The Leverage Buyout process in Private equity.
- A theoretical exploration and comparison.
Acknowledgement:

I would like to thank the following people in making this thesis possible. A big thanks to the three interviewed Niels Stidsen at Deloitte, Søren West at Axcčl, and Mikael Gillsmark at FIH, as they through their time and answers made this thesis possible. Secondly, I would like to thank my family as they have supported me in this research process, and in the decision of going abroad. A lovely and deeply gratitude to my mom, especially who has been so patient giving me both support and guidance, when I know that other and far more important things has been on her mind. Further I would like to thanks my friends and fellows students as they tolerantly have listen to my discussions and given me feedback keeping the process going, and for making me smile when things looked difficult.

Claus Walther Bruun
2nd of May 2007, Umeå
PREFACE

This thesis has been changed quite extensively from the original version based on the feedback I received at the opposition. Primarily the structure have been changed as I had decided to construct and write a thesis as the criteria is in Copenhagen with the expectation of it being similar to the criteria and expectations at USBE. Unfortunately, it appeared that the weigh the different parts is given is quite different. I have therefore put more emphasis on the methodology and the motivation for my approach, than what appeared in the first version. I have not changed anything in regards to the content, research or the conclusions, and it is identically to the previous version.

In addition to these major changes, parts have been relocated and mistakes and misunderstandings fixed to secure a better readability and understanding of the thesis.

I hope that these improvements will benefit for the interest and enjoyment in reading this thesis.

Claus Bruun
Copenhagen 21st of May 2007
ABSTRACT

The Private equity industry is receiving a lot of attention in the daily news. The Private equity firms are acquiring other companies through a Leverage buyout transaction (LBO). The ownership period is short with an average ownership of five to seven years. The business strategy of the PE firms is only focusing on generating the highest possible profit in a resale over this period. The PE firms’ target companies are companies they think have potential to grow or improve under their management. In the daily press these improvements is often associated with cost-cutting to improve efficiency (Mills 2006).

This business strategy seems to be contradicting general Merger and Acquisition motives defined in theory, as the theories are mainly focusing on long term integration and achieving synergies. Additionally, the focus on profit should lead one to believe that PE firms are highly focused on the financial aspects of the acquired company, hence heavily relying on financial valuation methods. These naïve conditions have lead to this research.

Theorists argue that an acquisition is a homogenous process where every step in the process affects the final outcome. Nevertheless most research in merger and acquisitions often focus on integration and synergies of the post-deal. These theories often neglect the more basic financial criteria that have to be met for the acquisition to be feasible in the first place. Other schools of theories are focused on the financial valuation of an LBO and the financing of it, excluding other aspects than financial.

The purpose of this thesis will be, from an academic point of view, to explain the transaction process of an LBO leading the way for the final acquisition by PE firms. This will be facilitated by drawing from and combing the more general Merger and Acquisition process theory with the more financial valuation theory.

A holistic framework is created, based on and by combining Haspeslagh & Jemison’s (1991) process model and the Watson Wyatt Deal Flow Model in (Galpin & Herndon 2000), this created framework identifies, where in the LBO process the valuation and due diligence takes place. The framework aims at identifying and explaining from an academic point of view, how the transaction process is constructed. Through this framework it will be evident what methods are attributed, by scholars, to the financial valuation in regard to a successive outcome. The created framework will be compared to the qualitative data collected through interviews with professionals from the industry. It will with an explorative angle be tried proven, whether the created framework has any explanatory value, relating theory perspectives with the practical LBO transaction as seen in the examples.

Based on the research and the findings, conclusions are made. It is apparent that the accepted general Merger and Acquisition theory is not fully applicable with the actual LBO transaction as identified in this research process, and that the methods used for valuation, is not utilized in the same manor as the theorist predict.
“Once you buy a company, you are married. You are married to that company. It’s a lot harder to sell a company than it is to buy a company. People always call and congratulate us when we buy a company. I say, “Look don’t congratulate us when we buy a company, congratulate us when we sell it. Because a fool can overpay and buy a company, as long money will last to buy it.” Our job really begins the day we buy the company, and we start working with the management, we start working with where the company is headed.”

Henry R. Kravis
Financier and Investor
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1 INTRODUCTION

In this part of the thesis it is motivated why the author has found this topic interesting and why the topic is important to research from an academic and a professional viewpoint. Further it will be illustrated how the research is conducted.

1.1 Background

A Merger and Acquisition (M&A) is the term used to define the transaction between two companies, where one acquires the other or where the companies merge into one. Companies engage in M&A for many reasons; the defining motive is nevertheless basically that the company will benefit from it either financially, or competitive vise. The strategic decision for making an M&A transaction¹ can among others be growth, cost savings, entry on new markets, access to technology, elimination of competitor, favorable offer (Sherman & Hart 2006).

Leverage buyout (LBO) is an acquisition where the capital used for the acquisition is being financed through debt (Olsen 2003). A buyout or leverage buyout is when one or few investors buy the share majority of a company to gain control of it, and then in the process privatizes the company by subtracting it from the public market.

An LBO has in recent years often been associated with Private equity (PE) and their funds² created solely for acquiring companies. The PE firms acquire companies with the objective of making a profit by a resale of the company. The profit is secured by improving and developing the company, making it more valuable, with in a short time horizon (three to five years). A major factor making this process possible is the financing terms of the acquisition, and the management of the target company.

When PE facilitates an LBO acquisition it is important that an accurate valuation is performed and that the right drivers for future value creation are identified. By utilizing the identified theories in a created framework, which is a combination of theories and valuation methods, it is tried seen evaluated and which financial factors are motivating, supporting and clarifying the decision making of a “buy/ no buy” of the target company. The result of this research creates the foundation for a framework that supports this academic work and the readability of the thesis.

The first LBOs were executed just after World War II. Up to the 1980ies LBOs were just seen as an obscure way of financing acquisitions (Olsen 2003), mainly due to their much high debt to equity ratios. An LBO acquisition, as we know it today, had its entry in the beginning of the 1980s with four deals with a total value of $1.7 billion (Olsen 2003). In the last decade there has been an enormous growth in total number of deals from 2702 in 1997 to a total of 50055 in 2006³.

A few years back large targets seemed impossible to acquire due to the size and price. Nonetheless as access to capital, through financing and borrowing has become easier due to the

¹ Transaction is used from this point forward as the definition of an M&A deal. However the term describes the whole process, from initiation to closure.
² Fund is a pool of money that the PE firm has been given control of through a Silent Partnership from investors, and partners.
³ World historic numbers of M&A and Value Appendix 9.6 source Zephyr database
economical growth in the world. Financial markets have seen an extensive amount of free capital and low interest rates making the competition for targets more fierce; making investors and lenders taking higher risks (Olsen 2003). These factors have made the potential targets larger in size and more expensive, as financing have become easier. The increased competition has further lead to objectives being others than a quick profit with a high return (40-50%) (Rosenbush 2006).

As the size and value of LBO acquisitions have increased, it has received increasingly more attention. In Denmark the LBO acquisitions of the former state owned telecommunication company TDC for $15.6 billion\textsuperscript{4}, the world’s largest service provider ISS for $3.6 billion\textsuperscript{5}, and the security company Falck for $950 million\textsuperscript{6} have received tremendous attention from journalists, researchers, analysts, the government and in the end from the public. The primary reason is the way in which these acquisitions are financed as to the used of tax shield to finance the acquisitions.(Børsen 4\textsuperscript{th} of April, 21\textsuperscript{st} of March). As the deals tends to get increasingly larger, the impact they have on industries, market, countries and employees increase as well, hence they receive more and more attention from researchers, scholars, theorists, authors and in the end from the public.

As LBOs have become increasingly more common in the last years one would expect that plenty of research concerning the topic existed, this is although not the case. PE has gotten little attention from academics (Fenn et al. 1997), which might be explained by the difficulties in getting access to detailed information\textsuperscript{7}. However it has become clear that the LBO transaction appears to be acknowledged as a unique way of financing an acquisition, hence it seems like academics have accepted that LBOs belong to the more general M&A theories and that unique LBO theories identifying and illustrating the process do not exist. This however is not discussed or motivated in by any scholar, hence the importance of this research.

The author’s interest in this topic and what the initial curiosity arose from, was how the short time horizon and the apparently more emphasis on financial aspects from PE firms, would align with the more sustainable and long term perspectives of general M&A theories.

Based on the public assumption that the financial focus is crucial for the success of a PE facilitated LBO, the financial valuation methods often mentioned in relation with LBOs have been identified. These methods have been connected and combined to the general M&A theories in the research, through a “created framework”. This is done to secure a holistic and objective research, that identify the whole LBO process, as identified important by academics, from both the general M&A theories and financial valuation theories, and that it explain the process from a theoretical point of view.

As this research for the arguments stated above is somewhat belonging and affected both by general M&A theory and financial valuation theory, it is for the validity and transferability to reality compared to some illustrative samples of how an LBO process is described executed by industry professionals.

\textsuperscript{4} Zephyr research database  
\textsuperscript{5} Ibid  
\textsuperscript{6} Ibid  
\textsuperscript{7} PE firms do not follow normal disclosure legislation, as they are not public listed companies.
1.2 Research objective

As outlined above, it appears that the academic world and the rest of the world’s perceptions of an LBO process vary. Based on existing knowledge acquired from my academic education and from researching academic publications and books, it has caught my attention that much research has the focal point on culture and integration of an M&A (Risberg 2003, Napier 2001, Haspeslagh & Jemison 1991). This is in contrast to the angles taken in the public press where it appears that PE firms acquire large corporations solely based on a financial opportunistic behavior, greed has being mentioned in this relation of a capital gain (Olsen 2003), supported by Trumbull (2006), who states that: “…deals are doing more for the acquirers than for the economy at large…”

The existing M&A theory has defined the process of an M&A, hence how an LBO process is conducted. The focus of this research is therefore to examine how the existing theories can be utilized to explain the LBO process leading the way for the actual deal. This research is exploring the theories identified for defining and outlining an actual LBO process.

The aim of this research is to examine the process leading the way for an LBO acquisition. This will be addressed from an academic angle, hence the theories explanatory effect on the process. It has been important to get a broad understanding of M&As and PE firms to secure the fundamental understanding of the area. Because of this broad scope and the abstract focus, the development of the methodology is important in securing the further research.

The identified theoretical perspectives are combined in a “created framework” to be able to illustrate and apply them as theorist it is identified by the author to secure best fit, this will then be compared to some illustrative examples based on data and interviews of industry professionals, to see whether the theoretical perspective on the LBO process have any value in outlining the process.

The importance of this research is that normal M&As have longer time horizons and other objectives motivating the engagement of the M&A transaction. The common idea concerning PE executed LBO acquisitions are very short termed and with other objectives and motivations than the normal M&A. It is therefore interesting to investigate to what extend it is possible for the existing theories to explain the LBO process.

As PE executed LBOs have high emphasis on the financial valuation, but on the other hand is said to follow more sustainable and general M&A theories, it appears that for the explanatory value both theoretical perspectives have to be utilized to identify the LBO process. The general M&A theory belongs to the process theory school which identifies the process and the human factors affecting an M&A, but delimitate the financial valuation. The other theory perspective is looking at the financial valuation, identifying the most accurate and reliable methods for making the valuation, without paying attention to the process and the strategic implications that might be associated with an M&A. The objective is therefore to explore the theories and see how an LBO fit within these perspectives and whether it is possible to combine the two perspectives and evaluate if the findings in this study have any explanatory value in regard to the actual LBO process, as identified in the illustrative examples, outlined by three stakeholders in the LBO transaction.

8 Trumbull (2006) page 2
9 See theory part 3.1
1.3 **Problem statement**

How well is the LBO process defined by existing M&A theory? And how well does this align with an actual LBO acquisition process?

1.4 **Delimitations**

In the academic world mergers and acquisitions are often aligned, due to the similarities in the transaction. However this research is only concerning PE firms and the valuation methods applied when examine a potential target for a Leverage buyout. Because of this focus mergers are naturally excluded from this paper, hence the research is within acquisitions. Acquisitions can be many things and also many things in relation to PE, so the scope of this research is further delimited to LBO. Within this special acquisition technique I have chosen to research the process of a transaction and especially the financial valuation (financial due diligence) of the target company and the methods applied to secure a sound base for an accurate bidding price, the concluding decision of the “buy/no buy” decision.

As will be explained further in this thesis much theoretical work defines M&As as a holistic process where individual motives can explain a M&A.

Tax as such has not been getting much attention in this study. Tax does play an important role in an LBO transaction as the tax shield is essential for the acquisition and ownership. The focus of this thesis is on the process leading to the valuation of a company, tax plays an important role, but it appears to be a mean to the end, rather than something affecting the decision of “buy/no buy”. I have seen it necessary to delimit the scope of this paper, to secure findings within certain areas, based on sound academic work. Secondly the delimitations have been made as this thesis has a physical limit.

The empirical data used for this research is all interviews conducted with Danish companies. The research have been delimited to this country do to geographical constrains, as it was believed by the research that the data collection method (interviews) were crucial, to get in-depth information, to be able identify if differences in the LBO process existed. Denmark and the Danish companies represents the LBO market fairly well as several larger LBOs have taken place here, both nationally motivated, but also international motivated. Further it is believed that the transaction is facilitated quite similar in various countries as many PE firms also invest across borders. It is therefore assumed that these companies represent a common way of conducting the LBO transaction.

In regard to the empirical data collection, one could argue that it is only the one side of the LBO process that is represented, being the PE firm, Consultancy house and Investment bank. It is though the researcher’s belief that these first of all represent an accurate and diversified picture of stakeholders in the LBO process. They were assumed to give a broader picture of the LBO process, than if it only had been PE firms. Secondly it was not intended to investigate in depth why and how the LBO process is conducted the way it is, the research objective would have been completely different. The illustrative examples are used descriptive to compare the theoretical perspective with reality, and it is the researcher’s belief that they are adequate in this way. It was early tried to get contact with an acquired company (Teladanmark) to have them outline the process. After a conversation with them, it became clear that little information could be gathered from this side benefiting the research. The reason for this is that the LBO process is only facilitated by the PE firms, and their professionals. The negotiation is of cause affected both by the PE firm and the target company, but the target company have little influence on the
pre-deal process prior to the negotiation. This part have been delimited, hence acquired companies are naturally limited as well.

1.5  **Structure for the process**

![Diagram of thesis structure and process]

As this research is heavily dependent on theory it is essential that the theory utilized is the most suitable and that enough theory have become familiar to secure this research soundness. The (Data collection) process was quite extensive and time consuming. This process lead to the (Theory) part which is central for the process, as the “created framework” as it is the outcome of the (Framework creation) process based on the work and theories identified here. However, to secure that the research two methodology parts are introduced, the (Scientific Methodology), which secures the work from an academic point and the (Practical Methodology), which secures the actual execution of the research.
As seen in the figure above the “created framework” presented in (Framework) is essential for the further research. It defines the scope of the existing theory (Theory). The “created framework” is the link between the theory and the practical approach, identified in (Interview/ Cases) and (Empirical research) parts.

An important element in the research is the (Academic perspective), it is the process where the identified theory is implemented in the created framework (Framework). This creates a common ground, which makes it possible to relate the Empirical findings with the theoretical perspective, it is done in the (Analysis/verification) process. The result of this is presented in the (Empirical Analysis) where it is be analyzed whether theory and practice align. Based on the findings, it appeared that the theory and practice does not align completely, a “new framework” is created in the (New Framework Creation) process. In the (Conclusion) part all the findings and recommendations are summarized.

To see if the research has any validity, the research conclusions are compared to the (Problem statement), which is done in the (Verification of research), as presented in the Credibility Criteria part.

1.6 Disposition
Chapter 1 Introduction: In this part is outlined the environment in which this research is conducted. Further is it motivated what the Problem statement is and why the research has any academic value. The delimitation made for conducting this research is also discussed.

Chapter 2 Methodology: Here is the methodology outlined, which defines this academic research. Further is presented and discussed why this topic is in my interest, and how this might affect the outcome. It is described how the process and the approach utilized are executed. In addition are the sources and the data collection reflected as to secure the work.

Chapter 3 Theory: This chapter is first of all structure in the same way as an LBO transaction is performed. The reason for this is, that it better shows the interrelation between the different processes. Secondly all the existing theory both general M&A theory and Valuation theory, that is utilized for creating the “created framework” and describing an LBO transaction is defined and presented.

Chapter 4 Framework: Despite this is closely related and builds on the previous Theory chapter I have chosen to present it seperatly to highlight the importance to the research.

Chapter 5 Course of action: in this part is defined, motivated and discussed how the primary sources (interviews) have been utilized and processed to secure the research.

Chapter 6 Illustrative examples: The chapter is similar to the previous, structured as an LBO transaction. It is though structured as the professionals identify the transaction. It summarizes the interviews and the background information into different cases which illustrates different entities in the LBO transaction.

Chapter 7 Empirical research: As the two previous chapters, this is also structured as an LBO transaction. The chapter relates the empirical findings both from interviews and from data to the theoretical “created framework”.

Chapter 8 Analysis and discussion: This chapter combines the Theory with Empirical research to see if the theory has any explanatory value. Based on the findings a new and more accurate framework is created, discussed and presented.

Chapter 9 Conclusion: This chapter outlines the findings and discusses the circumstances leading to them. In addition is further research proposed.

Chapter 10 Credibility Criteria: In here is a self reflection presented - if the research has achieved its goal and if the research conducted is valid and reliable. It will here be discussed if any shortcoming have been identified looking back at the thesis process.
2 METHODOLOGY

In this chapter will the scientific argumentation be outlined for the conduction of this research. The decisions and motivation for securing a sound academic work in the thesis will be illustrated in regard to literature and data collection. It will further be illustrated how the methodology, have supported the process, secured findings and verifying the conclusions. At the same time the methodology is used for presenting the research as logical and reader friendly as possible.

2.1 Preconceptions

For this research to have any academic value, it is crucial that the research is aware of his objectivity in relation to the research and the findings. This has a direct impact on my research as I am comparing two different perspectives on a topic, the academic view and the professional view. If I were to take part, intentionally or unintentionally, the research would appear to be biased, as prejudice in regard to theories, persons etc. could affect the conclusions.

I as a business student have been taught in courses concerning business research and methodology and financial and strategic courses related to the research topic. I have a bachelor in Business Administration and Computer science from Copenhagen Business school. My master degrees have been with the aim of International Business (Copenhagen Business School) and Master in Accounting and Finance (Umeå School of Business and Economics). Through these courses I have acquired knowledge about M&A, PE and LBOs, which in the end motivated me to write my thesis within this business area. Secondly I have in my research and methodology classes acquired knowledge which has helped me in structuring and conducting this research.

2.2 Topic of research

In the business world today the PE and their large acquisitions is not executed unnoticed. Being a business student taking classes in business strategy and financing, it is a topic of interest and it is often discussed among by fellow students.

The reason why acquisitions, and buyouts especially have caught my attention is the magnitude and prices of these deals, and the impact they have among other on markets, industries, employees. An example is the LBO of the previously government owned telecommunication company (TeleDanmark) in Denmark. It was acquired by a PE fund for $15.6 billion. This LBO received an extreme amount of interest from the public, do to its affect on the country, market, employees. TeleDanmark is close to have monopoly status in Denmark on the telecommunication market.

Secondly, it is interesting how companies get to the stage where they are able to valuate another company, and what factors are mentioned to be of importance in this valuation, securing a profitable outcome in the short holding period of the PE firms.

These more everyday encounters with the topic have grown my interest in the topic. In extension to this, are the additional knowledge about M&As and valuation and investment, that I have acquired through courses facilitated by the Business schools where I am enrolled in Master Programs. The topic is further aligned with the scope of my two Master education Programs in International Business and Accounting and Finance. This thesis is aimed at the

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10 see Appendix 4
11 Copenhagen Business School (2005-2007)
Accounting and Finance program, and is mainly facilitated by the knowledge acquired in this program, although it will be supported by the knowledge I have acquired at my International Business degree.

I am aware that research previous has been conducted within the M&A field of business. I have nonetheless noticed that little research in an LBO process has been executed, hence I believe that this research is unique and that it can benefit both academics and professionals, as it appears that LBOs needs to be explained both by general M&A theory but just as much through financial valuation theory. This research will illustrate for academics how LBOs fit with existing theory and for professionals it will show how and what factors academics think have importance in the process. The research is though mainly intended as an explorative study to see how well existing theory explain the pre-deal LBO process.

2.3 Research design
Is the master plan that the research follows to identify methods and procedures made for collecting and gathering information on which the analysis and conclusions are based upon (Zikmund, 2003 page 65). The research design should clarify why the research should be conducted (Remenyi et al. 1998).

As this research explores whether or not the existing theories identified and connected into a framework can explain the actual transaction of an LBO, the research philosophy is Positivistic. The focus of the research is first of all exploring existing theories secondly it combines theory with standardized processes as illustrated in the companies. The research is therefore hardly affected by the social interpretations or bias’, which supports the positivistic philosophy (Saunders et al., 2003 page 83). In positivism the research is defined as an objective interpreter (Remenyi et al., 1998 page 33). It is tried remaining as objective as possible, which is aligned with the theorist perspective taken (Remenyi et al. 1998, page 31). This both in regards to the theory and the collected data, it is done to secure that the academic research from a theoretical view describe the best way possible of the LBO process. Secondly it is done to facilitate little affect on the empirical data collected.

In contrast the research could have been conducted in a phenomenological philosophy perspective. This philosophy advocates for the direct experience, where behavior is determined by the situation (Remenyi et al. 1998 page 34), hence a more sociological approach. This philosophy is subdivided by Saunders et al (2003) in Interprevism and Realism. If the origin of the research had to be to understand a unique situation and trying to grasp a holistic picture of that individual situation, it would have been Interpretative philosophy, where it is believe to be to complex to be explained by a single theory. Basically to understand what is happing in the situation(Gadamar, 1975 page 110). This is not aligned with this research. Further it could be assumed that reality exist without being social depended, but rather that people are affected by underlying factors which affect people, this would have made the research Realistic. This approach has little value in regard to the research topic, as it is believe that the process is highly controlled and structured by the stakeholders.

