voting power that the private equity company retains after the exit on the stock market does not have any effect on the floated company's economic development. We could not find a common pattern suggesting that among our investigated sample. That would indicate that the close contact and management a single owner have don't give any effect when the company was floated and sold off. It could also indicate that the changes the private equity firm has made remains within the company even after the floating and when the private equity company has left the company. When it comes to stock performance the explanation could be that the market don't care how owns the company as long the company performance well and gives the investors returns in form of increasing stock price and dividends.

5.1 Future studies

Other areas that can be interesting to study include a deeper study of a single company that has been owned and is exited by a private equity company to the stock market. How has it performed before the floating and how is it performing after? This as well a deeper study of how the private equity companies act after they have existed one of their company's to the stock exchange. What is their strategy? One has to realise that with the lack of information provided by the private equity companies, it is difficult to examine what happens to a company in between the buyout process and the floating. On several occasions, private equity companies sell companies to other private equity firms with little or no information regarding the sale provided to the public. It would, however, be very interesting to study the decision making process and the valuation process before a private equity company decides to do a buyout of a company.

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