When exploring the theory by first identify the appropriate theories, to see how they explain the LBO process the research takes an ontological approach. As the emphasis is to explain how the LBO process is facilitated. It is crucial for the research to understand the theoretical and the real process to validate the research, this by taking an objective stance to the data. On the other

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12 The Business School at Umeå University (2006-2007)
hand if the focus had been on understanding the LBO process, to figure out why, the research would have had a more epistemological approach (Andersen, 1999 page 13). This would also have been a more sociological approach as the conclusion would have been uniquely specified for the individual situation. As the research identifies some descriptive real processes and tries to verifying the explored theory from a theoretical and objective stance the philosophy is highly positivistic.

2.4 Research approach

When conducting the research it is essential that the approach applied for the further research is defined. This is often defined as deductive or inductive. The approach utilized tries to explain, based on existing theory, how the LBO process is facilitated. This is later compared with reality for identifying different perspectives on the theory. Consequently as the created framework is based on existing theory and it is compare to reality the approach is deductive. In contrast if data were collected trying to outline the LBO process, creating an understanding of the process, the approach would have been inductive. The use of this approach is natural since it is closely related to the Positivism (Saunders et al. 2003). The use of altering the models into the framework is a classic example of existing theory being used as explanatory factors.

The initial idea was to explore the existing theory and combine that with a descriptive illustration of the real world, to see whether the theories have any explanatory value. As the motive or the initial thoughts for this research was an assessment of establish theory used for outlining the LBO process, the most applicable strategy is the Grounded theory Glaser and Strauss (1967). However as outlined in (Remenyi et al 1998, and in Saunders et al. 2003), this is highly aligned with a inductive approach where it is possible to skip back and forth between the theory development and the respondents, securing the development of the theory building or framework creation. The aim of this research is not to examine whether and why stakeholders in the LBO process affect the process, but it is rather to make an objective illustration of the real world, creating a perspective of how aligned theory really is with reality. Because of this Case studies could have been used, but they would be too comprehensive, as a lot of additional and excess information would have to be collected. The chosen strategy to collect data is an In-depth survey (Remenyi et al. 1998 page 55), as outlined by Saunders et al. (2003) page 92, this strategy is often associated with deductive approaches.

The benefit of using in-depth surveys is that a large amount of information is gathered, from a relatively small number of informants. Secondly by using survey less unique information is gathered than in the case study (Saunders et al. 2003 page 92). As it is not regular survey strategy, where questionnaires are often used (Saunders et al. 2003 page 92), but rather in-depth surveys interviews are more appropriate (Remenyi et al 1998, page 55). When conducting the interviews in in-depth surveys it is beneficial to use semi-structured interviews (Remenyi et al. 1998, page 55). This because it supports the research as both more quantitative information, useful for comparison, and more qualitative information, use for in-depth understanding, can be gather through this data collection approach (Remenyi et al 1998 page 55). The data collection technique for collecting empirical data for this research have been carried out qualitatively, to secure individual and in-depth information, which could illustrate differences in the LBO process. Although some of the questions used in the interviews have been quantitative, for securing the comparability, between the illustrative examples. According to Remenyi et al (1998) page 55 the result of in-depth survey is rich data and insight into the company. This would create a solid foundation of the illustrative examples of the real LBO process as conducted by stakeholders for creating perspective on the theories.
2.5 Perspective

The perspective chosen for this research is to contribute to the academic and theoretical view of M&A and especially the LBO process for increasing the understanding of this unique acquisition technique. It is therefore a theorist perspective (Remenyi et al. 1998, page 31). The research takes its beginning in identifying the most acknowledge and complete theories within this area. To be able to identify and concluded on the finding, to see whether they have any explanatory value, interviews with stakeholders in an LBO process have been carried out. This empirical information created the foundation for the illustrative samples used to compare the utilized theory to the real world. The perspective in this thesis is consequently academic.

2.6 Data collection

The literature collection was mainly conducted in the early part of the process as it was used to create the general understanding of the topic. In this research two primary sources of data have been used: literature and numeric data, and interviews. The research is heavily dependent on both kinds of data. To the extent possible, it has been tried getting access to the primary source. This has been done for two reasons, first to secure reliability, hence sound academic work. Secondly, since it is a rational way to acquire additional information about the topic, securing that the theories relied upon is utilized and discussed as objectively as possible.

6.2.1 Secondary data

To find papers, books and journals the library at Copenhagen Business School has been a great help. The data collection has primarily been done by using their online web catalog of the library holdings. Secondly, the experience librarians have been a great help, as they were often able to find sources which were not directly accessible. Through the Copenhagen Business School’s Library access to various academic resource databases were possible, most of these were used in my search for literature. This was done by using the cross-reference tool Journals A-Z, which is an internal system that allows for searching several academic journal databases simultaneous. However the link often ended in the Business Source Complete database, therefore most articles, publications, and research papers are sourced from this database directly.

2.6.1.1 Academic research papers

The use of academic publications was mainly to acquire knowledge and to identify existing theory applicable for the research. Secondly they were used to validate or reject the arguments stated in similar publications. I have used three broadly defined research areas:

- **M&A**, as the more holistic process oriented theory.
- **Valuation and Due diligence**, has been applied utilizing methods and approaches, to give a more detailed picture and for justifying the “buy/ no buy” decision.
- **PE**, for creating to environment and define the entities of which this study’s focus.

These areas were the starting points for this research, mainly because of the implication in finding articles that interlink the different focus areas, as research just seem to focus on the individual areas. For this reason was the research in the beginning conducted separately in the individual areas.

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13 For words used to find sources, see Appendix 1
14 Ibid
The research papers have been used as the main source as they supply different perspectives to the subject and they often are making cross references and extending each other. The research papers were all accessed through academic channels or by other means safe or trusted sources. However, it has been important to keep in mind that some research papers are actual grey hence the reliability and objectivity can be discussed (see grey papers part 2.6.1.3).

2.6.1.2 Books
The books are generally a little more thoroughly in their analyses and explanations. Two models have been applied, which both originated from books. A lot of books have been written in the subject of M&A, but few of them research more than a single subject. Secondly, they only have small chapters concerning LBOs. It seems as some of the schools of theory are more acknowledge, as they are referred to more often in academic publications. A big part of the books sourced in the research are mainly from courses in the Master Programs in Accounting and Finance and International Business, others have been found on the library at Copenhagen Business School. For the same reason it was possible to utilize knowledge and competences acquired in my degrees.

2.6.1.3 Grey papers
These papers have been gathered from various corporations’ internet pages. The ones there were mostly aligned with the topic appeared to be from investment banks (MorganStanley) and consultancy houses (PriceWaterHouse, Deloitte). These publications have been read quite critical as they often appear to be promoting the work of the banks, consultant houses or whoever has published them.

Some articles were not reliable, as references and sources were missing, so they were disqualified as sources. Other used their own internal empirical research without discussing it, which overall made the conclusions unreliable, as the numbers could be altered to support their findings and conclusions. On the other hand they brought up some new insight, and ideas in regard to this research, and therefore helped keeping the process going, and in creating some new ideas to the research.

2.6.1.4 Newspaper articles
These were generally used to get the latest information on empirical data. Often these are considered secondary data, as their information has to be supported/sourced to be justified and for securing the accuracy. However the data in these articles are often sourced to acknowledge sources. It is the journalist’s interpretation of the information that makes the articles unreliable.

In this research it has been tried avoided, using any secondary data processing, but rather use the data as stated in the articles. All articles sources are from major and acknowledge publication houses.

Contact to Dealogic, the company most often sourced was made. Unfortunately they were not able to support with any data.

2.6.1.5 Databases
Accurate data on price sizes, annual transactions, and main industries concerning PE have been acquired through Zephyr business research database. This database was accessible through the Copenhagen Business School Library only. The database is quite extensive and it was

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15 Process theory (Haspeslagh & Jemison 1991)’s model and the WatsonWyatt Deal Flow Model
complicated to define criteria which made reliable extractions possible. It was a time consuming process, but it is believed to be correct.

The raw data have not been altered in any ways, but are simply used for describing the development of the PE industry.

The Zephyr database relies on same information as the more acknowledge Thomson Research Database, which was also accessible but more difficult to use. The most cited M&A research database is the Dealogic. It was though impossible to get access to that database, as the price of access was £15000, which was not acceptable for either the author or Copenhagen Business School.

In addition little use of direct searching in www.cnnmoney.com, www.google.com and www.finance.yahoo.com was used to get access to articles and data.

6.2.2 Primary data
The other major source channels were the industry professionals, as they supplied with extensive amount of information, which hardly would have been accessible otherwise. These professionals gave time for some indebt and fairly broad interviews regarding this research topic, allowing for unique and reliable qualitative information.

2.6.2.1 Interviews
The focus of this research is to investigate if the academic and professionals view on the LBO transaction aligns. Getting access to empirical information turned out to be quite difficult as little qualitative and quantitative research has been made in the area. The approach chosen for acquiring the needed information was interviews with industry professionals. The interviews have been used to support the research and the conclusions as they allowed for a more realistic picture of the actual LBO transaction, which have made a comparison with the academic perspective possible. (See also part 8.1.1)

2.7 Use of In-depth surveys
The major reason for presenting the data collected in illustrative examples, is basically that it supports the research approach where the theory is explored as to see its validity in relation to the practical/realistic perspective (Yin 1994: cited in Saunders et al. 2003 page 392).

As the data is collected and presented in individual examples, it is easier to make the comparison with theory, as it secures for a common ground, both between theory and reality, but also differences between the different examples will become apparent. In addition allows for allows for combining the empirical data (interviews and collected data), which gives this part of the research more weight in relation to the theoretical part of the research. By introducing examples the arguments become more objective, because of the more objective presentation.

2.8 Why this methodology is good
By structuring the research following this methodology it is possible to identify the most appropriate theories within M&A and valuation. The most applicable theories are implemented to secure the soundness of the research. Based on the theories it is further identified what

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16 quote: Librarian at Copenhagen Business School Library
17 For further information regarding the interviews please see part 5
academics believes to be of importance in the LBO transaction. By following the structure and conducting research as stated here, the research and the findings will be sound.

The theory and valuation methods identified and utilized in this research for defining an LBO transaction are essential. When following this methodology and by being aware of the limitations, this research will make it possible to give an objective conclusion, on whether the created framework has any explanatory effect.
3 THEORY

M&As have always been a topic receiving a lot of attention, the high bidding prices, the impact they have on the employees, industries, markets, competition etc.. For the same reason it has caught many scholars interest, which explains why research have been carried out with such different perspectives and approaches, when trying to understand the motives and rationales behind M&As. In this part the scope of LBO is tried identified, and further is it aligned with theories and methods used to explain the factors affecting the “buy/no buy”.

3.1 The evolution of M&A theory

The literature studying M&A has changed its field of interest during the years (Haspeslagh & Jemison 1991). From the beginning with an emphasis on the financial aspects, both in the valuation and in regard to the benefits achieved from an M&A. Later it has evolved focusing on strategic management, as a defining factor for the success of an M&A. In the last period the center of research has become the integration of individuals and cultures offset by the M&A.

As the field of research is concerning the financial aspects of the valuation in an acquisition, the research appears to be highly aligned with the first two stages in the research evolution of M&As.

An extensive amount of time has been dedicated for the searching for academic articles, as the interest of financial and strategic valuation and its effects on the final outcome has decreased over the last decades. It has therefore been difficult to find material which is up to date. It has nonetheless been managed to locate material and data supporting the further research, and in this process the most influential and acknowledged work has been utilized to secure the further work.

Through the years scholars and theorists have tried to identify and evaluate the reasons and motives for companies to acquire other companies. The conclusions have spanned from financial objectives, capturing value, to more managerial objectives, achieve synergies hence create value.

According to Haspeslagh & Jamison (1991) the theorists researching M&As can be categorized in some broad schools of thoughts. This is:

- Capital market school
- Strategy school
- Organizational behavior school
- Process school, (a combination of Strategy- and Organizational behavior school)

Here stated in the academic evolitional path of M&A. In addition it is interesting that the focus of research has evolved through the process in identical way as an actual M&A process is carried out. From the initial basic financial focus to the strategic fit and ending at the integration phase. This classification is later supported by Larsson & Fienkelstein (1999), who argues that M&A has been looked at through various lenses. They name similar categories as:
1: **Field of strategic management**: Method of diversification, and performance of the M&A. How an M&A can be executed.

2: **Economic motives**: Economy of scale, market power, and accounting based motives

3: **Finance**: Look at performance, by stock market measures

4: **Organizational research**: The post-integration process

5: **Human Resource Management**: The psychological impact on employees.

Haspeslagh & Jemison (1991) define the different schools quite comprehensive.

The **Capital market school** took the more financial approach when researching M&As. The main objective was to see if any financial value were obtained from engaging in an M&A and who benefited from the deal. The general conclusion of this research was that the shareholders of the target company benefited financially, and the acquirer obtained none or little financial profit from the acquisition.

The **Strategic school** studied how the acquisition affected the individual companies involved in the process. Within this category of thoughts two focuses can be identified, one group looked at the performance of the acquisition, what synergies were captured by engaging in the M&A. The other group looked at the M&A process in itself. They studied what affected the performance of the actual M&A process and the succession or failure based on that.

The later **Organizational behavior school** looked at the impact of an M&A at the individual and the organization within the companies affected by the deal. These two implications of the M&A have been examined from a Human Resource Management group of thoughts and a group of Cultural Theorists.

Finally the **Process school** which combines the latter two schools of thoughts, states that one has to focus at the whole process of the acquisition to secure a successful outcome hence one cannot just look at the individual phase of the process. This is basically a more holistic approach to the M&A. They argue that everything done in the process will in the end have an influence on the final outcome, which is a very rational approach.

It is not possible to examine all of this in a single academic publication. Many scholars have seen it necessary to delimit the pre-stages of the M&A to be able to keep focus of their post-deal research and vice versa. Despite that the research is within the scope of the Process school of thought, where the whole process is said to affect the motives and the outcome. This trend with the implications of delimitating or neglecting the valuation is the incentive for this further research, even though it has been necessary to utilize some of these theories to perform the research.

During the last decade, in the last evolution of M&A theories, a trend seems to be common. Some central parts of the M&A process have been neglected and assume correct and reliable, for the scholars to be able to argue and justify their research and conclusions (Kissin & Herrera 1990; Larsson & Finkelstein 1999). Despite that, as mentioned above, they conduct research within the process school. The concern is that the due diligence and the valuation process are neglected or assumed correct, making the company beneficial to acquire, it is only assumed necessary to look at other factors affecting the outcome of the transaction. This delimitation is interesting as it is acknowledged within the same school of theory that the process has to be seen holistic and interlinked (Haspeslagh & Jemison 1991; Larsson & Finkelstein 1999; Risberg 2003).
“Merger and acquisitions are complex events in organizational life for which we have incomplete understanding, in part because researchers have tended to consider only partial explanations of them”\textsuperscript{18}.

“M&As are clearly multifaceted phenomena that are poorly understood through incomplete and partial application of theories from separate fields”\textsuperscript{19}.

This is especially obvious in later publications where the importance of the pre-deal phase is stated, but few scholars actually pay attention to this part of the process (Hendriks 2000; Angwin 2001; Conway & Rouse 2002). This might be rational explained, as the later part of the process is not likely to happen if the transaction is not executed in the first place. However this rationale or delimitation is missing in the listed publications (Galpin & Herndon 2000; Kissin & Herrera 1990; Markides & Oyon 1998), where the focus is on the later post-process integration. They argue the integration’s number one importance of the final outcome. Despite the deal would never happen if the target had not been financial sound. This is a general limitation in many of the theories, as few publications actually examine the impact of the due diligence processes and the valuation on the final outcome. They state the importance and outline the methods, but few conclusions are made. This goes in both process theories and in financial valuation research. Likewise many do not seem to reflect about the financial valuation in relation to their research on acquisitions. Regular financial valuation is also treated as a separate entity, and it is rarely connected with the more general M&A school of theory (Olsen 2003; Kaufold & Inselbag 1998), where the more human aspects is weighted important (Risberg 2003, Haspeslagh & Jemison 1991). The valuation methods often applied belongs to another theory approach. The valuation methods are, if applied, often already acknowledged and little discussion of the various methods is done.

For these reasons it has been necessary - in this research - to tie various theories together to be able to examine how the research topic aligns with the theories as the more general and holistic theories are not applicable for the due diligence process, and the due diligence theories are not suitable for explaining the final outcome. This leads to the importance of this research as the theories are so dispersed, how is their explanatory effect together and in regard to the real world.

When combing these more strategic theories with the more financial theories of the actual valuation of the company it again becomes clear, that these two parts of the transaction rarely are researched in relation, despite the argument of the importance in a holistic approach.

3.2 Merger and Acquisition motives

It is argued by Haspeslagh & Jemison (1991) that there are different incentives for managers to execute an acquisition; this can either be for a strategic purpose or because of opportunistic behavior. The strategic purpose is a well considered M&A which is highly aligned with the future business strategy of the company. It has been considered why, how and when. In contrast if a M&A is based on a more opportunistic behavior, it is often executed because the management have some personal benefits by making the transaction, hence they have less emphasis on the larger business strategy and the benefit to the company as a whole (further discussed in part 3.3.1). However, it is also stated that it is often a combination of the two that justifies the acquisition. This statement is aligned with a logic rationale that by doing a proper

\textsuperscript{18} Larsson & Finkelstein (1999), page 1

\textsuperscript{19} Larsson & Finkelstein (1999), page 2
analysis prior to the acquisition, risk will be minimized, but risk cannot be eliminated completely, hence the opportunistic behavior.

As one reads through the various theories it becomes clear that M&As are affected by various factors. These are micro economic-, macro economic-, human-, legislation factors etc. For the same reasons the research conducted in the field has been quite dispersed. Often the research of M&As is divided in researching the pre-deal or the post-deal processes.

This subdivision is related to the theory development, where it has become clear that the more knowledge and insight there is in the field, the more complex it becomes. It is supported by research, as the academic world is affected by the surrounding world. Prahalad & Hamel (1994) explains, that as the world has become more global, and at the same time more aligned, the distance between different geographic areas have become smaller. Information and products spread faster, more efficient, and more reliable, making the transaction cost lesser. This has opened new opportunities for cheaper production, new markets, and increased competition for the companies and in the end an increase in the numbers of M&As. The consequence of being more aware of these factors is an increased focus on cultures, integration, and business processes (Hofstede 1993; cited by Angwin 2001).

More generic it can be said that either the acquiring company initiate the acquisition for either capturing value or creating value (Haspeslagh & Jemison, 1991, page 22). Private equity, capital funds, and hedge funds, belong to the group that initiate the acquisition for capturing value. Companies are either acquired because the price of the target company seems undervalued in relation to the future expectations, in regard to estimates or tax-benefits, trimming, optimizing, growing, issuing of debt, future profit, and asset stripping (Haspeslagh & Jemison 1991), so the overall objective is delivering additional value to the shareholders (Bradley & Korn 1984). However, an implication to this is that the value capturing is facilitated by, value creation, as the PE firms believes they can optimize the company so to speak, for a later value capturing (Haspeslagh & Jemison 1991). Creating value can be, as defined by Napier (1989), an extension acquisition, where the company engaging in an M&A transaction, is hoping to create synergies like economic of scope and scale, entry to new markets, new products, distribution network etc., which makes creating value a more sustainable strategy. All the various incentives have become topics of individual research and as the information and technology have become easier accessible over the years the topics have received increasingly attention. Angwin (2001) sums up the motives for M&A:

“motives interact and are complex rather than singular and yet, publicly, they are aimed at achieving the rational outcomes of improved performance and increased shareholder value.”

3.3 Merger and Acquistion process

The theories, researching the actual transaction process are based on the later Process school where it is argued that all processes affect the final outcome. However the process is divided into phases Marks ((1982); cited by Risberg 2003) divided the process into three phases: pre-combination, legal combination, and post-combination. Later Haspeslagh & Jemison (1991) identified four phases: idea, acquisition justification, acquisition integration and results. One has to keep in mind when applying these theories and utilizing the phases in an M&A that the phases often are interrelated and overlapping in the time perspective, hence the process

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20 See illustrative examples part 6
21 Angwin (2001) page 34
perspective, this has more extensively been discussed in the; *The evolution of M&A theory* (part 3.1).

This thesis is chosen utilized within one of these holistic process theories. As argued in the Framework (part 4) the structure of this thesis is based on Haspeslagh & Jemison (1991) process model. This model is used as it appears to be one of the more acknowledge ones, and at the same it illustrates well how the general M&A theory is identified by theorist. This comprehensive model, which is subdivided into stages, makes it easier to identify the individual processes both prior and post the transaction. It shows what factors there are affecting the final outcome.

![Figure 3: The acquisition process. (Haspeslagh & Jemison 1991)](image)

In this model it is argued that the final outcome is affected by the individual phases, and that one phase can not be neglected when looking at the full process. The acquisition process is often stated as a continuous stepwise process, however in the process theory it is argued, that what happens at every single step in the process has an influence on the success of the final acquisition.

> “The pre-acquisition decision-making process presents a variety of problems that affects not only the firm’s ability to understand the value-creating potential of an acquisition, but also its ability to achieve successful post-acquisition integration”.

By utilizing the first part of this model, the decision-making process, and delimitating the second part, it will be easier to identify some early drivers which support the management in the decision of a “buy/ no buy” decision.

### 3.3.1 Pre-deal Merger and Acquisition phase (Haspenslagh and Jemison 1991)

First a subdivision has been identified, it is the IDEA, which is where the initial naïve interest of M&A is made. It is argued that there basically are two different approaches, either the planned where it is systematic and properly analyzed and considered, or the opportunistic, where a clear strategy has not been identified. It is though stated that a “normal” acquisition lies in between these two (Napier 2001, Haspeslagh & Jemison 1991). In this phase the company weigh pros and cons in regards to how a merged or acquired company could support there strategy. When a company has been targeted, the evaluation of its soundness must be conducted. The investigation takes place in the Acquisition Justification phase.

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22 Haspeslagh & Jemison 1991, *figure 1-3 Major themes and Conclusions, page 15*
In this figure it is further illustrated how the Acquisition justification is interlinked with the actual processes in the earlier stage. As seen in the figure, if problems are identified in the decision process, they will have an influence on the outcome. Hence if issues arise they will influence the transaction.

In the model Haspeslagh & Jemison (1991) identifies some of the common problems in the Decision-making process affecting the acquisition justification. It is being argued that

**Fragmented perspectives** from the various advisors counseling in the process might blur the picture. Many analyses have to be made. They are most likely based on different models and different data, and as all of the advisors both internally and professionally have different perspectives suggesting different conclusion, it is difficult to align it all into a united valuation of the target company.

**Increasing momentum** is a factor affecting the “buy/no buy” decision. It is stated that forces accelerating the speed of the process is often stronger than those stalling it again. This is supported by the empirical evidence found by (Puranam et al. 2006) where empirical evidence shows that managers rarely walk away. Again this might be explained by the increased personal commitment from the managers. They see it as a personal endeavor, to enhance their reputation and acknowledgement (Haspeslagh & Jemison 1991). In relation to this it can be said that professional advisors are being paid more for the contract if the transaction succeeds, that if it fails (Niels, Interview), and the publicity they receive from executing a big acquisition is neither to be ignored. It is therefore important that the management is not “blinded by the thrill” (Angwin 2001).

**Ambiguous expectations** are closely related to the previous issues, management might end up disagreeing down the road when they realize that the initial objective from the other part has changed. This may lead to lack of trust, irritation, and hostility, making an acquisition almost impossible.

**Multiple motives** can distort the process. Synergies expected to be gained from the acquisition might me imaginary or optimistic valuated. These issues can make the post-integration process difficult as the objectives are not the same for the individual managers. The identified issues are of a managerial focus as they arise in the decision-making process of “buy/no buy” decision making.

This model takes a very objective stance as it tries to explain everything. It argues that the process is holistic and nothing can be neglected in the M&A process, as it has influence of the outcome. This objective stance makes it possible to identify the different phases, and it briefly
describes what they contain. This approach unfortunately makes it very generic, and some sort of superficial. It is therefore difficult to identify in this model where the valuation of the target takes place, and secondly nothing is mentioned of the most appropriate methods. For this reason, another model has been tied to this one. This is done in the part below.

3.3.2 Pre-deal acquisition process (Galpin & Herndon 2000)

An acquisition is in comparison to merger a more aggressive and direct growth strategy. Acquisitions are often motivated by a rapid access to new markets, knowledge, and technology. At the same time acquisitions secure better control of the investment, new market etc., than what would have been the case with a merger (Angwin & Savill 1997)

To identify where in the process the valuation takes place, and for improving the justification of the acquisition the Watson Wyatt Deal Flow model will be connected. This model is detailing where in the pre-deal process the valuation takes place, and simultaneous it shows if the pre-deal process is executed appropriately. This model can be used as an extension to the decision-making framework, as it mainly focuses on the pre-part of the process and is more detailed in this regard. This model - as the previous model - belongs to the process school of thoughts.

As seen in the figure the Watson Wyatt Deal Flow Model has subdivided the pre-deal part of the process into four individual phases. One has to keep in mind that it is similar to the previous framework where the phases are interrelated, despite it is presented linear, so in reality is more homogenous where several phases can be executed simultaneous (Galpin & Herndon 2000, page 18). The four first steps are used as a detailed guideline for improving the planning in the acquisition process. The last stage identifies the key activities which have to be done after the deal is signed.

The formulate stage is used for the acquiring company to secure that it, prior to the process, reflects on its objectives and its strategy, to secure that an M&A is in the interest of the company, and it therefore is the right way to proceed. The key issues in this stage of the process are: identify business strategy, set growth strategy, define acquisition criteria, and begin strategy implementation, this is support by Angwin & Savill (1997). These issues are important as mentioned earlier, when the process is on its way, as it is often difficult to stall the process again.

Next is the locate stage if the management finds, in the previous stage, that an acquisition is aligned with the objectives of the company, it can begin to look at potential targets, albeit this already often has taken place in relation to the formulation stage. When a potential target has been located the actual deal-making process can begin. It is here suggested that the company focuses on the following key activities: Identify target markets and companies, select target, issue letter of intent, develop M&A plan, and offer letter of confidentiality. As a sum up, find the strategic target, examine if value can be created through
synergies, efficiency, optimizing etc. and make sure that a structure of the further process has been made, to best secure the outcome.

The third stage **Investigate** is where the initial due diligence process relating to the target company is executed. According to (Galpin & Herndon 2000) the due diligence needs to consist of financial, operational, legal, environmental, cultural and strategic analyses. By doing this the acquiring company is improving its understanding and insight of the target company. The position for negotiation will improve, estimating accurate bidding price and assessing cultural “fit” between the two companies, so overall, if it continues to the next stage, when doing a due diligence analysis, it is trying to minimizing the risk of any surprises when acquiring the target. In addition the acquirer should summarize the findings, decide negotiation parameters and consider integration plans.

“This part of the theory has been delimited in this thesis, as the process of negotiation and integration, does not affect the initial valuation of the target company”.

The **negotiate stage** is where the actually deal takes place. In this part of the process it is important that the management of the purchasing company formulate the strategy for the final deal. This is done to minimize confusion internally and avoid disagreements with the counter part. Hence the stated key activities are: setting deal term; legal, structural, financial, secure key talent, and integration terms, and closing the deal.

The fifth stage **Integrate** concerns the implementation and planning of the integration. It is stated here that the integration phase of a deal is the total outcome of the entire process, from the due diligence to the final and total integration of the two companies.

In the previous paragraphs it has been shown how and why the chosen theories apply and have been implemented and utilized in this thesis. It has by utilizing the theories been possible to identify where the due diligence, and the actual valuation takes place, which justify the “buy/no buy” decision of a PE firm.

The next part is not theoretically in the normal sense, as it is more a sum up of theorists’ recommended due diligence procedures and analyses to improve an appropriate and accurate valuation of the target company.

### 3.3.3 Due diligence

“...due diligence should be a comprehensive analysis of the target company’s business- its strength and weaknesses- its strategic and competitive position within its industry”\(^{23}\)

Due diligence is essential for the success of the transaction, Kissin & Herrera (1990) defines it as the cornerstone. Deloitte (2004) states that due diligence is not an option it is a necessity. According to Sherman & Hart (2006) due diligence is a reality test- if what seems to be attractive on paper, is attractive in reality. The importance of the due diligence relies much upon the weight it is given, the analysis is expected to be objective and independent (Angwin 2001). The reasons for performing due diligence are many. It helps in valuation and negotiation to realize performance and operations, this to recognize and estimate future possibilities (Schweiger et al. na), or shortly: due diligence is “to confirm that the deal make sense”\(^{24}\). The due diligence can help in identifying and valuating both tangible and intangible assets. This is

\(^{23}\) Kissin and Herrera (1990)

\(^{24}\) Sherman and Hart (2006) page 65
even more an incentive for companies to make a due diligence as it minimizes risk by disclosing more information about the target. Due diligence can act as a safety, hence it is rarely a disadvantage, this proved by empirical evidence (Angwin & Savill 1997, Lajoux & Elson 2000). If proper due diligence is not executed it can have devastating consequences later in the transaction (Schweiger et al. na). A side effect of the due diligence can be the time consumption of the analyses. One has to keep in mind that it is the acquirer who decide the debt, extend and time spent on the due diligence.

If the acquiring company finds information which either lowers the value of the target company or find significant flaws and irregularities in the business or process it might end the deal (O’Reilly 2005). The due diligence gives the acquirer an enhanced insight into the target company, it basically eliminates “black holes” if executed appropriately (Angwin & Savill 1997). Likewise it can be said that empirical evidence (Angwin 2001) show that close to 50% in all transactions uses due diligence when negotiating price, creating integration plan, and gaining commercial insight. Due diligence is therefore executed to secure the reliability of the information gathered, - are you buying what you think and are you buying it at the right price?

As the world is becoming increasingly more complex, so is the due diligence analyses, hence the focus on making an accurate due diligence (Sherman & Hart 2006). When the companies then assume that the due diligence is sound and often forget to have a critical stance towards it (Angwin 2001), the outcome can be anything that what they expected. Companies simply do not pay enough attention to this part of the transaction, and therefore base the acquisition on wrongful data (Perry & Herd 2004).

As the due diligence process is a subjective approach for each company, consulting house, investment bank, PE firm etc. each company creates its own due diligence checklist. For some of these companies supplying due diligence analyses, it is their core competence, which makes it a highly protected secret, hence difficult to obtain and evaluate (Haspeslagh & Jemison 1991, Sherman & Hart 2006).

It is intended to secure the most complete picture of the target company. The factors being valued in the due diligence is highly affected by, external factors, like national culture, company culture, national legislation, political risk, competition etc. (Angwin 2001).

Some scholars have identified general focus areas which are advocated as being the main points in the due diligence. Sherman and Hart (2006) divides the due diligence into two sub areas Legal and strategic. This has further been subdivided by other scholars (Lajoux & Elson 2000) identifies Financial statement analysis, Management and operations review, Legal compliance review, and document and transaction review. Deloitte (2004) defines four areas: Commercial/market, financial, tax, and legal. They each argue that this is the minimum of due diligence a company must do to secure proper and accurate information. These are similar to the areas stated by (Kissin & Herrera 1990; Angwin & Savill 1997; Conway & Rouse 2002; McGrady 2005; Pearson 2005), though these have been presented a little more thoroughly. It is being argued that it is difficult to make a standardized list which could be the compulsory list to match against when making a due diligence. It is therefore interesting to see that many scholars creates comprehensive due diligence checklists (Kissin & Herrera 1990; Sherman & Hart 2006). An example of a theoretic developed due diligence checklist can be found in Appendix 2.

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3.3.4 Valuation methods

An important entity in the LBO transaction, which is based on the due diligence, is the valuation of the target company. The transaction might be good from a strategic business perspective, but bad from a financial. The target is not interesting if the total business does not reflect the price paid. The target can be interesting for several reasons as mentioned in part 3.2. However, it is the value and the insight in the target that have to be weighed to proceed with the “buy/ no buy” decision.

Financial economists assume some basic concepts: The efficient market hypothesis, agency theory, free cash flow, the market for corporate control and the Capital Asset Pricing Model (Haspeslagh & Jemison 1991). Some of these are acknowledge in this financial research as well.

In this paragraph will be considered the financial valuation methods applied when estimating a bidding price. Several methods are being utilized by academics arguing for the most accurate valuation. This paragraph outlines the most commonly mentioned valuation methods used and supported in academic publications.

The total financial value of a company is all its equity (E) plus all its debt (D). Similar to this:

\[ Vl = E + D \]

where \((Vl)\) is the total value of the leverage company, hence the value of a company is also the signed debt. Though as companies take up debt, they can create a tax shield as the interest paid on debt can be subtracted from tax, this is an important implication in the LBO transaction.

\[ Vl = Vu + t, D \]

where the \((Vl)\) is the value of a leverage company, which equals the \((Vu)\), value of an unlevered company + \((t, D)\), the tax shield of the debt. As this tax shield which is created by interest, is tax deductible, a company can reduce taxes by increasing its debt.

For a company to remain sustainable it has to secure that it makes more money than it spends for avoiding bankruptcy. The uncertainty in the sustainability can also scare the investors, suppliers and customers away, consequently reduce future cash flow. This is what is known as distress costs or deadweight costs (Koller et al. 2005). To see this, the rate of return on invested capital is the single most important value driver for the company.

\[ \text{Return on invested capital} = \frac{\text{NOPLAT}}{\text{Invested Capital}} \]

where \((\text{NOPLAT})\) net operating profit less adjusted tax divided with \((\text{Invested Capital})\) shows the companies ability to make more money than it spends. The value of an investment is therefore only profitable if it earns a higher return than what is paid in cost of capital.

Generally the academic scholars argue for the synergy effects of a merger and acquisition (Weston & Weaver 2001) where:

\[ NVI = Vbt - (Vb + Vt) \]
meaning that the Net value increase \((NVI)\) is the result of combined company \((V_{bt})\) minus the value of the two individual companies \((V_b)\) plus the value of the target company \((V_t)\). For this to be a positive Net value increase the combined company, must be more valuable than the two separate companies.

It appears in academic literature that several methods can be applied when making a valuation of a company. Sherman & Hart (2006) states that main ones are: Comparable companies and comparable transaction analysis, assets valuation and discounted cash flow. Others (Koller et al., 2005; Sherman & Hart, 2006) mentions: Price to Earning, Comparables and Multiples, Adjusted present Value, Dividends growth model etc. It is important to keep in mind that no single method can give a complete and correct picture, they can all be questioned, and hence applying several valuation methods is recommended.

### 3.3.4.1 Price/Earnings

The Price/Earning (P/E) ratio is showing how much a shareholder is willing to pay for a given return. It basically relates the stock price to the earnings generated or the future expected earnings.

\[
P/E \text{ ratio} = \frac{\text{Price per Share}}{\text{Earnings per Share}}
\]

When a company acquires another company and they have a lower Price/Earning (P/E) ratio, the earnings per share of the target company will raise (Weston and Weaver 2001).

\[
\frac{P_b}{E_i} = \left[\frac{(1 - \frac{g}{r})}{(k - g)}\right]
\]

where \((g)\) is expected growth in earnings and cash flow, \((r)\) is the rate of return earned on investments and \((k)\) is the discount rate (Copeland et al. 1990). A normal P/E ration is according to empirical evidence in (Ross et al. 2005) argued to be around 30, however there have in the past been as high as 200. P/E is a good indicator of how the market values a company’s performance. However there are some limitations which have to be considered when applying P/E as a valuation method, as the P/E ratio is directly influenced by these factors. (Ross et al. 2005)

The ratio is high:

1. if many growth options exists.
2. if it has low risk
3. if accounting is conservative.

These issues are all related to the efficient market hypothesis which will be presented later in part 3.4.

Empirical evidence shows that if a market is generally expecting to be a bull market, where lots of opportunities exist, the general valuation and willingness to pay for higher P/E ratios is normal. This might in the end lead to a too high value of the company (Ross et al. 2005). The
more information an investor has about a company, the less risk exists. If a company is a cash
cow and little known risk exist in the future, P/E tends to be higher.

The P/E ratio is a good valuation method, which can easily be applied and it is useful as a
supporting valuation method. It should not be used as the only or main valuation method in an
acquisition, due to some influential shortcomings.

It is often assumed that the high P/E ratio of the buyer will follow into the new
company. If this is the case the outcome of the acquisition would seem to be higher, which
could accumulate further in the post acquisition process (Weston & Weaver 2001). This might
appear in the short run, but in the long run the change in P/E ratio is based on lower growth rate
and/or more risk. This will in the end affect the long term development of the combined P/E
(Weston & Weaver 2001).

Further as earnings can be adjusted due to accounting, it is important when making
comparisons between companies based on P/E, that the accounting is analyzed to secure
comparison of equals. For example by adjusting the working capital, it is possible to affect the
P/E ratio. Therefore the precision in the P/E ratios both for the acquiring and target company
might be wrongfully estimated, hence likelihood of a bad outcome.

P/E is basically only useful when the companies analyzed is listed at a stock exchange,
since access to key numbers are essential, both for the individual calculations, but also to be
able to compare.

3.3.4.2 Discounted Cash Flow

This model is providing a reliable and detailed insight into the value of the company (Copeland
et al. 1990). It is the most trusted and utilized valuation method (Weston and Weaver 2001).
This method calculates the present value of all the future free cash flows (FCF) generated by
the company know as the discounted cash flow (DCF). By calculating FCF it is assured that the
CF generated is available to the providers of capital both equity and capital (Copeland et al.
1990). This is done by discounting the FCF with an estimated Cost of Capital (COC). The time
horizon of these FCF is normally based on historic data, dating five to six years back (Sherman
& Hart 2006). They are then used to forecast approximately five years forward (Sherman &
Hart 2006). To calculate the FCF the following values have to be identified in the financial
statement:\footnote{following the outline as defined by (Weston and Weaver 2001) page 140- see additional in Appendix 3}

\begin{itemize}
  \item \textbf{EBITDA} (earnings before interest, expense, taxes, depreciation and amortization)
deducted \textit{depreciation} gives \textit{EBIT} (earnings before interest, expense and tax). If “\textit{other
income}” and “\textit{other expenses}” equals zero, then \textit{EBIT} equals \textit{NOI} (net operating income).

From this is deducted “\textit{interest expense}” giving \textit{EBT} (earnings before taxes). When “\textit{tax}” is
subtracted from \textit{EBT}, “\textit{Net Income}” is left. Now “\textit{interest expense less tax shelter benefit}” is
added to give \textit{NOPAT} (net operating profits after tax). To \textit{NOPAT} is further added “\textit{non cash
expense}” to give “\textit{gross cash flow}”. Next “\textit{capital expenditures}” and “\textit{change in (net) working
capital}” has to be accounted for to get “\textit{net cash flow}” (FCF).

Copeland et al. (1990) list some stages beneficial to go through for securing the forecast
of the FCF.

\begin{enumerate}
  \item Define the factors contributing to the FCF and those there do not.
  \item Identify the historic key values driving the performance, look at historic perspective.
  \item Develop the assumption of which will affect the forecast.
  \item Calculate and evaluate the FCF based on the previous three steps.
\end{enumerate}
There is one constrain the FCF must equal the financial CF, meaning that the CF generated by the company, needs to cover the liabilities to creditors and shareholders (Copeland et al. 1990). This is also related to the rate of invested capital as mentioned earlier.

As the FCF has now been calculated the discounting needs to be done. When applying the DCF model one has to consider the Continuing value. It is the total estimated value of all FCF after the defined time horizon. These will be fixed and estimated to one terminal value either with or without a growth factor.

\[ \text{Continuing value} = \frac{\text{NOPLAT}}{\text{WACC}} \] 

Or the growing-perpetuity formula:

\[ \text{Continuing value} = \left[ \frac{FCF \cdot (t + 1)}{WACC - g} \right] \]

To be able to calculate the DCF the COC has to be estimated. COC consists of some main financial components which are equity, debt, and preferred stocks. There are several methods which are applicable for calculating the COC. The calculation of COC is essential in a valuation in the LBO transaction. As it shows the extend and whether the acquisition is feasible from an financial point of view. So it is not directly linked to the actual valuation of the target company, but it shows the sustainability of the engaged acquisition hence it has a big influence on the “buy/ no buy” decision. To calculate COC the most important methods are Adjusted Present Value (APV), Weighted Average Cost of Capital (WACC). The difference lies in the way they treat the debt of the company (Ross et al. 2005, page 482).

The total DCF is calculated by:

\[ \left[ \frac{1}{(1 + k)^n} \right], \text{ where } (k) \text{ is cost of capital and } (n) \text{ is the sequence of years (Weston and Weaver 2001).} \]

This gives a total of the individual future FCFs. The final number gives an indication of what the future value of the company is worth and what the value of the company is.

3.3.4.3 WACC

When applying WACC it is assumed that the company is simultaneous financed by debt and equity. Hence the COC is a combination of weighted debt and weighted equity. The WACC is the time value of money used to discount expected future CFs to present value. It is a reliable and simple to calculate, in addition it is a reliable valuation method (Koller et al. 2005). There is one important implication with WACC, it needs to be consistent with the valuation approach, if the debt to equity structure changes the WACC has to be recalculated (Koller et al 2005).

To calculate WACC after tax the formula looks as follows (Ross et al. 2005):

\[ \text{for calculation of NOPLAT see Appendix 3} \]
\[ rWACC = \left( \frac{S}{S + B} \right) r_e + \left( \frac{B}{S + B} \right) r_d \cdot (1 - t_c) \]

where (S) is equity and (B) is debt, and (t_c) is tax rate. It is seen in the formula that it is split in two, the weight equity (S/(S+B)) of and the weight of debt (B/(B+S)), which is ratios. Notice that the debt ratio is reduced by the tax rate. This because the interest on debt is deductible, creating a tax shield. The limitation of this method is, as the financing changes over time, the relationship between equity and debt, so does the WACC. It means that WACC has to be “adjusted” recalculated every time there is a change in the financing of the company (Ross et al. 2005 and Koller et al 2005).

WACC is more used in corporations than the APV, however academics think that the APV is better in valuating capital investments (Grinblatt & Titman 2002).

3.3.4.4 APV

Adjusted present value (APV) was introduced by Myers ((1974) cited in Grinblatt & Titman 2002). APV is recommended as the alternative to WACC when the capital structure is changing (Grinblatt & Titman 2002, Ross et al 2005). The APV values the cash flow of the capital structure (tax shield) separate from the capital structure (Koller et al. 2005). Hence it can be seen that the APV method separates the operation in two components. Generically it can be illustrated like this (Ross et al 2005):

\[ APV = NPV + NPVF \]

where the value (APV) of a project to a leveraged firm is equal to the value of the project to an unlevered firm (NPV) plus the net present value of the finance side effects (NPVF).

The main side effects are:

1. The tax subsidy to debt.
2. The cost of issuing new debt
3. The cost of financial distress
4. Subsidaries to debt financing

these are defined more generally as the Present Value of Tax shield. (Koller et al 2005). This is directly linked to Modigliani and Miller, who argued, that in a market with no taxes, the value of the company is not affected by its financial structure (cited by Koller et al. 2005).

When utilizing the APV method the valuation takes place in three steps (Damodaran, 2002). First the value of an unlevered company is estimated. Next the present value of interest tax savings accumulated by the debt. Finally evaluating the effect of debt with the probability of bankruptcy and the cost of a bankruptcy should be done.

The first step is to value a company, which does not have any debt, hence a total equity financed company. Because the valuation growth can be adjusted from expectation the formula looks like this (Damodaran, 2002):

\[ Vu = \frac{FCF(1 + g)}{COC - g} 27 \]

\[ 27 \text{ as there is no debt financing.} \]
where \((Vu)\) symbolizes the total value of the unlevered company and \((g)\) is the expected growth rate. To be able to estimate the unlevered cost of equity, here same as the COC, the systematic risk \((\beta)\) of this capital has to be calculated:

\[
\beta_{unlevered} = \frac{\beta_{current} \cdot D}{1 + (1 - T) \cdot E}
\]

where \(\beta_{unlevered}\) is the unlevered beta of company, \(\beta_{current}\) is current equity beta of the firm, \(T\) is tax for the firm and \(D/E\) is current debt to equity ratio of the firm. \(\beta\) has to be calculated here because an all equity finance is compare to a debt finance, it is necessary to be able to compare the theoretical all equity to the actual debt financed (Grinblatt & Titman 2002). Secondly as debt is used for finance it will affect the risk of the firm’s equity (Grinblatt & Titman 2002).

In the second step the expected tax shield is calculated. It is similar to the tax shield argument shown in part (3.3.4) where the tax savings, based on deduction in taxes due to debt is seen as a perpetuity:

\[
Value\ of\ tax\ benefit = t_c \cdot \text{debt}
\]

the tax rate \(t_c\) is the marginal tax rate, and is assumed constant in time. If the tax rate is changing during time, Present Value can still be calculated, although not by applying the above perpetuity formula.

Last step is an estimation of the expected bankruptcy cost and the effects. The present value of a bankruptcy is calculated as the probability of bankruptcy times the cost of a bankruptcy. This part of the APV method is the vainest, as both factors have to be qualified guesses. Often an indirect estimation is based on the bond ratings of a company, as they are positioned differently than debt holders in regards to a bankruptcy (absolute priority rule\(^{28}\)) (cited in Ross et al 2005).

The benefits of the APV method is the individual identification of the effects based on debt, which allows for applying different discount rates for each component. The APV and the WACC will give the same result, however WACC is a little more comprehensive to calculate if the debt structure changes, albeit the downside of the APV is the qualified guesses of bankruptcy cost which has to be identified.

The valuation methods mentioned here are based on the subjective firm specific key numbers. It is therefore important to have access to the company books, to be sure that the calculations are accurate. The valuation methods are both looking at the value of the company the DCF and P/E, but also at the soundness of the acquisition through the WACC and APV, as they illustrate the Cost of capital needed for the acquisition.

\(^{28}\) It is a ranked list, which the order of distribution of proceeds when a liquidation takes place.
3.4 **Efficient market hypothesis**

In a financial market prices are affected by the information the investors, customers, suppliers etc. can gather about a company and its products. If a market is efficient, new disclosures will affect the market value of a company immediately, or within a short time.

> “An efficient capital market is one in which stock prices fully reflect available information”\(^{29}\)

When this is the case investors will expect to have a normal rate of return, as the prices adjusts so quickly that profit can not be made because of information as it is already reflected in the price. Sellers at the same time will expect to sell at fair value, as the price received is reflecting information and selling price is the actual present value (Bodie et al. 2005, Ross et al. 2005). In general it can be said that no investor can profit by buying or selling based on information because all investors have access to same information.

According to Andrei Shleifer (cited in Ross et al 2005 page 352) three conditions creates the foundation of efficiency: *Rationality*, all investors behave rational, meaning that they will adjust their investments after the information they obtain in the most rational way. Secondly the “*Independent deviations from rationality*” if information is not obvious, investors might misinterpret the information, behaving rational to what they understand, albeit it is actually wrongful interpreted. This could affect the market price of the target. The chances are though that likewise many would be optimistic and pessimistic about the interpretation of the information, balancing out the effect, creating an efficient market. *Arbitrage* is the last condition which might affect a market, making it efficient. If small amateur investors do not have full disclosure some investments would be made on emotions, creating situations where over-price is paid for a target, though at the same time would there be stockholdings there are undervalued, and should be sold. This creates a lot of holdings / portfolios which are inefficient. However there might be so many that they in the end would even out. If large professional investors has all information accessible, they would make rational decisions, adjusting their portfolios. If these professionals deal more often optimizing their portfolios, they would outweigh the amateurs, creating an efficient market.

These three conditions are closely related to the financial market today, indicating that today’s financial market is close to be efficient.

The efficient market hypothesis is by many subdivided into three versions (Bodie et al. 2005, Ross et al. 2005): The *weak* form, the *semi-strong* form and the *strong* form. The weak form assumes that all information from trading data is reflected in the price. Therefore trends are of no use, as they are public available. The signals seen in this form are eliminated by purchases so quickly that no profit can actually be made. The semi-strong form states that all historic information is available and is therefore already reflected in the market value. So if investors have access to this information it is already incorporated in the price. Lastly the strong form hypothesis assumes that all information insider and public are already incorporated in the value, hence no gain can be made from insider information. This is an extreme approach, and it is a little unrealistic, as it is known that people do benefit from insider information.

\(^{29}\) Ross et al. (2005), page 351
Many valuation approach and the ones applied in this paper is assuming this hypothesis: The financial market being efficient and investors behaving rational. However there are as mentioned above limitations to the efficient market hypothesis.

It is believe from the PE firms that they can justify a premium paid, do to better management, unexploited opportunities. This indicates that the professionals believe the market is not completely efficient. This is primarily based on the extensive due diligence analysis. This is somewhat contradicted the assumption when the company is re sold.

3.5 LBO structure

The cornerstone for making LBO acquisitions durable is the access to financing. An LBO acquisition is financed partly by equity (20-30%), raised by the investors which invest capital in a PE fund, which is controlled by the PE firm. Debt is the main source of capital (50-60%) obtained at the private equity market, plus some Mezzanine financing\(^{30}\) (Olsen 2003).

The motive for investing and borrowing to an LBO project is that the debt holders are obligated to a fixed return, the interest paid on the signed debt. The equity holders gets the excess capital as profit, usually this is a high return (Olsen 2003). Empirical evidence has shown that when LBOs are sold, it is with an average profit of 30-40% (DeAngelo & DeAngelo, 1987, Kaplan 1989, Jensen 1986, 1989; cited in Wiersema & Liebeskind 1995). This return is argued by Ross et al. (2005) to be secured in two ways. First, is the exploitation of debt to the optimal level, which gives big tax deduction. Secondly, by making the managers owners through shares and stock option, they will have an incentive to work harder for personal benefit from the new ownership. Olsen (2003) further argues the importance for PE firm to obtain big loans, as it decreases the need for equity to acquire the target, hence PE can afford to buy larger targets (Ross et al. 2005).

Figure 6: Financing and ownership in an LBO. (own make)

The environment has been good for this kind of financing due to excess of capital, low interest rates and risky investors (McCarthy & Aversano 2007). The capital funding is supplied from institutional investors (pension funds, insurance companies etc.) and individual investors being

\(^{30}\) Mezzanine financing: is borrowed capital that gives right to issuer to acquire ownership in relation to the amount borrowed.
qualified (having enough capital) (Olsen 2003). Some critics argue that taking up high debt ratios as seen by PE in LBOs affects the firm, stakeholders and the economy by five ways (Seth & Easterwood 1993):

- The company is forced to sell of valuable assets to finance debt obligations. This is known as a “fire sale”.
- The company does not have access to the public market and might miss profitable investment opportunities.
- The heavy debt burden makes the company inflexible and makes responsiveness to competition and change slow.
- The restructuring might move wealth from employees, bondholders, and stakeholders to owners, affecting relationships
- It might change the market power through reallocation of resources.

PE firms join together (known as club-deals) as they each have competence in different areas. By teaming up in mega-funds, they can get access to more capital, they diversify the risk by each having a small share, and they exploit each others competences. When the PE firms has found a good target, based on their insights in the industry, growth potential etc. they make the “buy/ no buy” decision. If they plan a buy they create a holding company though it actually is a fund with a big cash reserve, especially created for LBOs (McCarthy & Aversano 2007). This is often done through a limited partnership, where one partner is the general partner making the decisions and the others are limited partners delivering the capital (Olsen 2003).

When the company is bought out of the stock market, the disclosure legislation is not as strict. The wider boundaries are often an incentive for delisting a company from the public market. The PE firms often do not interfere with the daily management of the company and the management simply gets some more space to work within, without having to think about the next quarterly report and the effect on the share price from small private shareholders. Secondly, as they become owners to a larger degree than when the company was public owned, they get an incentive to maximize performance and firm value. In an LBO there are fewer stakeholders, hence it is easier to take decisions and get proposals discussed, with the owners, who also monitor the company more closely (Wiersema & Liebeskind 1995).

The central for the PE firms are that their funds usually have a lifespan of three to five years (Olsen 2003). This is solely based on the return the PE and their investors demand. They are willing not to get a return in the period, and rather just having the profit paid out in the end.

The debitors however demand their return continuously during the loan, which is why the CF is of such importance as it pays the interest. When the three to five years are ended the PE firms has some exit strategies. Either an Initial Public Offering, where the company is relisted, they sell the company to another company or PE fund, lastly recapitalization, where equity is further replaced with debt. (Olsen 2003). Now the debitors can get their money back and what is left is divided between the equity holders, often making large returns.

### 3.6 LBO targets

The increased competition has lead to new “fields” for PE firms to be able to make profit from LBO acquisitions. It was previous few industries e.g. pharmaceutical, telecom, IT and special geographical areas that were interesting for the PE market (McCarthy & Aversano 2007). The

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31 see figure 6
industries targeted now for LBOs are broader and more dispersed (McCarthy & Aversano 2007). For a company to be a potential target for an LBO there are some factors which contribute heavy to the “buy/ no buy” decision making (Olsen 2003, page 4):

- Steady and predictable cash flow
- Clean balance sheet with little debt
- Strong, defensible market position
- Limited working capital requirements
- Minimal future capital requirements
- Heavy asset base for loan collateral
- Divestible assets
- Strong management team
- Viable exit strategy
- Synergy opportunities
- Potential for expense reduction

Not all of these criteria are present when an LBO is executed, but they are good points to examine for minimizing the risk of the acquisition and optimizing the likelihood of a profitable outcome.

This is only some motives for the PE industry for engaging in an LBO, securing their profit. The exit strategies are just as important as to identify the right targets. Rozwadowski & Yong (2005) states in their research:

“In early 2005, macro- and microeconomic indicators provided ripe conditions for buyout firms...the market seems more receptive to IPOs, which promises greater exit opportunities, and the supply of buyout targets seems ever more favorable”\(^{32}\).

Therefore it is important that the PE firms consider the macro economic environment to secure when the LBO is realized.

3.7 Managing an LBO

Privately owned companies are managed in different ways than listed public owned companies. There are several reasons for this, but mainly because the regulations concerning listed companies are stricter in regards to disclosure. Secondly a public owned company needs to have an annual shareholder meeting, where the shareholders can hold the management responsible. An LBO is often owned by fewer owners hence the stakeholder/ shareholder conflict is minimized.

The management is often compensated higher through ownership parts when the company is owned by private equity companies, to secure the incentives of the owners (Kaplan 1989), KKR states that they allow ownership up to 10-20\% (Kohlberg et al. 1989). It can be seen in relation to both agency costs and incentive hypothesis. This is most often done through stock options, which gives the management a stronger personal incentive:

“According to this reduced-agency-cost and new-incentive hypothesis, the new incentives lead to increases in operating income and operating margins as well as reductions in wasteful capital expenditures”\(^{33}\).

\(^{32}\) Rozwadowski and Young (2005) page 67
\(^{33}\) Kaplan (1989) page 218
The management is aware of the crucial importance of cutting cost, divesting non-core businesses, downsizing etc. to be able to generate a high cash flow, to fulfill the debt interest (Olsen 2003). Evidence further supports this argument as managers downsize and prune the LBO businesses (Wiersema & Liebeskind 1995). Secondly, as the PE firms has so much as stake because of the huge investments and the expected high returns, they often monitor the company closely (Wiersema & Liebeskind 1995).

The short life of these PE funds is all part of the reasons why it is easier to raise extra capital if needed, as the time perspective is shorter than at a public owned company, hence it is easier to get an understanding of the situation for the funds and investors lending the money.

Privately owned companies are managed in a different way that public owned companies, mainly because of the factors mentioned above. Public owned companies need to pay dividend on the shares annually or they need to justify why they reinvest the capital or why they pile it up. Secondly their strategic focus in regards to investments is often more long termed, to secure a sustainability of the business, where the privately hold companies have a shorter perspective and no long term growth strategies due to the short term ownership. No return is paid to the owners in the period. The capital can therefore be used more freely to secure a short term profit.
4 FRAMEWORK

In this paragraph is the central framework presented. The framework is the outcome of utilizing existing theory, identified and secured the methodology presented. The framework is based on several theories which combined gives a view of the academic perspective on the LBO transaction.

In this research various theories have been combined. First, a more generic theory (Haseslagh & Jemison 1991) is used to outline the scope of an M&A. This model is applied to identify the market and the motives of the M&A in general and secondly it is used to outline the scope of the thesis. Further the Watson Wyatt deal flow model (Galpin & Herndon 2000) is applied to create the framework. It is used as a more detailed approach to identify the pre-deal part of the M&A process.

By utilizing this framework it is possible to identify where in an actual transaction the due diligence analysis takes place. As the due diligence has been identified in the transaction the importance of it can be examined. Based on the due diligence the financial valuation can be made. The different valuation methods will therefore be applied. These are identified from other theoretical areas. The framework is a combination of the general M&A theory and the financial valuation theory.

This structure is solely created on theoretical data, from academic publications. Through this structure and by utilizing a combination of theories and methods, the most likely focuses, identified by academics, of PE firms in the valuation process are identified.

34 see figure 1
35 based on existing theories as outlined in part 3
By comparing this academic framework and valuation methods with the empirical evidence collected, it is possible to examine whether or not the valuation has an explanatory effect on the final outcome of a “buy/ no buy” decision. The framework is finally compared to the data gathered from interviews, these will be summed up as illustrative examples to see whether the created framework is aligned with reality. The framework is both used for showing how the theories could be combined to explain the LBO, as it shows a holistic theoretical perspective on the LBO transaction. In the end based on the development and utilization of the framework it will be seen if the theories, the combined theories align with reality or not.
5 COURSE OF ACTION

In this chapter will be described how the empirical data have been collected. The empirical data utilized in this research is all collected as interview as supported by the In-depth survey approach, being most beneficial to the research in regards to quality and the time constrain.

The different respondents and the motivation for using them as illustrative examples will be justified in this chapter. Further will be outlined how and where the interviews were conducted. Lastly will be discussed why the companies are presented the way they are, and how the data gather a processed.

5.1 Selection process of representative companies

The selection process is the part of the research where the researcher decides how the research is best executed securing the most reliable conclusions without being too comprehensive. The researcher has to decide what data collection methods to use, how to use them, to secure the research and the findings (Andersen 2005, page 106). In general, data is subdivided into two different kinds based on their sources: Primary and Secondary. Primary data is data which has been collected and gathered directly at the original source by the researcher him self (Remenyi et al 1998, page 287, Andersen 2005 page 151). This is often done through observations, interviews, survey. Secondary data is data which is sourced in already published sources (Remenyi et al. 1998, page 289). Secondary data can be both raw and processed data. The qualification is though that it has not been collected by the research him self (Andersen 2005, page 151), and it has often been collected for other purposes (Saunders et al. 2003, page 188). It is often presented in articles, dictionaries, and databases (Remenyo et al. 1998 page 289).

The empirical data for this research have mainly been gathered as primary data, as the author conducted interviews directly with the respondents. Little supportive secondary empirical data is used to identify the macro economic factors motivating to LBOs. Secondary data have although also been used in the creation of the framework.

Defining the sampling size used in the research is important, as it is often impossible for the researcher to collect data from the full population (Remenyi et al. 1998, page 192). It is though important that the sample represents the population to give a reliable picture (Remenyi et al. 1998, page 192). This is the most important implication as the results otherwise might be biased and not represents the population (Remenyi et al 1998, page 192). According to Remenyi et al. (1998) page 193, a sample is aiming at representing the population, but variability exist hence another sample, identified by same criteria, will most likely be different giving slight other conclusions.

The sampling frame is the total population, from where the entities which are used to represent the population are found. This sampling frame is companies which are members of the “Danish Venture Capital & Private Equity Association”. The list was found on their homepage36. It is important to be aware that not all of these members are PE firms, they are stakeholders related to PE, so they are Venture Capitalists, Private angles, Investors, Banks, Funds, Pension funds, Institutional funds, PE firms etc., but they are not all stakeholders in LBO processes. This is further delimited to the PE firms of which there are 13 (Vækstfonden 2006, page 27) The largest 20 accounting and consulting houses, have down to as little as 40 employees37, making

36 http://www.dvca.dk/sw7612.asp, see appendix 10 for full list
the less likely in providing services for PE and LBO, do to the transaction sizes, and workload. Based on these information and previous knowledge the major stakeholders in the Danish LBO market were contacted, this is known as *Judgement sample* (Remenyi et al. 1998, page 194), as the representatives are selected with the specific purpose of being the most experienced in conducting LBO transactions in Denmark. As defined by Remenyi et al. 1998 page 194, “Such sample comprise individuals considered to have knowledge and information to provide useful ideas and insights.”. It is important to keep in mind that the research did not concern the PE firms, the aim was not to understand why the process is facilitated as it is, but rather explore how it is facilitated. The reason for this is to make comparison between the created framework and the reality possible.

5.2 Interview process, respondents and location

As this research is aiming at explore the academic perception and compare it with the professional perspective of the LBO transaction, it is crucial that the respondents are professionals and working in this area daily. The reason for this was to secure that the respondents are reliable, and experienced so the information they provide supports this research. Interviews were chosen as the data collection method as it is easily to verify and secure the reliability of the respondents (Saunders et al 2003, page 245).

As mentioned above the companies are sampled do to there high recognition, size, number of transaction, their experience in facilitating and conducting LBOs. Contract was therefore made directly to these companies FIH, Axcel and Deloitte. Other companies, PriceWaterHouse and Advizors, were contacted however it was not possible to get calendars to match despite interest from the companies. The respondents were:

- Søren West, project-/investment manager at Axcel. The largest PE firm in Denmark
- Mikael Gillsmark account manager for financial services in FIH. Part of Kaupthing bank, the 8th largest bank in Northern Europe and FIH has a leading position in Corporate banking in Denmark
- Niels Stiden, assistant manager in Corporate Finance, Deloitte. In the largest Corporate Finance department in a consultancy house in Denmark (Deloitte).

It is as mentioned above, concluded that their experience in the LBO transactions provide detailed information and brings insight in the actual LBO process, that might not have been accessible in other companies. As other companies in the industry not have same amount of experience.

The respondents were initially contacted by phone, this were arranged through their receptions. The author asked for a interview for a thesis project, with an employee working with LBO, M&A or Corporate Finance. Based on the connection made by the reception, a brief phone conversation was done, to secure that the person contacted actually was able to contribute to the research. Both in Deloitte and in PriceWaterhouseCoopers it turned out that the first person

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38 see part 5.2
39 For further information regarding the Companies see Appendix 7
40 Personal background information on the respondents see Appendix 7
41 http://www.axcel.dk/
42 Houmann (2006)
43 http://hugin.info/134900/R/948956/134204.pdf
44 http://www.deloitte.com/dtt/section_node/0,1042,sid%253D6719,00.html
contacted were not the most appropriate, which were appointed by them self and I was reconnected to another person. Direct contacted with one respondent (Niels, Deloitte) was made at a student fair in Copenhagen, while other contact with the companies was in progress. This was later abolished, as Niels was a qualified respondent.

The interviews were all conducted at the individual companies. Meeting rooms were booked by the respondents. This was probably a consequence of the interview being estimated to at least an hour. The interviews were conducted in Danish, the reason for this was that it seemed easier for the conversation, and at the same time made the respondents relax, making the dialog flow more easily. All the references and presentations have been translated into English to qualify for this research. The respondent received information, background, and the questions a few days in advance of the interviews on email\textsuperscript{45}. This was done to give the respondent time to reflect on the questions, for saving time during the sessions, and to remove any misunderstandings that might have occurred at a later stage in the interview (Saunders et al. 2003, page 255). This approach is beneficial when making interviews where certain questions has be answered, as it gives the respondent time to find answers if he she, is unfamiliar with the question and it gives time to come up with other thoughts which might be beneficial to the research (Saunders et al 2003, page 255). The interviews took from 80-100 minutes each. The interviews were recorded on sound files to secure better understanding and processing of the conversations and the information provided through the long interviews (Saunders et al. 2003, page 247). Approval from the respondents regarding recording was done, it is therefore assumed that the recording have little influence on the answers. The decision of recording were the result of the interview structure, and the in-depth qualitative approach as it was important to be able to fully comprehend all information provided (Andersen 2005, page 142)

Interviews can be structured and executed in different ways. The structure chosen is highly related to the information that the researcher wants to collect. If the data is qualitative or quantitative. Quantitative data is numerical data, it can be measured and compared in analyses and interpretation (Saunders et al. 2003, page 327). Qualitative data is on the other hand data which is non-standardized data, requiring processing to fit categories (Saunders et al. 2003, page 378).

Based on the way the research decides he needs empirical data, how it best supports his research he can choose different ways to conduct his interviews. A common way to categorize the structure of interviews is: Structured-, unstructured- and semi-structured interviews (Saunders et al. 2003, page 246). Structured interviews are highly standardized, using lists and pre-developed questionnaires, securing that the answers are related, making comparison of equals possible. Unstructured interviews are basically the opposite. It is informal conversations, which evolve during the interview, no structure has been plan, and the goal is to get in-depth with general topics defined on before hand (Saunders et al 2003, page 247). Comparison is difficult as the structure and questions might not be similar from interview to interview. In between these two forms of interviews is the semi-structure interview. It utilizes parts of both, as questions needs to be developed on before hand, securing that certain questions are answered and for making the interview develop in the right way. At the same time this structure allow the interviewer and the respondents to go in-depth with certain questions and extend both question and answer, bring more insight into the field (Saunders et al. 2003, page 246).

\textsuperscript{45} A copy of the letter, with introduction and questions can be seen in Appendix 8
For this research semi-structured interviews were chosen utilized. This is beneficial to the In-depth survey approach chosen (Remenyi et al. 1998, page 55). Secondly it is beneficial to use if theoretical and practical insight is already establish, but new insights and information could benefit the research (Andersen 2005, page 168). When using a semi-structured interview it is aimed to acquire information regarding certain topics, but the order the questions are answered are not important. Secondly, it allows for probing answers in certain topic bringing more insight to the researcher (Saunders et al. 2003, page 250).

5.3 Interview structure
The manual used to structure and guide the interviews by were based on the created framework. It was decided to follow the structure of the framework in the interview to secure that LBO process was extensively describe as the professionals saw it. First in the information provided to the respondents a brief outline of the research were presented. The idea was to create an understanding of the research and the motives for the interview.

The questions were divided into different subgroups. The initial questions, where the respondents were ask about themselves, to justify their qualifications in answering the questions. Further they were asked to verify the background information gathered about the company, for securing the validity as sample companies representing the population of LBO stakeholders. After these questions were answered the interview moved into the entry part of the questions. Theses questions are important as they secure the terminology, between interviewer and respondents. Secondly the questions here created common ground as the practical understanding of the company, industry and market could be discussed.

After these more open-ended questions have been answered the questions turn more into the actual LBO process. These questions are structured according to the created framework with first attending the Motives, Due diligence, and Valuation methods. The questions are more directly formulated, and potential topics relating to the question are listed to secure that the answers are somewhat related. This secures the consistency, making comparison possible. During these question is was intended and allow for the respondent to motivate the answers to increase the understanding and insight in the LBO process, where the respondent felt it naturally to expand the answering. Lastly the final questions again proved to be a little more open-ended allowing for some more descriptive dialog, making the respondents answer more broadly.

It is believed that the question and the semi-structured interview manual allowed for collecting both more qualitative, company unique information, but also more quantitative, general process orientated information. This will be illustrated in the empirical research part 7.

5.4 Data processing
Despite the interviews were conducted in a short time frame, and was still easily remembered, I decided to summarize the interviews. This has been done in two ways. The more general and not directly influential information has been presented in the Appendix 7. The more research relevant information has been outlined in the Illustrative examples part 6. The reason for this subdivision was to secure that extensive information was collected. Secondly it allowed for a reflection in the processing which lead to single emails sent to the respondents for clarification. By outlining the different interview as illustrative examples it makes the individual LBO process apparent. By doing this a broader perspective on the actual LBO process was conducted, secondly it enhanced the chance, if different approaches was used to identify them.

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46 The initial email, with background, structure, and questions can be seen in Appendix 8
A result of this was actually the identification of the Vendor due diligence. In theory the buy and vendor due diligence is often not distinguished. It became clear by these qualitative interviews that it plays a significant role in a part of the LBO transaction, conducted in reality.

When collecting primary data, and by using interviews it is important that the researcher is aware of the pitfalls, bias answers, prejudice, time constrain, confidentiality, lack of insight/knowledge etc. It is my belief that the respondents were qualified and that they provided data and information which is reliable and valid. This is based on the position their companies have in the market. The insight these professionals have into the LBO transaction. Secondly, all interviews lasted longer than what was original intended, proving that the respondent were willing and responsive in their definitions and argumentation. Further were they are promised a copy of the final work, making them aware of the accuracy, and information they provided. They were although all informed about, what other parts there provided information to the research.

For the further discussion in regard to Reliability, Validity and generalisability please see part 10.
6 ILLUSTRATIVE EXAMPLES

The cases applied in this part are used as comparatives to the theory identified in this research. By applying the cases it is illustrated how the theory and the framework created is related to the real world. The cases are based on the interviews and information gathered in the research. The interviews are presented and utilized as case interviews, where each represents a different angle to the LBO transaction, from being the company raising the capital (FIH) to the companies supplying the data (Deloitte) and the actual Private Equity company (Axcel). The intention of using the interviews as individual cases is to improve the clarity and make comparison easier between theory and real world.

6.1 Private equity firm (Axcel, Søren)47

The PE firm follows to a large extent the created framework. This finding will be illustrated in the following case of Axcel. The case is presented as the actual transaction takes place, and as it is illustrated in the framework.

SPECIALIZATION

Axcel is as many other PE firms specialized in certain markets and sectors. Axcel has a strategy of making 1-3 acquisitions48 per year. Acquisitions are the only way PE firms can make money, hence the many acquisitions. Axcel has defined some criteria when identifying potential targets. Axcel’s broader boundary is Danish med-sized companies (Axcel, 2007). The market Axcel has delimited is companies with revenues of DKK 250 million – DKK 4 billion. In this category are approximately 900 companies all together. These companies are further defined, as Biotech and IT companies are often excluded due to the high capital investment needed and lack of immediate cash flow. For the opposite reasons are production and retail companies attractive. This is also indicated in the firm portfolio where among others Icopal, Junkers, Royal Scandinavia are well-known manufacturing companies in Denmark.

CRITERIA

The screening process looking for targets is a continuously process, where companies are identified through public announcements, similar companies, same industry, announced auctions etc.

The target companies are identified by pre-defined criteria, which the target companies have to meet. It is important that the target company has potential for Value creation. Among others it is to develop the business model, consolidate with the market, and improve management. Secondly Geographic is considered. The company has to be an international Danish located company. Thirdly, Industry, the company is only attractive if it is located in certain industries, which are familiar either as industry, products or technology. Fourthly, the Position of the company in the market is important. It needs to be a visible and strong player with a strong market position. Fifthly, Management has to be competent and motivated. Axcel demands a good fit/chemistry between target company management and Axcel. Sixthly, the Size of the company is considered. The target needs to be a medium-sized company, with revenues of DKK 250- DKK 4000 million. Lastly, the Time horizon is essential. Axcel works with a horizon of three-five years, although this can be changed because of profit, price, market

47 All data concerning Axcel and interpretations of PE firms is acquired through interview at Axcel the 11th of April 2007, and the Presentation of Axcel
48 Søren uses Acquisition as definition. All Axcel’s acquisitions are LBOs.
of the target company. For Axcel to engage in an LBO there has to be several exit strategies available for realizing the invested capital.

ACQUISITION PROCESS
From a company has been identified and until contact has been made either through indicative bid (auction) or letter of intent (acquisition) and response is positive, the process can take as little as five-six weeks. However the process is often stalled due to vacation, other projects, and investors acceptance of financing, so in average an acquisition takes two-three month.

DUE DILIGENCE
If a company fulfills these criteria a due diligence is initiated. Due diligence alone takes at least three to four weeks, depending on the size of the target. Axcel conducts due diligence in every transaction. Various due diligences are executed, researching different areas regarding the target company. A Legal due diligence is done every time. It is facilitated by lawyers. This due diligence examines among others, if all shares are for sale, if listed subsidies are actually owned, the contracts with suppliers and costumers. Further a Financial due diligence is conducted. This is carried out by auditors. All financial statements are looked through for securing that there is no economic “surprises”. This due diligence does also show if there is any season cycles in the business. This can turn out to be a very important aspect for the later exit strategies. The cycles can tell when it is optimal to exit securing the highest profit. In addition to these a Commercial due diligence is executed. It looks at the business more objectively, in regard to the brand, products, market etc. Axcel does sometime conduct this internally, however it is in acknowledge of objectivity often outsourced to a Marketing company, for getting a second opinion. A Productivity due diligence is sometimes done. Here the age, size etc. of the production machinery is investigated, for a perspective on cost, renewal, unexploited capacity etc. In relation to this an Environmental due diligence might be done, if there is any problems with the environment, e.g. pollution of property, subsoil water, which might lead to a lawsuit. Most importantly a Management due diligence/ audit is executed. It is done by looking at the board members and managements resumes, personal relations, and a personal fit. This due diligence is often outsourced to headhunting bureaus. They try to identify shortcomings, gaps, where extra or better managers might be needed. It is important in an LBO that Axcel trusts the management, as it is too cost full and it stalls the process to replace management in the short ownership period. This issue often arises with privately entrepreneurial like companies, where the owner might be better in developing the company than in managing it.

Close to all of the due diligence analyses are outsourced. There are several reasons for this, first of all it minimizes fixed cost for Axcel, as it would be expensive having lawyers, auditors, marketing staff etc. sitting and waiting for an acquisition. Secondly as mentioned above, it brings new angles and second opinions on the target. Thirdly, it allows for simultaneous work, thus saving time.

BUSINESS PLAN/STRATEGY
Axcel works with several strategies for increasing the value of the company. The primary one is Buy-and-build. If this strategy is applied Axcel aims at growing the company mainly facilitated by acquiring other companies to the main one. This strategy aims at achieving synergies for the target, or consolidating the market. To growth the company organically “Organic growth”, which is a more normal and sustainable process, can be done through new distribution channels, sales locations, develop production etc. These two strategies are the more common ones utilized. Earlier Trimming and Restructuring were very common. They still exist
as strategies albeit the usability has declined. The reason for this is, as stated by Søren (Axcel), that the increased competition among acquiring entities, PE firms / funds, competitors and alike, are increasing prices. In addition the target companies are aware of focusing on core competences/ businesses. The unprofitable or unrelated divisions have already been sold off, making potential conglomerates where sell offs are possible, much more rare. Companies with weak management are often spotted quickly by several entities, making bidding prices increase. This reduces the likelihood of profit for PE firm and their investors. Neglecting these strategies is impossible, as companies still qualifies for these latter two strategies.

MANAGEMENT

An important factor for a PE firm’s LBO to succeed is the close monitoring and understanding from the PE firms. Axcel has created a Value creation model which is utilized along with the management of the target company. Axcel calls this model Value creation through active ownership.

![Figure 7: Value Creation model. (Axcel 2007)](image)

This active supervision is a quite normal approach for PE firms in relation to the portfolio companies (Søren Axcel). The reason for such an active approach is mainly that Axcel acknowledge that the current management is the best management, as defined earlier. It is common that Axcel place own employees and selected skilled persons to sit in the board, assisting the management. It is essential that Axcel and management have same understanding and acceptance of how predefined goals are reached.

According to Søren (Axcel) is it easier for management in PE owned companies to actually manage than it is for public owned companies. Several reasons exist for this. First of all, there are fewer stakeholders. Secondly the performance is not evaluated quarterly in the statements. Thirdly, the results of changes are discussed, and evaluated by Axcel and the few investors, which have a better insight and understanding than normal investors. It is essential that the company performs better after the PE firm has acquired the company than what it did prior to the acquisition. The target companies management is paid partly in performance incentives like options, bonuses etc.

By utilizing this strategy through different management approaches, Axcel believes that the company’s capabilities are fully exploited, hence improving the likelihood of a satisfying exit.

VALUATION

Axcel is using different financial methods. They use three valuation methods. The Discounted Cash Flow is used every time. It is used to estimate what the cash flow will look like in the next 10 years forward. In this calculation are they applying the different changes that they are going to implement. The calculation is based on a financial situation where acquisitions to the target company are not included. The Discounted Cash Flow is used as a guideline to see, what the potential changes might bring in relation to the cash flow.

Comparables in relation to multiples are the second method used. They have more faith in this model than in the DCF. They estimate both the enterprise and the transaction
comparables. This is done in relation to EBITDA and EBIT in relation to the enterprise value. These multiples are calculated one year forward, the current year and the previous year.

The last and the one they use the most is the LBO valuation method. It is an offspring of the Discounted cash flow. In this model is the debt included in the calculations as it shows whether the cash flow can cover the interest, and at the same time it shows the estimated value of the company when it is put up for sale. What it basically shows is the “return multiple”, the value generated by making the acquisition, and what is the estimated profit when the company is sold again. Axcel uses mainly this model as it also is the one, which their investors measure the projects.

6.2 Investment bank (FIH, Mikael)49

SPECIALIZATION
FIH works among others in this narrow segment financing and investing in projects50 for PE firms. The financing and investment either takes place as a service provider delivering the capital or as a silent partner in a PE fund.

CRITERIA
FIH supplies financing for acquisitions both to normal acquisitions by sustainable businesses and to LBOs initiated by PE firms. When FIH analysis a project to be financed, the main objective is risk associated. The risk evaluation is highly affected by the track record of the PE firm. The more disclosure and familiarity the bank has to the PE firm or the target company, the more likely the bank is in taking higher risks. Often the silent partner situation is an agreement that the bank will deliver capital to the fund. Hence the PE firm identifies the target, and the acquisition is often accepted, based on the close relation.

FIH evaluates the debt to equity ratio, when estimating the risk. The higher the degree of the debt to equity ratio of an investment project, the higher a risk classification of the investment. The investment falls into two different LBO groups. If the acquisition aims at a small target where the client secures for the investment and the interest payment is financed by the performance on the client company rather than the target company, this is a more safe investment project. Or the situation which is more related to PE firms where the investment is secured or interest rate payments are based on the target company. This is often seen as a more risky investment. The focus of the analysis for FIH changes from being the client’s reliability to the target company’s reliability. The presented data is among other things focusing on cash flows.

ACQUISITION PROCESS
FIH receives the entire material about the project, collected by the PE firm. They present the project as good as possible to enhance the chances of financing/ acceptance. The strategy presented from the client affects the risk FIH assigns the project, hence if it is growing, diversification, synergies, optimizing, hostile takeover, and elimination of a competitor. These factors can justify a price, which the client is willing to pay and then based on the material presented FIH decides whether or not they are willing to engage in the project.

As the access to information about the client and target is easier accessible and more reliable through various sources, among others public news, similar companies, different

49 All data concerning FIH and interpretations of investment banks is acquired through interview at FIH the 12th of April 2007, and from the FIH homepage
50 Project is used as the general term describing a financing, investment in regard to expansion, acquisition, or for a company in distress.
markets, the valuation process of a potential projects is assumed safer based on the excessive amount of information. This both leads to more projects being considered and at the same time it leads to few adventures of companies surprising with higher or lower returns. The time used for assessing a project has become shorter, as the valuation is based on the more reliable and easier accessible data.

FIH is entering the LBO transaction at a fairly late stage. Often the client has created contact, and initiated the transaction with the target company. FIH receives an investment/financing package where the project is outlined and is base for the financial analysis. This package outlines the future perspectives. It is often supported with the due diligence.

DUE DILIGENCE
The investment bank does not support the client in recommendations, albeit the might give feedback if there is an uncertainty with the validity and the rational behind the acquisition and the terms in the deal. As discussed earlier in the theory part 3.3.1 the client/investor might be blinded by the acquisition, and not make rational decision. This might be pointed out and subsequently leading to a refusal of financing.

The investment is financed by the investment bank why it is of high importance that the financing/investment are based on the best possible data. The data collected and presented is generated and altered by consultancy, auditing, legal companies, which do not have money at stake, rather they might be success fee paid. FIH therefore takes a critical stance to the data presented in the due diligence analyzes. The quality of the information presented may be of varying standards, leaving a bad overall impression of the project.

BUSINESS PLAN/STRATEGY
The riskyness of the investment is the main focus for FIH. If they can see from the books that the interest rate can be financed by the cash flows, they are more willing to invest in the project. From FIH’s objective the return on their investment has to reflect the risk they are taking. In a normal finance project they calculate with a margin of one to four percent in return. In an investment the risk is higher hence the return is expected to be equally high up to 30 to 40%. The investment bank has a rule of thumb, where the investment has to be repaid within five to seven years otherwise the project is estimated to be too expensive. The time horizon either increases the interest rate paid on the financing or it leads to a lower debt to equity ratio as the investor has to finance more with own capital. As mentioned earlier the relationship to the PE firm is essential, each project is therefore financial evaluated, but trust plays a central role as well, making FIH deviate from the standards.

The financial valuation of the project is primarily based on Discounted Cash Flow. FIH does not use any of the other financial methods mentioned in the theory research. The reason for calculating the cash flow is that it has to cover the payments on the interest rates. Similar to Axcel is FIH focusing on the debt to equity. FIH works with a multiple of EBITDA being five to seven times of Enterprise value. This is an acceptable ratio, and it is affected by the risk in the individual case.

MANAGEMENT
FIH utilize their insight in the different industries. FIH has an asset management department controlling a stock portfolio. This department has a strong insight in the various markets as they follows growth, regulation, competition, and their affect on stock prices. This broad market understanding is utilized when making a decision on a given project, as the future perspective already is evaluated.
6.3 Consultancy company (Deloitte, Niels)

SPECIALIZATION
Deloitte assist both in acquisition and in sale of companies. In the acquisition Deloitte deliver analyses, data, due diligence to the PE firm on the target company making the investment easy to push, when raising capital from investors. When Deloitte is contracted to assist in a sale, they often get a mandate. This allows them to make an evaluation of the company and take contact to potential buyers selling the company to the highest possible price.

CRITERIA
Deloitte only sells companies in the price range of DKK 200-2000 million. These companies are often privately owned and the owners have seldom done business transactions before. For a company to be easily sold there has to be a strong cash flow. Deloitte has also noticed that the management is an essential factor contributing to the value of the company. In the selling position it is beneficial to have a strong business plan/strategy.

ACQUISITION PROCESS
When helping PE firms in buying a target company, the job is to assist and present the target in the best possible way for their investors.

When selling a company contact to different entities are taken. It can be competitors or other industrial conglomerates. Recently the contact was taken to PE firms, as they have capital that they need to invest. The selling process most often takes two paths. Either an auction is setup, where bidding has to be made, and the highest price wins. Or the other scenario where all interested parts get information concerning the selling company and the bid prices are ranked. Then the highest bids are selected out. These bidders are then allowed further in the process, where access to company management is allowed. The highest bidders are then selected out. This process continues until highest bidder and best fitting buyer is found.

A normal sale process takes for Deloitte typically six-twelve month. Deloitte often perform most of the price valuation and due diligence before the potential buyers are contacted. This process typically takes three months. The same thing reversed goes if they assist in a buy, then the work takes three to nine month.

DUE DILIGENCE
Deloitte is paid by success fee; meaning that if a deal goes through they are paid higher, this goes both in buying and selling. The fee contains of a minimum salary, the rest if paid out, is as a percentage, related to the selling price. In an acquisition process they are paid with a transaction or a minimum with no transaction. Due diligence analyses is paid by the hours.

Due diligence is used differently depending on, whether it is a sale or an acquisition. A vendor due diligence is initiated and financed by the seller. This due diligence is usually conducted, with larger transactions as it shortens the transaction time, and the biddings become more qualified, hence the buyers have access to the due diligence made for promoting the sale. The bidders make a due diligence which analyzes the vendor due diligence, however it does not have to be that thoroughly. This due diligence takes place in a data room.

All data concerning Deloitte is acquired through interview at Deloitte the 12th of April 2007, and the Presentation of Financial Advisory services.

Data room: A defined location where buyer have full disclosure to the targets books, contracts, history, legal etc. However nothing is allowed to leave the room.
diligence is conducted at the very beginning, and the acquisition due diligence is conducted at the later stages. Every time a PE firm is facilitating a purchase a due diligence is done.

Management due diligence is essential in a selling position. The reliance of the management by the PE firm is enhanced through two different means. The classic incentive to perform is through options and warrants. The other governance tool utilized is to make the management invest by own means, making them dependant on the performance of the company.

VALUATION
When Deloitte makes a valuation, the results is defined in a spread or price range. The valuation methods applied varies from project to project. A Discounted Cash Flow is always conducted. Often the valuation contains ratio comparison of similar listed companies in same industry (EBITDA and EBIT). Historic data on the prices paid for similar companies in similar industries are collected from various databases. These different valuations give the consultancy house the possibility to estimate the fair market value of the company. If a PE firm is the client then an LBO ratio analyzes is conducted. This method has several names, but it is basically a DCF which includes the financing of the leverage. This model gives an impression of the impact of the debt.

The interviews can be found on the CD place in the Appendix\textsuperscript{53} X

\textsuperscript{53} In agreement with my Supervisor has the interviews only been supplied to the main opponent’s report.
7 EMPIRICAL RESEARCH

This paragraph aims at defining the real settings in which an LBO transaction takes place. This paragraph is structured by implementing the framework defined and created in the Framework part 4. The framework is followed stepwise through the chapter. First will the IDEA be empirical examined, that will then create the foundation for the ACQUISITION JUSTIFICATION, where the more external factors, are compared with the internal financial analysis and valuation. This will be examined in the INVESTIGATE phase to give a more detailed perspective on the results, it will further be analyzed in a due diligence analysis, where the valuation will then be applied. By utilizing the framework it is possible to identify what factors there are affecting the actual transaction.

The definition of an LBO appears to be quite similar, both in the real world and in the academic world. This is illustrated in the quotations listed below.

Søren (Axcel) defines an LBO as:

“we don’t think about it, as all our transactions are LBOs. Debt has to be utilized in an LBO. The debt is often related to the EBITDA, so the leverage says something about the debt ratio to earnings. PE firms are often using more debt than average on the market and especially the listed companies. The reason for this is the active ownership management, and additional capital can be invested if needed.”

Mikael (FIH) defines an LBO as:

“a client contacting FIH with as little capital as possible, borrowing the most, creating the leverage. We are looking at risk and FIH’s risk. The more familiar we are with the client and the target company the more willing we are to invest or finance up till 100%.”

Niels (Deloitte) defines an LBO as:

“an investor enters the business and increases the debt to equity ratio. The debt is primarily used to finance the acquisition.”

These definitions are quite similar to the ones defined by scholars. Kaufold & Inselbag (1998) defines an LBO as:

“is the acquisition financed primarily with debt by a small group of equity investors of a public or private company.”

This is further supported by Olsen (2003) who defines an LBO as:

“As the acquisition of a company or division of a company with a substantial portion of borrowed funds.”

and Sherman & Hart (2005) defines it as:

54 Interview with Søren at Axcel 11th of April 2007, see Appendix 7.1
55 Interview with Mikael at FIH 12th of April 2007, see Appendix 7.2
56 Interview with Niels at Deloitte 12th of April 2007, see Appendix 7.3
57 Kaufold & Inselbag (1998), page 24
58 Olsen (2003), page 1
"is a transaction in which capital borrowed from a commercial lender is used to fund a large portion of the purchase."\(^{59}\)

These statements are important as they illustrate that the definitions are similar from the different stakeholders in the LBO market and the theoretical definition, it creates common ground. It will later be seen, that the different stakeholders, are not alike, as each has different approaches and services in which they affect an LBO transaction.

7.1 Idea

This part as used by Haspeslagh & Jemison (1991), tries to identifying the initial ideas and motives for engaging in an actual LBO transaction. In this phase the external factors, the managerial motives, and the larger perspectives are defined. This is later used for analyzing whether or not the LBO can be justified. Weston & Weaver (2001) has identified the following motives (Weston & Weaver 2001, page 3-4):

1. The pace of technological
2. Cost of communication and transportation have declined
3. Markets are more aligned internationally
4. Increased competition
5. New industries
6. Some industries are becoming more regulated, some are becoming less regulated
8. Some industries and markets have experienced problems
9. Difference in income and wealth have increased
10. Valuation and equity returns have risen through the 1990’ies

1.7.1 External factors

No matter what kind of business or market you are in the surrounding environment will always affect the way your business is conducted. It is pointed out by several academic scholars and journalist that the macro economic environment has had a major impact on the PE. According to Varchaver 22/1/2007:

“Several factors have fueled the PE Boom. Lenders are offering the buyout firms money on the cheap and with more relaxed loan restrictions than in the past. Institutional investors, notably pension funds, have become funnelling more money into buyout firms.”

and

“"In the U.S., pension fund managers were allocating 4 percent [to private equity] four or five years ago. Now it’s closer to 6 percent,” says Erik Hirsch, chief investment officer of Hamilton Lane, which advises pension funds holding some $55 billion in assets”.

further

“Finally, some suggest that Sarbanes-Oxley has been private equity's silent partner, driving companies away from the regulatory web that comes with public ownership and into the arms of PE firms.”

These quotes outline the main factors affecting the motives for making LBOs. They are often used as the explanation factors for PE being able to make LBOs. Other drivers which are important are the tax shield created by obtaining a high debt (Olsen 2003), ownership replacement\(^{60}\), the managerial owner want to retire (Sherman & Hart 2006). The last factor

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\(^{59}\) Sherman & Hart, page 123

\(^{60}\) This is only receiving little attention from the academic world, but in the interviews it was stated as an important driver.
mentioned in the academic publications, and in public news is the wealth in the world (Rick Rickertsen; cited in Brown).

Despite some of these macro economic factors are global they are believe also to have influence on the Danish LBO industry. A lot of financing are secured or raised internationally as the value and need of capital is not feasible to rise nationally. It is therefore assumed that the following macro economic factors are usable as descriptive values for the further research.

1.7.2 **Interest rate**

By looking at the central banks interest rates in the figure below, European Central Bank (ECB) and the Central bank in USA (Federal Reserve), it can be seen that the interest rate has had a low stable period from January 2001 (1.9%) and up to 2004, where it started a steady incline. This indicates that the economy is expanding and later that the economy is stable and growing.

As stated in the quotes above, the low interest rates have made it possible for PE firms to borrow capital cheaper than previous. Søren (Axcel), argues that it has been easier to obtain and get debt financed. This can also be seen in relation to an increase or acceptance of the debt to EBITDA, where it is argued by Weston & Weaver (2001) that the value of EBITDA must be five to seven times. This is supported by Søren (Axcel), he argues that the EBITDA has moved from a level of four times up to five to five and a half times, depending on industry. So the market has accepted an increased debt-ratio to the earnings.

![Interest rate of Fed. and ECB](https://example.com/interest-rate-graph.png)

Figure 8: ECB and Federal Reserve interest rate. (own make)

Source:
In addition a lot of the institutional investors, pension funds and others have been more willing to invest in PE (Rozwadowski and Young 2005). The allocation of PE investments in the portfolios has grown from 4% till 6% in five years (Varchaver, N 22/1/2007). The motive is an expectation of a higher return than what could have been generated from loans and on the bond- and stock market. Søren (Axcel) supports this interpretation: “some PE funds have been able to deliver a much higher return than the stock market.”61 It is also stated that by (na)62

“Investors are keen to gain exposure to the upper echelon of private equity and buyout funds, which have a track record of returns above those of public markets.”

The ECB and Federal Reserve interest rates are used as guide for many national economies as they peg their national interest to either one of them. The result is that many economies in the world are affected by these two rates. As it can be seen little adjustments and interactions have been made in a long period (2002-2004/05). It indicates that the economies are fairly stable. The investors and PE firms evaluate the economic environment for securing their investment. It can later be seen that the growth in LBOs seems related to the interest rates.

1.7.3 Economic growth

The investment and finance of capital from the large institutional and pension investors to the PE firms are based on the stability and wealth in the capital market. The large returns consequently results in a liquid capital market, with new options for capital placements. The growth has also paid larger returns which the owners need to reinvest. This excess or extra return can possibly explain the extra risk willingness. At the same time the investors need to diversify their investments for minimizing risk.

S&P500 and OMXC20 can be seen in the figure below, they are often used as proxies for explaining the development in the capital market in the world economy and in Denmark. It is evident that S&P500 inclines steeply from 2002 and forward. In total it has risen by a little more than 75%. This is an indication of economic growth, as the companies perform better, hence is valued higher, and that the premiums on investment and dividends have to be reinvested. Similar it can be seen that the OMXC20 likewise have had a strong increase from 2003 and forward with more than a 100% increase. Showing that the Danish capital market similar if not stronger that the world economy have seen a tremendous growth.

61 Interviews at CD in Appendix
62 na, Carlyle said to create $15B buyout fund
In the following figure it is further supported that the economic growth has been steady since 2002. The figure shows the growth in the Gross Domestic Product of the 23 most advance countries in the world. The reason why this factor is used for illustrating and explaining the raise in LBOs is - for the same reasons as above- that the absolute capital free to invest is increasing due to the general economic growth. The justification of using this multiple is, that most capital free to invest is generated in these countries, and that most PE firms and the targets are physically located here, hence the transactions are facilitated in these countries.
Figure 10: Advanced economies GDP in current prices. (own make)

1.7.4 Sarbanes-Oxley

The Sarbanes-Oxley Act\(^{63}\) came into law July 30\(^{th}\) 2002. This American law is accredited for all companies interacting in the public market in United States. The law changed the legislation regarding corporate governance and financing. It is a more strict law compared to previous standards. It was introduced as a reaction to the large corporate and accounting scandals like Enron, Worldcom etc\(^{64}\). The Sarbanes-Oxley was imposed to “protect investors by improving the accuracy and reliability of corporate disclosures made pursuant to the securities law.”\(^{65}\), facilitated by improving transparency and quality of financial reporting. Public owned companies have to comply with the eleven titles in the act (House of Representatives, 2002).

1. Public Company Accounting Oversight Board
2. Auditor Independence
3. Corporate Responsibility
4. Enhanced Financial Disclosures
5. Analyst Conflict of Interest
6. Commission Resources and Authority

\(^{63}\) http://www.sarbanes-oxley-forum.com/modules.php?name=FAQ&myfaq=yes&id_cat=1&categories=FAQ+-+BASICS 30th of March

\(^{64}\) http://www.sarbanes-oxley-forum.com/modules.php?name=FAQ&myfaq=yes&id_cat=1&categories=FAQ+-+BASICS 30th of March

\(^{65}\) http://www.sarbanes-oxley-forum.com/modules.php?name=Content&pa=showpage&pid=1 30th of March
7. Studies and Reports
8. Corporate and Criminal Fraud Accountability
9. White-collar Crime Penalty Enhancement
10. Corporate Tax Return
11. Corporate Fraud and Accountability

Each of these points focuses on different areas which will improve disclosure, and minimize irregularities. Companies that are public owned must comply with the Sarbanes-Oxley. Public owned companies have many stakeholders, affecting the management. Kevin Callaghan 66 is cited:

“First is what he calls the "hassle" factor of being a public company. The hassles include the costs (in both time and attention) of complying with Sarbanes-Oxley, the higher risk of shareholder lawsuits, and dealing with issues of board size and composition.”

As the rule requires more transparency, it might have motivated companies having issues with the public/ transparent ownership (Fenn et al. 1997) or if they were not following the “normal” way of conducting business, to turn to the private capital market. This most likely motivates the target companies to be acquired by a PE firm.

1.7.5 LBO development

<table>
<thead>
<tr>
<th>Figures refer to : Number of deals</th>
<th>(mil USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time period (Deal latest date)</td>
<td>Under 7</td>
</tr>
<tr>
<td></td>
<td>from 7-35</td>
</tr>
<tr>
<td>1997</td>
<td>0</td>
</tr>
<tr>
<td>1998</td>
<td>0</td>
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<td>1999</td>
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<td>2005</td>
<td>5</td>
</tr>
<tr>
<td>2006</td>
<td>5</td>
</tr>
<tr>
<td>2007</td>
<td>2</td>
</tr>
<tr>
<td>Total Group</td>
<td>19</td>
</tr>
</tbody>
</table>

Table 1: Numbers of LBO in the world, divided on size (period of 1997-2007)

Source: Numbers subtracted from Zephyr research database

It can clearly be seen in the right column of the table, that there has been a high increase in LBOs during the last ten years from 2 to above 200. In the same table it is seen that there are a big increase in number of transaction from 2002 to 2003, where the number in general more than doubles in almost all LBO sizes. It can also be seen that the larger deals takes up an increasingly larger share of the total number. This is especially evident from 2004 to 2005

66 cited in Pfeffer, J. (2007), Why it pays to be private
where LBOs of more than $650 million increases from ~7% of total deals to ~19% of total number of deals. This might partly be explained by the lower interest rates and the less risk awareness from investors. Mikael (FIH) argues that the track record of the PE firms is essential for raising capital. This supports the numbers, as it has given the investors time to look at history and examine the track record of the PE firms in the bull market. Secondly, the use of “clubbing”, where several PE firm joining up in one mega-fund to acquire larger targets are seen more often (Bob Filek cited in Wong 2007/19/01). This might also explain the increase in larger LBO transactions.

Based on the factors argued by scholars to affect the environment of PE firms and LBOs especially, it is evident in the macro material present here, that it supports the argumentation.

The higher prices lower the profit for the funds when exit is made (Filek B. cited in Wong 2007/30/01). The market has also made many PE firms looking for the quick entry and exit, making the market unstable (Rozwadowski and Young 2005).

All the previous factors are affecting the circumstances which affect the initial idea of making the actual LBO. As seen above it appears that there is a relation in the amount and size of LBOs and the macro environment that motivates PE firms. The next stage in the transaction is to see whether any of these surrounding factors and their affect on the motives can justify an acquisition.

7.2 Acquisition justification

This phase in the process is closely related to the first phase. In this phase the PE firms, investment banks, consultancy houses and other stakeholders examine and evaluate the individual target company. This process gives the PE firm the answers of the LBO can be justified- if the target qualifies to their criteria, and if the deal is expected profitable. This phase in Haspeslagh & Jemison (1991) covers two phases in the Watson Wyatt Deal Flow Model as Locate and Investigate are the central aspects here.

2.7.1 Screening identification

As the core business of PE firms is to find and locate potential targets, the screening is essential in the business plan. The more favorable the market looks, as discussed in Idea, the more aggressive the PE firms should be in locating targets. Bill Conway (Carlyle Group), (cited in Wong 2007/01/30) saying:

"The biggest mistake I've made in the last few years is I should have been far more aggressive."

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67 Interview at CD in Appendix 9
68 Lewis, M cited in Wong, G. (2007), Big buyouts go global
69 See Appendix 4
This is also seen in the previous paragraphs, as the survival of PE firm is locating the right targets. PE firms often choose to specialize in certain business segments, as seen with Axcel. The focus on a core industry minimizes risk, as it secures a better insight and understanding of the market. There is an addition to this, Niels (Deloitte)\textsuperscript{70} states that, often a company is listed for sale and contact to PE funds is made from seller’s side. This indicates that the targets are not always found through screening, but also that targets are being introduced to the PE firms. In addition it is said Mikael (FIH), that the investors often engage in projects as investors or lenders based on the track record of the PE firm or of the target company. The more familiar the investors are with the companies the more likely it is to get funding and the speed of the process is quicker. This leads to a faster entry into the next phase.

7.3 \textbf{Investigate}

In this phase the PE firm often follows a checklist (due diligence) which is created based on previous experiences. In this list it can be seen what criteria these are interesting when investigating in a target company.

3.7.1 \textbf{Acquisition/ LBO motives}

PE firms are often working within certain industries and sectors, where they have extensive knowledge. (McCarthy 2007), this is further supported by Søren (Axcel)\textsuperscript{71}. As the individual company is screened the PE firm has some criteria which the target companies must meet. These points or criteria are used as guidelines by PE firms and investors for making a reliable valuation and securing their investment through proper analysis. According to Kravis and Roberts (1989), the criteria can be divided in two, the financial and the business factors as seen in table 2 below.

<table>
<thead>
<tr>
<th>Business</th>
<th>Financial</th>
</tr>
</thead>
<tbody>
<tr>
<td>A strong management team</td>
<td>A history of demonstrated profitability and the ability to maintain above average profit margins</td>
</tr>
<tr>
<td>Products with well known brand name and strong market position</td>
<td>Strong predictable cash flows to service the financing costs related to the acquisition</td>
</tr>
<tr>
<td>Status as low cost producer within an industry, thereby creating the competitive advantage</td>
<td>Ready separable assets or businesses which could be available for sale, if necessary</td>
</tr>
<tr>
<td>Potential for real growth in the future</td>
<td></td>
</tr>
<tr>
<td>Not subject to prolonged cyclical swings, in profitability</td>
<td></td>
</tr>
<tr>
<td>Products which are not subject to rapid technological change</td>
<td></td>
</tr>
</tbody>
</table>

\textbf{Table 2: Criteria for best LBO target. (Kohlberg et al. 1989)}

Since these definitions are closely aligned by the ones mentioned in part 3.6, by Olsen (2003), it is evident that these factors are of importance when a PE firm identifies target companies. The motives outlined in the table above is aligned with the motives which the PE firms like Axcel is exploiting\textsuperscript{72}. Axcel’s criteria are \textit{Value creation, Geographic, Market, Position, Management, Size,} and \textit{Timehorizon.}

Weston and Weaver (2001)\textsuperscript{73} have identified some requirements which they believe creates the foundation for a successful LBO.

\textsuperscript{70} Interview at CD in Appendix 9
\textsuperscript{71} see Cases part 6.1 and appendix 7
\textsuperscript{72} See Case part 6.1
\textsuperscript{73} Weston & Weaver (2001), page 188
1. The most important reason is the improvement in operations, reducing cost and increasing cash flows.
2. The percentage of equity ownership by management strengthened management incentives
3. Valuation in the LBO purchase transaction must be 5 to 7 EBITA.
4. Higher percentage of equity in financial structures provides greater flexibility in making the additional investments that may be required.
5. Financial buyers may assist in formulating strategies and providing managerial expertise.

3.7.2 Different transaction processes
As mentioned briefly, there might be a reason why companies are potential targets for PE funds. There are several reasons why management is interested in having the company acquired as an LBO. If we divide it in two, the companies which are posted for sale through a consultancy houses, and the ones that is contacted by PE funds, without initiating the contact themselves.

Companies for sale:
The owners/ management might be getting old wanting to retire. This is stated more often as the case based on the interviews with Niels (Deloitte) and Mikael (FIH), than what is mentioned by academics. If this is the case, the management is interested in getting the highest price possible. The selling company can also be in financial distress. The sale might be last option before a bankruptcy, this was mentioned by Søren (Axcel) as possible “cheaper” targets. Some entrepreneurs build a company only with the objective to have it acquired, when it still is in its early stage. These are the primarily motives for companies initiating the sale to PE firms through an LBO.

Companies being contact by PE firms for an acquisition (LBO):
Many instances argue that it is easier to run a business, being a privately owned company than a public listed one. “In a private company you can focus on what really matters.” further supported by Olsen (2003), who states the freedom from scrutiny in the public market or as a subsidy to a larger parent. The reason why it is tempting is basically that there are fewer stakeholders. The stakeholders, but mainly the shareholders are affected by the quarterly statement, and the annual statements. The high emphasis makes management focus on these statements, making the management having a short time horizon. As is explained by Capellas, M: “but more importantly, freedom from the relentless quarterly-earnings grind”.

this is further supported by Kevin Callaghan:

“The third reason for going private is the ability to run a business more effectively. For starters, private companies needn’t worry about having their every move and financial result available for rivals to analyze. And they can spend more time on long-range planning”

The business strategy presented to the target company’s management most also be well funded. This along with the increased management incentive plans may lead more managers to be willing to accept a PE ownership. The incentives is made through options and by having the management to commit themselves through investment to the company, but on favorable terms (Olsen 2003). A general rule is that the management should be financial independent after the

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74 Capellas, M. and Danos cited in, Serwer, A (2006), A big year for Buyouts
75 former CEO of Compaq, now PE man at Silver Lake Partners
76 Capellas, M. cited in, Serwer, A (2006), A big year for Buyouts
77 Callaghan, K. cited in Pfeffer, J. (2007), Why it pays to be private
PE ownership (Niels, Deloitte). On the other hand many companies are so freighted by the extreme focus on cost reduction, that it harms the business. Empirical evidence (Wiersema & Liebeskind 1995) find that growth rates are significantly lower in LBO companies than similar public owned companies, additionally they find that companies undergoing an LBO transaction are decreasing in size both in their periphery and core businesses.

3.7.3 Information gathering for due diligence and valuation

When PE firms, consultancy houses, and investment banks gather information for the valuation and due diligence some information are essential to estimate a proper price. First of all there are the target company’s books. This shows everything concerning the financial situation. Secondly, comparison to similar companies in the market, similar deals that may have been executed, track record of the company, the history of the company, the market in which the company is located, the country etc.. By examining and collecting these data it makes the due diligence process and consequently the valuation process easier and more detailed, making the price bid more accurate. The decision making is based on a larger amount of information which minimizes the risk. The data can be collected several places. It can be anything from the company itself, annual statements, market researchers, public news, vendor due diligence, to a created data room, all of these gives information needed for the PE firm to estimate a fair price.

The PE firms pay a premium of 10-30% (Kaplan 2006) to this market value. Dunne (2004) argues that normally in a sound market the premium paid to secure a buy is one third above market value. Although it appears that PE firms use premium to secure sale, they also think that they can justify it as the public price is too low, and that the company is driven by factors, which they have identified and can control, or manage better than the existent management or owners (Niels, Deloitte). The procedure of paying a premium despite the market believes the company is already accurately valuated is a very delicate procedure, hence identifying (due diligence) the possibilities in the company is essential.

3.7.4 Conducting due diligence

As such the due diligence is not a valuation method. The due diligence can not be used as an objective valuation method, but it can be used subjectively to make the business strategy and to justify the acquisition. However in the interviews it became clear that the financial due diligence and the commercial due diligence is of high importance as it created the foundation for the changes that the PE firm expect to implement.

As each of the respondents mentioned, due diligence is almost always conducted. “*It is very rare that due diligence is not conducted, sometimes the company just skim the target through them self, but it is rare*” (Niels, Deloitte). “*But with PE funds, consultancy houses are always contracted*” (Niels, Deloitte). The emphasis on due diligence is high in both the Axcel and in the Deloitte case. The reason for this is most likely that they themselves conduct the analysis or have it done by external professionals. FIH on the other hand, used the final due diligence analysis to examine the projects and secure their investment by getting more discloser on the project by the information gathered in the analysis.

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78 Special location where the acquirer can get full disclosure of the target company, however nothing is allowed to leave the location.
Over all it is said by Niels (Deloitte), that the due diligence can be divided into two categories. Either a *buyer due diligence*, for analyzing a potential target company, or a *vendor due diligence*, which is made by the company it self, as a presentation of the company for a sale. The vendor due diligence is according to Niels (Deloitte), often done by consultancy houses on a mandate\(^79\), as the company managers acknowledge that they have little experience in making company deals in that sizes. The vendor due diligence is accessible for the potential buyers, hence they use it in their buyer due diligence. This is know as a *confirmation due diligence* (Niels, Deloitte). It is not so thoroughly, as it relies on the information presented in the vendor due diligence. The timeframe and initiation stage of the two due diligences are different. The buyer due diligence is normally conducted in the end of a process, being after a target has been identified, and after contact have been taken (Søren, Axcel). This is partly because it is an extensive analysis and it is costly to perform, hence the transaction needs to be fairly stable and trustworthy. Secondly it requires access to the company and its data to create a good picture of the company, which is not possible or allowed by the selling company until trust has been build. The vendor due diligence on the other hand is made prior to the transaction start, as it is often used to attract potential buyers (Niels, Deloitte). This due diligence is made and financed by the will of the managers or the owners of the selling company. Hence access to the data and cost is not a concern in the same way, as it leads the way to a higher price.

The use of external professionals is also different in the two kind of due diligences. In a buyer due diligences, they are used as mentioned by Søren (Axcel) to give second opinion, cut costs as they are only used on project basis, and to speed up the transaction, because different tasks can be facilitated in parallel. In a vendor due diligence external professionals are not used in the same degree\(^80\), basically, because some of the tasks appointed in a due diligence, are impossible for the selling company or its consultants to evaluate, e.g. personal fit, the quality of managers, etc. hence the buyer has to address them themselves. Often the vendor due diligence is data heavy and less analytical, more informative and contains more data intensive analyses than the buyer due diligence (Niels, Deloitte).

The content of the due diligence analysis is as mentioned by Søren (Axcel) typically focusing on: Legal, Financial, Management, Commercial, Productivity, and Environmental areas. The larger the company, the more complex hence more time spend on due diligence. A buyer due diligence is mainly spent in the data room. The use of data rooms takes place in the very end (Niels, Deloitte). A normal due diligence normally takes five to six weeks, but can take as long as two to three month (Søren, Axcel)

### 7.4 Financial Valuation

When a target has been located and due diligence has been conducted, the price estimation begins. According to theories several methods can be applied\(^81\) with various success in accuracy and implementation usability. The respondents mention several valuation methods, which are applied when making the valuation. The methods are outlined below.

#### 4.7.1 Discounted Cash Flow

The respondents all argued for the usability of the discounted cash flow (DCF) valuation method. This method is essential, as it tells the PE firm and investors something about the potential in the business. Søren (Axcel) explains that it is always made for a target, but the

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\(^79\) A mandate is a contract which allows the consultancy house to prepare the company for a sale. From initial investigation to a final sale

\(^80\) Except if the consultancy house has a contract on a sale mandate.

\(^81\) See theory paragraph 3
emphasis on its value is less. “it can’t justify an acquisition, but it can be used as a guideline”82 In all the cases it is mentioned that a basic case is made, which is the initial organic company including its growth. Then different scenarios with the potential changes is implemented are connected, and an estimation of how the cash flow is affected is tried illustrated. As an investor it is mentioned by Mikael (FIH), that the CF is important in assessing a project as it gives an indication of the return and if the CF is good enough, to cover the interest rates that needs to be paid on the loans. Normally FIH would like to see the loan paid out in five to seven years. If this is not aligned with the financing needed to buy the target company, more equity is required or “… the company is simply too expensive in our eyes.”83 This is closely aligned to the multiples calculation method outlined further down. Deloitte is also using the DCF in their assessment of a potential target. They are calculating the CF based on the information gathered in the due diligence, mainly the financial and the commercial. This goes as well for the PE firm.

4.7.2 LBO valuation method
This valuation method is an offspring of the DCF, Søren (Axcel). He further argues that it is the most important valuation method. It is basically the Internal Rate of Return (IRR) the PE firm will get by making the acquisition. It is based on the assumption that the cash flow beneficial to the PE firm by buying the company is used to pay the debt. It is therefore possible to make an estimation of the selling price and the profit as the debt is paid out. This method does not account for the WACC, as it is difficult to estimate (Søren, Axcel). The easiest way to outline this method is illustrated through an example:

The target company has a price of 500, the debt obtained finance 300, so the PE has to use 200 of equity. With the cash flow we are able to cover the interest on the loan. When exit occurs it is seen how much equity is left in the company, with the restructuring, growth etc. This return is the “IRR” as it is seen how much the company sells for, for example 700. This gives a multiple of 3.5 times back, as the debt has been paid back in the calculation. This multiple is the return the investors are interested in.

The CF is essential in this method, as it has to cover the interest on the loan. Deloitte utilize this method when working with PE firms. Niels (Deloitte) argues, for its importance as the financing of the debt has to be incorporated in the price bid. Further this method outlines how the PE firm estimates or expects to be able to cover the debt in the period. This is an important method as it is what the PE firms use to secure the financing at the investors as they want to see the total return on a potential investment (Søren, Axcel).

4.7.3 Comparable multiples/ Leverage ratio
This is a more abstract method to valuate the target company on. It is divided into several factors which are used for the conclusions. The main one is the enterprise value to EBITDA (Søren, Axcel). This multiple are utilized by all the professionals identified in these cases. Mikael (FIH) argues that this in general can be anything from three to four and rarely up to seven times. But it is difficult for the investor to use for investments, as it is also relates to the amount of equity the PE firm delivers (Mikael, FIH). It is generally calculated for the previous year, the current year, and the future year. The benefit of this method is that it is easy to make a comparison as it is based on public accessible numbers. The calculated multiple is compared to

82 Søren, Axcel, interview Appendix 7.1
83 Mikael (FIH), interview Appendix 7.2
similar public listed companies’ multiples. It is compared to similar transactions in the industry. Deloitte and Axcel have access to these transactions in databases so the multiples can be trusted in being comparison of even (Niels, Deloitte).

7.5 **Sum up**

Despite the company looks good financially, there has to be a clearly defined value creation opportunity. There are big differences from one target to another. The less the PE firm has to change to make a profit, the better, however the cases with companies that are just not exploited are often more expensive, as the market is effective in identifying the “good deals”.

The more stable the company, the less risk on the investment. It is therefore easier to accept a lower return. As the market is efficient, the selling company often take contact to several potential buyers, this minimizes the chance for a “good deal” (Søren, Axcel). Based on the financial valuation a fair market value is created for the company. This is used by the seller to identify what the price should be likewise it is used by the acquirer to estimate a bidding price (Niels, Deloitte). The price bid is highly influenced by the potential that the PE firm sees in the target company. But the prices and motives for LBOs are also highly affected by the external macro economic factors. The business plan for how the PE firm plans to evolve the company is therefore essential and it has to be sound and well founded in the data outlined in the due diligence analysis.

The exit is essential for the PE firm and the argumentation for acquiring a target has to be justified in the market, as illustrated in the due diligence (Søren, Axcel). This goes as well when an investment bank analyses a project (Mikael, FIH). The less exit strategies or possibilities that exist, the higher the project’s risk are estimated. Although if the cash flow presented is high enough to cover the financing of the debt, the investment bank is more willing in investing in the project. Therefore the track record is essential, as the financial data cannot alone justify financing from an investment bank (Mikael, FIH).
8 ANALYSIS AND DISCUSSION

8.1 Analysis and connection of empirical and theoretical findings

What has become evident in this research is that the theory and reality is aligned in certain aspects of an LBO transaction, but at the same time in other aspects they are quite different. For the readability and understanding, this paragraph is structured as the created framework, hence similar to the Theory\textsuperscript{84} paragraph and the Empirical research\textsuperscript{85} paragraph.

1.8.1 Process

The central focus in the general M&A theory is that every phase in the process has an affect on the final outcome. It is argued that the process has to be seen holistically where every part affects each other, and in the end affecting the final outcome. It is stated that the various phases are interlinked, so they support and affect each other, and that they have to be executed in right order for the most successful outcome (Haspeslagh & Jemison 1991; Larsson & Finkelstein 1999; Risberg 2003). Another feature with the process theory is that different phases sometimes are overlap in execution, supporting the interrelation definition to be able to obtain the optimal outcome (Haspeslagh & Jemison 1991). This is not exactly aligned with what have been seen in this study’s empirical data. The evidence here is rather that it is various’ tasks that can be performed. The stages are not interrelated as said in the general M&A theory, where one is need to execute another, but rather that they can be used interdependently, as they can support each other (Business plan, justified by due diligence, Valuation based on due diligence, trust in managers etc.), but they are not connected in a way, so if one is not conducted the other can not be done. Further it is argued that certain phases/ tasks can be avoided in the LBO transaction\textsuperscript{86}, this contradicts the general M&A theory, which sees the process as a holistic and interlinked process.

This study is related to the implemented theory, as the LBO transaction is divided into pre- and post-deal as well, hence the relatedness with theory and reality. The PE firms evaluate and identify implications in the target company (due diligence), which affect the likelihood of a successful post-deal ownership, hence a successful (profitable) exit. However it would be overemphasizing to say that the PE firms implement or change anything in their organization to accommodate a better acquisition of the target company. It is rather that a business plan/strategy for the acquired company’s post-deal situation is identified and created, based on the pre-deal phases. This is certainly also a process that takes place in a “normal” M&A, however the implication here is that the acquirer (PE firm) does little or nothing to adapt to the target, rather they look at what can be changed in the target company to make it perform better individually.

It appears that the LBO transaction proceeds slightly different, whether it is a target being “offered” to the PE firm, the selling company wants new owners. Or if it is the PE firm which have identified the potential target company. This stage is crucial to the PE firms, as it is of high importance that the right target is located and the right price is paid. The stage is aligned

\textsuperscript{84} Theory part 4.
\textsuperscript{85} Empirical research part 6
\textsuperscript{86} mentioned by Niels, that due diligence is not always conducted. By S\o{}ren as Vendor due diligence exists.
with that of the general M&A theory “Idea”87/ “Formulate”88, however the initiatives identified in theory are not quite similar to the once motivating a PE firm to acquire a company in real life, this further discussed below.

1.8.2 Idea/ Formulate

This name or definition as used in the general M&A theory does not define the similar phase as it takes place in an actual LBO transaction. Overall it can be said that the incentives for a PE firm to acquire a company is similar to the generic motives identified in theory (Olsen 2005, Weston & Weaver 2001).

Napier (2001) identified two approaches which motivates for an acquisition, the planned and the opportunistic. These approaches are both driving an LBO transaction, although the planned part is taking up a larger share. As seen in Axcel, they make extensive analyses of the target as identified and presented in this study. However, Søren (Axcel) also mentioned that chances are taken, with the expectation of a higher return, this is supported by Mikael (FIH) who states that variation from standard does happen, if target or PE firm is well known. This indicates that the opportunistic behavior affects judgment to a degree. It would though be fair to say that most decisions concerning acquiring a target are rational, and highly based on indebt examination of the target.

If the theory, as outline in the created framework is followed more consequent, and if using the definition in the Watson Wyatt Deal Flow Model, where the “formulation” takes place, it becomes apparent, that differences might exist between theory and practice. It is in the theory stated from an acquirer’s point of view, how the M&A process should proceed to be successful - to secure an optimal “fit” between the two companies. This is not the case in real life as no organizational “fit” is needed.

The formulation stage is where the PE firm defines its boundaries of where it wants to keep its focus. This is aligned with the focus on acquiring experience and knowledge within one industry segment, as seen with Axcel89. Using this explanation, fitting real life with theory is a little vain, as Axcel does not define its business and its target area every time a potential target is considered, this argument is therefore abolished. A more logic interpretation of this stage theoretical is how the PE firm could develop a general business strategy and see whether this business strategy fits the target company and how they expects the target to execute it. This contradicts the information from Axcel that states that each company is different and a general plan of how to manage the LBO transaction and the company after the deal does not exist.

A justification of this phase can be made, as a similar stage takes place. However the actual stage is aimed at the target company, rather than the PE firm. It aims at defining how the transaction is executed and how the targets business plan is reached and developed. Albeit this stage first takes place after a potential target has been located, which is after the next phase in the theory. (This will be further discussed below).

1.8.3 Acquisition Justification

Before a PE firm can do its “business” it has to identify the potential targets. It is as mentioned above, mainly done in predefined industries and countries, as seen in Axcel, and discussed in

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87 Haspeslagh & Jemison (1991)
88 From Watson Wyatt Deal Flow model
89 see illustrative example (part 6.1)
part 3.5. It is argued that “clubbing” partly takes place for utilizing different PE firms’ competences and knowledge within certain industries, and to acquire larger targets. This is rather a business strategy than a project/ acquisition strategy, as it is used for narrowing down the scope of businesses which the PE firm has to investigate. This is for example seen in Axxcel, where a segment has been defined (international Danish mid-size companies).

For the PE firm to engage in a transaction, two approach leads to an acquisition. Either the company contact the PE firm itself, or the PE firm locate the target (Niels, Deloitte). For the further investigation the PE firms use some broadly defined criteria, which have to be fulfilled for a target to be attractive (Søren, Axxcel). These can among other be seen in part 7.3.1 and in the case of Axxcel part 6.1 for the more practical and real motives, and in part 3.6 as they have been identified theoretically by a scholar (Olsen, 2003). Other drivers for making LBOs are the macro economic environment. The favorable environment with easily accessible and risk willing capital and the low interest rates is ideal for PE firms as mentioned above. This is supported by the capital of which the Danish PE firms have for LBOs.

![Figure 11: Illustration of Invested and managed Buy-out capital. (Vækstfonden 2006)](image)

When following the outline of the process identified in the general M&A theory it seems like the justification is initiate at a fairly late stage in the process. It is stated that some processes are conducted simultaneously, but if using the Watson Wyatt Deal Flow Model, it appears that other tasks and processes has to be executed first. This is supported by the empirical findings, where the “investigation” phase from theory has to be initiate immediately as it is the only way an LBO acquisition can be justified (Niels, Deloitte; Søren, Axxcel). This investigation stage is in real life a thoroughly investigation of the company, it is the due diligence analysis.

1.8.4 Investigate (Due diligence)

The investigation phase is not aligned with the created framework, as it appears to be the first stage in the actual transaction. The formulation phase can therefore be discussed to exist in real life. The “fit” between the managers and the PE employees is important (Søren, Axxcel) but talking about a fit between organizations would be overstating, as discussed above.

The use of due diligence and its content is very similar between what is being stated in the theory and what is kept in focus by the professionals. The emphasis put on these analyses is also quite similar, as they are said to be essential for the success of the transaction. This supported by Niels (Deloitte) and Søren (Axxcel) who mentions, that it is very rare that a due diligence is not conducted. All the insight that the PE firm acquires concerning the target
company is basically gathered through various due diligence analyses. What is stated to be important in these analyses both in theory and in reality is very similar. The scholars have identified *Financial statement analysis, Management and operations review, Legal compliance review, and document and transaction review*, and Axcel facilitates due diligence analyses with emphasis on *Financial, Legal, Commercial, Managerial, Production, Environmental*. Despite the areas are not called the same, they basically covers the same focus areas concerning the business. One has to keep in mind that it is mention, both by scholars (Kissin & Herrera 1990; Sherman & Hart 2006) and by professionals (Søren, Axcel) that the due diligence is adjusted to the individual target company to secure the best result. In addition to this the *vendor* due diligence minimizes the extent of the acquirers need for a comprehensive due diligence (Niels, Deloitte). The due diligence outline, the possibilities that may exist in the target company. It is then the PE firm’s job to justify the acquisition, if is worth acquiring the company, exploiting these opportunities for securing profit.

When the PE firms believe to have found something which can be optimized, in regard to the business strategy, a valuation of the target company is made to estimate its physical value, and the value of unexploited opportunities.

1.8.5 Financial valuation

It has become evident in this research that the valuation methods utilized by professionals are somewhat similar to the ones scholars have identifies as being the common and most appropriate for making financial valuation. It is though apparent that in real life much less emphasis on subjective calculations is made, rather the valuation is made as objective as possible by making cross comparisons between similar companies in the industry and similar deals executed in the past (Søren, Axcel; Mikael, FIH).

In theory and in real life emphasis is put on the Discounted Cash Flow (DCF) when making a valuation of a target company. The DCF is in many instances essential as it gives an idea of the future value of the company. This is very aligned with the arguments in the theory. It is though mentioned in theory and accepted by respondents, that the PE firms’ main objective is to change and improve the CF, which make the use of past numbers for calculating DCF inaccurate. For the same reason it is not used as the final argument, for an acquisition “*it is a qualified guess*” as Søren (Axcel) states it. The investors are using DCF to secure their interest rate payments, as it is apparent if payments can be made. The DCF is acknowledged but little weight is allocated to it when making the “buy/ no buy” decision from the PE firm. On the other hand for the financial debt issuer they are more concerned as it illustrates the likelihood of paying the interest on the loans (Mikael, FIH).

The calculations from the DCF are, applicable in another valuation method, as defined and mentioned earlier (LBO valuation method part 7.4.2). This method is more broadly focusing on the company’s total value at exit time. This method gives a more defined picture of the profit, which the PE firm can use as argument for their investors.

It has become clear that the valuation methods used by professionals are more objectively valuating the target company. This based on two reasons. First, the financial due diligence has to a large extend defined the financial situation in the target company already, hence little doubt in the target company exist. Secondly, the more objective comparison approaches gives a feeling of safety for the PE when making the decision. *“The target we have identified is similar to other companies being targeted for acquisitions, and the price we want to*
pay is similar to other prices”. The trust put in the information gathered for the analysis is crucial (commercial due diligence, financial due diligence), it is also aligned with theory.

This might also explain the reasons why little emphasis have been put on “standard” theoretical valuation methods, as the ones outlined in the Theory part under Valuation methods (3.3.4). These all look at the company in a more subjective light, secondly it is mentioned that some of them are fairly difficult to calculate accurate. They also rely on data, which is difficult to get access to for comparison. Calculating WACC and APV is difficult from the outside as one need to have access to the cost of capital of the company. This makes them useless in comparison with other companies, as the numbers might be inaccurate as they might not have been calculated similar.

The same thing goes when Axcel or Deloitte estimates what the premium should be, they basically as aligned with Dunne (2004), only pay the premium to secure the buy. The premium is then justified by the faith in the PE firm, having the right business strategy, and that they are better in motivating the management, supporting in strategic decisions, and effectively run the company.

The use of multiples makes it easier to compare to similar deals or companies, and at the same time gives the professionals an idea of what the value of the company approximately should be. This is also illustrated by Mikael (FIH), as he says that the track record and familiarity is crucial in the debt issuer’s perspective. This indicate that a larger part of the transaction is based on collecting, as much and accurate information concerning the target company as possible. Then utilizing this along with experience, knowledge and intuition, for the final valuation, and the “buy/no buy” decision and experience, it appears to be a “kick the tire” approach.

8.2 Further implications in the LBO transaction
By conducting this study and by investigating the transaction surrounding a PE firm’s LBO transaction, it has become clear that some unique processes exits, which is not applicable in the general M&A theory.

Before a PE firm signs the papers, closing a deal, they have to a large extent already considered the exit strategies (Niels, Deloitte). The typically exit strategies are Initial Public Offering (IPO), where the company is re-listed, and the profit is the price of the shares times the amount. An alternative is to sell to another PE firm/fund. This happens when a company has grown so much that it might be difficult for the current PE owners to secure further growth Søren (Axcel). Or if it is assumed that an unexploited potential still exists. Finally a “normal” sale of the target company to a “normal” company is used as exit. The latter two are the most common as it is a process that is fairly easy to control, and both PE firms and industry companies can bid on equal terms. IPOs can be difficult to control as they are highly affected by external factors (Søren Axcel).

The big emphasis on the exit for PE firms, is argued by theorist to be short-termed and minimizing cost for profitability, during the PE ownership has to much focus. This is contradicted both by Niels (Deloitte) and Søren (Axcel), as they state that the value creation in the company can only be gained by optimizing the company, in addition to have a cost reduction focus.

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91 see also LBO structure part 3.5
8.3 **Sum up**

What this research has illustrated is that the process is well defined in theory, but that the emphasis and the explanation might not be exactly accurate. Some stages might be skipped or bypassed, without it has any negative effect on the final outcome in reality, this contradicts the theories, although the stages are identified appropriately.

The professionals are using a more objective approach when valuating a company, than what has been identified in theory. The data collected in the due diligence process is - in the real world - used to make a comparison to similar companies and deals. When Axcel uses financial comparison (Multiples) they secure that what they have estimated based on the due diligence is actually aligned with what the rest of the market estimates. This is aligned with the statement of Sherman & Hart (2006), as they mentioned that the world is becoming more complex, so is the due diligence. Axcel’s approach simply gives an indication on accuracy of their work as they take a stance towards the results, as Angwin (2001) argues is often forgotten.

The evidence from comparing the professionals approach with the existing theory has shown that PE firms facilitate and uses other methods than what is outline in theory. An important factor in this is, that despite what the methods tells the PE firm, it is the trust they have in the managers running the company that consequently affects the “buy/ no buy” decision. Further the PE firm wants as much information concerning the target company as possible. A financial valuation is made, which is quite similar to the theoretical ones. However the valuation methods are more objective, and the use of the findings differs. The results are used for comparison as the results on paper are not enough. The results need to be compared to similar companies and deals. What can be summed up from this is that the PE firm uses their experience and knowledge regarding the market to justify the acquisition. As this approach is taken, the professionals might also differ from the actual process, despite it in general follows the theoretical created framework. The result is that the holistic process as argued by the theorist is not exactly what the actual LBO transaction process looks like, hence for the further work a new, but closely related framework will be created to better explain the actual LBO transaction, as it differs more from general M&A theory, than what is stated by the theorists.

8.4 **Creation of better and more accurate framework**

To illustrate where in the research have identified differences, between the theory and the professional practice, and new framework is created. To create the new framework and to sum up on the findings from this research the original “created framework is presented again.
As mentioned earlier the create framework is used to outline where in the pre-deal process the valuation takes place. And what methods are used to support the “buy/ no buy” decision as seen in the academic world. As stated early in this part it has in this research been identified that some processes, as identified in theory, does not appear to be processes, but rather tasks which can be bypassed or utilized as it fits best with the individual transaction. If the stages is used as definition as defined in theory, they are interlinked and have to be performed in the right order, and one process can not be excluded from the total process. I have chosen to present the new “created framework” first, as it will simplify the understanding.

The initial approach to the M&A is the “Idea” process as identified by Haspeslagh & Jemison (1991), it does not seem to fully exist in the LBO transaction. The applicable part is the identification of the target, after the strategic idea has been created. It is better identified in the Watson Wyatt Deal Flow Model in (Galpin & Herndon 2000) as they use “Formulation process”. Although it has to be altered to, be related to the LBO transaction and the PE firms rather than the target company, hence the importance to LBOs can be discussed. It is because an integration process hardly exists in an LBO between acquirer and target, and that the “idea” is not evolved at a certain time, it is a continuous process. This leads to the “Locate” process, which is more similar to the last part of the process in the Idea process in Haspeslagh &
Jemison (1991). This process reminds a lot more of the actual first stage conducted in an LBO transaction. I have chosen to call this stage of the LBO transaction “Identification”. The reason for this is that the PE firms are screening the market for potential targets, this is a continuous task, as several screenings can be executed at the same time and also while an LBO transaction is proceeding. However, sometimes the PE firms are presented with potential targets. This was mentioned by the professionals to happen regularly, meaning that the screening might not be the solely reason for an acquisition. Therefore it does not exist in some LBO transaction, and should be possible to skip in the framework.

When a potential target has been identified, either by screening or introduced, the “investigation” starts. This is similar to the “investigation” process in the Watson Wyatt Deal Flow Model. The stage here is more defined and it does not cover as much of the transaction as in (Galpin & Herndon 2000). The investigation first looks at whether the company qualifies to the business segment/ criteria of the PE firm. This task is basically done my collecting data on the company. If it meets the criteria the due diligence starts. The due diligence is used, to see whether the company qualifies as a potential target. It can either be a buyer due diligence, or a vendor due diligence. In this stage the business strategy for the target company begins to take shape. Next it will in the “Qualification”, become clear whether the company is potential or if it should be abolished. It is outlined if a potential is seen - is there a business plan that can be executed. In relation to this and based on the due diligence the financial valuation can start. In the “valuation” stage, is implemented the methods, which were identified earlier in this research. The reason why this task is conducted at this stage, is its dependence on the due diligence information. Secondly as the potential has been identified, the company qualifies as a target, and price estimation can be made. This leads to the process of comparing all the outcomes of the tasks executed, creating a total picture of the company. All this leads to the task of making a price offer, which can lead to the Negotiation stage\(^{92}\). This framework is not holistic as mentioned by in the existing theories, basically as mentioned earlier, the complexity of the companies makes it so individual from transaction to transaction in how it is actual conducted. It is though not said that the original created framework is rejected, as it can be seen that the new framework is closely related to the first one, it is though believe that more emphasis should be put on the pre-deal process when conducting a LBO transaction.

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\(^{92}\) The negotiation stage has been delimited from this stage, as it has little to do with the actual valuation. See part 3.3.2
9 CONCLUSION

9.1 Conclusion
What has been evident from this research is that the general Merger and Acquisition theory does not fully explain an acquisition process like a Leverage Buyout. It is though apparent that the theory has to a large extent succeeded in identifying and outlining the processes as conducted by Private Equity firms.

1.9.1 Problem statement
And does this academic perspective align with an actual Leverage Buyout transaction? The conclusion has been sub-divided to answer the two problem statements. By utilizing illustrative examples it has been possible to explore the existing M&A theories, and concluded the following for sub question:

How well is the LBO process defined by existing M&A theory?

- The findings based on this research illustrates that the existing theories does not in full explain the LBO transaction.
- It appears that the general M&A theories are somewhat not specified enough to capture the LBO process, as more emphasis is put on the investigation in theory (due diligence), that what is outlined in the Haspenslagh & Jemison (1991) process model, and in the Wathson Wyatt Deal Flow model.
- It is further seen in the research, that the transaction defined as a holistic process by scholars is not as holistic. The interrelated process as defined by academics is better defined as tasks, which can then be combined most suitable. Mainly because it is argued that the individual LBO transactions are so different. It is more accurate to define a framework that acknowledges that the transaction is facilitated so differently from time to time.
- The valuation process, which is crucial for PE firms, is neglected in most general M&A theories.
- The general M&A theoretical developed models seem fairly static. Little attention to a continuous screening process is mentioned.
- That the first stage in the process does not seem to exist. The formulation and Idea, is not part of the individual process, but a business function at the PE firm. It is predefined, what segments to target, hence it does not affect the individual process.

And how well does this align with an actual LBO acquisition process?

- Same as last one above.
- The financial valuation methods identified and often mentioned in relation to acquisitions and valuations in academic publications are not utilized in the same way in practice. Other methods are used by the professionals in the industry. It is identified in the research that the professionals tend to use more objective measures than the ones normally mentioned in academic publication.
- It has become evident that the motives for PE firms to acquire a target company is highly dependable on the value creation opportunities, rather than the value capturing
often mentioned in the public news. Despite the high profit margins are mentioned in relation to cost reduction in the public news. It appears that cost is one among many drivers which motivate the PE firm to an acquisition.

- That the relationship between acquired company’s managers and the PE firm’s employees is crucial for the success of the acquisition. The PE firm may lay out the business plan of how to improve or grow the company, but it is the daily management that has to implement and manage the changes, the “relationship” and trust between the two is essential for a profitable outcome.
- In addition it has been identified:
  - Investors are putting a lot of emphasis on the track record of the PE firm or the target when issuing debt. That the investors as well as the PE firms tend to look more objectively on the project than what can be seen in the papers. The relationship is crucial to secure the financing either as invested capital or borrowed capital.

### 9.2 Further research

Through this research several related topics have caught my attention. It appears that the lack of interest from the academic world, or maybe just the assumptions:

- That what happens in an LBO transaction is similar to a general sustainable M&A.
- That PE firms manage and conduct business like normal companies.

are not entirely correct. This first of all could lead to further research. In the process other topics caught my attention as well.

I find the situation with the performance fee, or sale fee in relation to a mandate sale for consultancy houses quite interesting from an Agent/ principal theory perspective. The situation where the sale price affect the fee to the consultancy house, might give conflict of interest, as the consultancy house aim for the highest price, despite it might not be the best fit with the new owners.

Another implication I came across while doing this research is the premiums paid in relation to the efficient market hypothesis. As it is now, the PE firms and professionals justify the premium by being better at manage the company, however it could be interesting to see if this was actually the case. This could be done as an empirical analysis, the implication with this research is that one need to have access to both the acquisition price and the price obtained at sale when the fund is realized.

Related research is also the actual profit of the PE firms, as they are eager to tell about the success stories, but little is disclosed about the not so profitable acquisitions. This can again be done as an empirical analysis where the total targets purchasing prices are compared to the total sale prices.

In this research it has become apparent that the exit is crucial for the PE firms. It could therefore be interesting to see how the macro economic factors affect the exit. What strategies to use when to exit, and what the profit is from the exit. This again would be an empirical analysis and it would be quite comprehensive, as the timeframe of most of these PE ownership is five to seven years.
10 CREDIBILITY CRITERIA

In this paragraph a self-reflection on the research is presented. What it basically comes down to, is taking a stance to the research. This is very well formulated by Raimond (1993)\textsuperscript{93}: “‘how do I know?’ test...” This, I can not guarantee that I know, but I have tried to eliminate the possibilities of not knowing by utilizing acknowledge theory, sources, and respondents, within a well founded methodology.

The outline for this self evaluation is presented by Saunders et al. (2003) they state that minimizing the chance of getting wrong answers and interpretations is essential and good research ethics. According to Remenyi et al. (1998) page 179, four tests are appropriate to conduct from a positivistic philosophy stand point. It is construct validity, internal validity, external validity and reliability. These are more generic defined by Saunders et al. (2003) page 252 as reliability, forms of bias, validity and generalisability.

10.1 Construct Validity

To secure that the research qualifies to the construct validity, it is important that the basic understanding of concepts, ideas, conclusions are understood in the topic. Further it has to be proven that the measures used in the research are valid in explaining the research topic (Remenyi et al. 1998, page 179).

As a lot of time have been used to identify the most appropriately literature and data for this research, many perspectives have become acquainted. Because of this a broad and large insight in to the M&A theories, the PE industry and the LBO processes is the outcome, this has lead to a good understanding of the terminology, ideas, and assumptions presented in the area. This is basically the result of the positivistic philosophy and the deductive approach, as it naturally leads the researcher to lots of knowledge in the field where research is conducted.

Based on this understanding it is believed as the further research is conducted on this knowledge that it have benefited the further research. As this credibility is mainly concerned about the researcher and his work, is has been tried to remain as objective and open-minded as possible, in regards to the research topic. Working with the theory has been fairly easy, as the information has been acquired by the reading. However as stated earlier some of the theories are not resent. Newer research might have higher explanatory value, the constrain is though that little research is done in this field, hence the theories applied are the most recent and acknowledge.

10.2 Internal validity

When talking about internal validity, the focus is on whether the arguments used to describe the cause is ambiguous, if there are other reasons to the effect (Remenyi er al. 1998, page 180). This credibility criterion is closer related to phenomenologicist philosophy than it is to the positivistic approach, as the concern is often raised to research explaining relationships, and whether other factors affect not identified could affect the results (Remenyi et al 1998, page 180). It is though not to be abolished as a credibility criterion as it forces the researcher to think about strong arguments to validate the research (Remenyi et al. 1998, page 180), for this reason I believe that it is applicable in relation to this research as it forces the researcher to reflect about the argumentations, and different angles. In this research it is tried to argue for the

\textsuperscript{93} cited by Saunders et al. (2003) page 100
findings hence it is tried to remain objective giving the most complete explanation. It is closely related to generalisability, as it also addresses the constrain, in how general and naïve the research can be utilized. The research is using general theories which are supported by few interviews used to outline the LBO transaction process. These interviews might be affected by external factors which due to the few interview, might have a larger impact, than if more have been conducted. However the focus was not the actual LBO processes but rather the combination of theories and methods to define the process, hence it is believe that the result might have been the same with more or other respondents.

### 10.3 External validity

This aims at defining whether it is possible for the research to be generalized, to be used outside the boundaries of where it is conducted (Remenyi et al. 1998, page 180). External validity is closely related to positivism and less to phenomenologists, as it is central is authentic and whether the sample represents the population (Remenyi et al. 1998, page 180). The aim of research like this using in-depth survey, similar to a case study is not to argue for a complete generalisability. It is used to outline whether the theory has any explanatory value in the situation. Of cause as the research is assumed well produced and thought through, it is expected that it would be valid in other situations, hence generalisable to a degree. The interview is all conducted in one country, with few but qualified and reliable sources. These sources are believed to be highly representative of the Danish LBO market, as it is the biggest players in the country, and there are few others in the market, if one tries to justify the research internationally it could be a weak generalisability, as other regulations and cultures can affected the process. This is an important concern to this research. It is though not the researcher’s opinion, as a lot of regulations are utilized across boarders, affecting more than nationally, hence the process is similar. This is also supported as the theory and reality is outlining the process almost identical. The theory is developed in US and the companies are Danish located, showing that the explanation appears to be usable across borders. In regard to transferability the research is believe to be valid. The theory is quite generic, and little problem should there be in transferring the research to other environments or countries. It is though important that it remains within the same business area, as the theory otherwise has little explanatory value. Do to the limitations regarding the sample size it can be argued if complete external validity has been reached in this research.

### 10.4 Reliability

In the positivist point of view, by minimizing errors and bias’ the research will be increasingly more reliable (Remenyi et al. 1998, page 181). This is in phenomenology not a valid argument, to making the research reliable (Remenyi et al, 1998, page 181). To be able to identify whether or not this research is sound, answering the following three questions might help (Easterby-Smith 2002)\textsuperscript{94}.

1. **Will the measures yield the same results on other occasions?**
2. **Will similar observations be reached by other observers?**
3. **Is there transparency in how sense was made from the raw data?**

It is my belief that the findings would be similar at other occasions. The conclusions I have identified in this research is argued to be sound. First of all as I have made a theoretical explorative analysis, to verify whether or not existing theory had any explanatory value in

\textsuperscript{94} cited by Saunders et al. (2003) page 101
regards to an LBO transaction facilitated by a PE firm, it is believe that little external factors affects the research. Theory is easily accessible as one can pretty much pick up a book and read what the scholars’ idea is in regard to M&As, hence it should be the individual interpretation that might change the conclusions, this has been discussed in Internal validity (part 10.2).

The secondary sources used are all reliable, as they are either academic publications, or sources from the business press, they have further been identified through reliable channels, most through search engines at Copenhagen Business School, or through other academic publications. The approach and use of the identified sources have been critical and reflective, trying to see if bias’ and prejudices existed in the sources. The raw material was all collected through either acknowledge databases or by interviews with professionals.

The theory researched in this thesis is very aligned with other theories in the topic, and they therefore appear to give a clearly defined picture of the general academic acceptance of the M&A transaction. As theory is so to speak, not directly affected by its surrounding until new and better theory is defined, I believe that others would be able to identify an almost similar framework, based on same or related theories.

The respondents were all qualified in answering the questions and their answers describe the industry similar and thoroughly. Hence it is from an academic viewpoint unlikely that by talking to other industry stakeholders that you would get completely different answers than the ones presented in this research. It did not appear like any agenda, or if any outside factors were influencing the answers. All the interviews took longer than original plan, but it was mentioned by the respondents, that it was not a problem and that they would like to continue, hence time have not influence the answers.

In regards to the illustrative examples, the economic environment is beneficial for LBOs at the moment as defined in the thesis. This will in doubtfully have an influence on the methods and approaches used for valuating target companies. As defined by Bill Conway: “The biggest mistake I've made in the last few years is I should have been far more aggressive” This statement could lead to falls conclusions and decision making when evaluating a target. If the market changes to bear-rather than a bull market, it will be more difficult to get access to capital through investments and debt. The PE firms might be more careful and they need to do a better and more accurate job, to secure a successful outcome. This is an assumption, and there is nothing that argues for the LBO transaction being changed from, what the respondents have argued and the alignments in theory. It would be naïve to say that the professionals in the industry currently are not making a good job, for those reasons I think, that if circumstances changed the conclusions would be the same. The emphasis on making an accurate valuation is crucial for survival of PE firms, no matter what the surroundings look like, the mistakes made in a bull market may have less impact than if they are made in a bear market.

In this research, I have had little interest in getting a predefined outcome. I have no personal benefits whether the academic view is aligned or not with the actual transaction, known as the “good news” syndrome (Saunders et al. 2003, page 103). The findings and the conclusions has therefore little weight in the overall research process. On the other hand I have identified this topic personally so I find it interesting and it has been rewarding to research, but I do not feel

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95 Wong (2007), Carlyle Group dealmaker’s biggest regret
that it have had anymore influence on me, than it would have on any other researcher, deciding what to research for him or her self.
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Zephyr research database, through CBS library

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http://www.axcel.dk/
http://hugin.info/134900/R/948956/134204.pdf
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Loos, N. (2005), Value creation in Leverage Buyouts, Dissertation, University of St. Gallen, Gutenberg AG, Litchenstein
Vækstfonden (2006), Det danske marked for venturekapital og buy-out, Vækstfonden, Hellerup
11.8 Glossary of Terms

Acquiring Company: the company (buyer), which is interested in purchasing another company, the target company.

Acquisition: is a purchase where one company takeover the majority of assets and liabilities in another company and thereby gain control of it.

Bear market: is a market which is declining. The value decreases in the long run.

Block holder: a single shareholder with a larger possession of the shares in a company.

Bull market: is a growing market. The value of the market inclines in the long run.

Buy/no buy: term used to define the final decision in the transaction to make the deal go through or not.

Clubbing: club-deal when two or more PE firms funds are united into one for creating a bigger fund with more capital for larger acquisitions.

Data room: a defined location where buyer have full disclosure to the targets books, contracts, history, legal etc. However nothing is allowed to leave the room.

Deal: is the final transaction where the negotiations lead to an agreement and the transaction is executed.

Due diligence: is a task where all information concerning the company is gathered to create a complete picture of the company. Due diligence identifies the issues which might raise questions the management need answered concerning the company.

Fund: (PE Fund), a pool of money that have been created by a partnership where several limited partners deliver the capital to the PE firms disposition, with the expectation of a return higher than the market.

Hedge funds: generally refers to a lightly regulated private investment fund characterized by unconventional strategies (e.g., strategies other than investing long only in bonds, equity or money markets).

Intangible assets: are the capabilities which the company possesses which can not be identified in the books. It is the difference between market value- and book value.

Investment: when money is placed so they will generate revenue, without your direct influence after investment.

Leveraged buyout: (LBO) is a transaction where the capital used is borrowed in commercial markets. The debt finance a large portion of the capital needed for the acquisition.

Mandate: is a contract which allows a consultancy house to manage the process of selling the company for the owners or management. It is often signed as business managers have little experience in selling companies.

Market Value: the total price of a public owned company, based on the share price timed the amount of shares.

Mega-fund: one fund created by two or more PE firms and their capital investors to target larger acquisitions.

Merger: is a transaction where two or more companies join assets and liabilities and either structure the total companies as one of the previous or they create a new organization.

Merger and Acquisition: (M&A) the acknowledged termed used for defining merger and acquisitions. The process of the two are similar hence the use of one term.

Mezzanine financing: is borrowed capital that gives issuer right to ownership in relation to the amount borrowed if liquidated.

Optimal price: is the maximum price it is possible to get for a company in a sale.

Private equity: (PE) is capital for investment which is not listed by the stock market. Typical investors are rich individuals, pension funds, institutional funds, private firms.

Private equity fund: a pool of capital that a PE firm controls, which has been raised by silent investment partners.

Private owned company: is a company which is not listed at the stock exchange.

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Public buyout: a transaction where the shares in a company is purchased to the degree that the majority of shareholders, decide to delist the company by taking it of the stock exchange, making the company privately owned.

Public owned company: is a listed company which through the share capacity has several stakeholders.

Systematic risk: is any risk that affects a large number of assets, each to a greater or lesser degree.  

Tangible assets: are the physical assets that create the book value of the company.

Target Company: the firm (seller) which the acquiring company (buyer) has decided to address for an acquisition.

Track record: the history and the experience of the persons examined.

Transaction: is a definition of the whole LBO process, from initiation to closure.

Unsystematic risk: is a risk that specific affects a single asset or a small group of assets.

Venture capital: private capital which is invested in new or small companies which the Venture Capitalist believe can give a high return by taking high risk with investment.

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97 Ross et al. (2006) page 299
98 Ross et al. (2006) page 299
Appendix #1: Word used for doing research online

Merger
Acquisition
Buyout
Leverage
Justification
Due diligence
Large
Private equity
Hedge funds
Capital funds
Venture Capital
Process
Valuation
Risk
Conduct
International
Cross-border
Target
Appendix #2: Detailed list of due diligence factors.
(Trolley’s 2004, page 405-408)

Market:
- Description of product portfolio and key markets, including relevant literature and marketing collateral
- Market share and competitive analysis
- Customer analysis, showing revenue and margin by customer
- Analysis of pricing strategy
- Product life cycle analysis by product
- Description of distribution channels and key intermediary contracts
- Details of sales force structure and rewards
- All relevant market analysis conducted by external advisers
- Company press releases
- Articles relating to the company or its industry

Operations
- Details of the company’s main operational facilities and processes
- Organization chart for operations
- Description of the process flow for main activities of the company
- Supplier information
- An appraisal, including age of all equipment and fixed assets
- Expansion plans
- Patents, trademarks and other intangible assets

Research and development
- Review of research in progress with critical path analysis to revenue generation for key item
- Commercial analysis of R&D over the last five years
- Description of R&D policies and processes

Finance
- Audited financial statements for the last 10 years, including income statements, balance sheets, statements of cash flow and changes in equity positions
- Management accounts for the last three years
- Budgets and financial projections
- Business plans
- Description of accounting policies and practices and key financial controls and systems
- Organization chart for finance function
- Details of company’s financial advisers
- Copies of the management letters from the company’s auditors for the last three years
- Accounts receivable analysis
- Accounts payable analysis
- Analysis of any extraordinary income or expenses
- Analysis of any material write-downs or write-offs
- Summary of any bad debt experience
- Details of any outstanding contingent liabilities
- Any reports from outside consultants or accountants on the company’s financial condition
- Summary of the company’s financing arrangements including terms, conditions, covenants

Human Resources
• Profiles of all board members and senior executives of the company, together with any management audit reports undertaken in the last three years
• If the company is private and the directors are shareholders the buyer needs to understand the implications of a sale and the motivations of each of the directors
• The buyer will want to understand the nature of the relationships between the directors
• Organizational chart, including numbers currently employed and projections in each function or activity
• Details of remuneration and incentive schemes, including pension, option, profit sharing, deferred compensation and pension arrangements
• Confidentiality agreements with employees
• Consulting agreements
• Details of staff turnover
• Copies of employee policies and procedures
• If appropriate, details of key union arrangements and agreements including descriptions of any past disputes of a material nature
• Details of the company’s internal communication processes and examples, e.g. company newsletters etc.
• Investor relations
  Shareholder analysis
• Analyst reports for the last three years, together with analyst contact details
• Results presentations and scripts for the last three years
• Copies of any market research undertaken with shareholders an analyst communities
• Contact details for the top twenty shareholders
• Organization chart and curriculum vitae for the investor relations team
• Description of the company’s culture and core values

Legal and company secretarial
• Articles of incorporation
• Minutes of board of directors, committee and shareholder meetings
• Documents furnished to shareholders and directors over the last three years
• Certificates from all states and jurisdictions where the company and subsidiaries are authorized to do business
• Sample copies of stock certificates, warrants and options
• Shareholder data, including dates of issuance, number of outstanding shares and details of registrars
• Detail of any outstanding preferred stock, options, warrants or convertible securities
• Description of share option, share purchase and other employee share ownership schemes
• Joint venture and partnership agreements
• License agreements
• Purchase agreements
• Liens, equipment leases, mortgages or any other outstanding loans
• Insurance contracts and agreements
• Any additional agreements or contracts relevant to the business of the company, including contracts with suppliers, vendors and customers
• Description of any current litigation, including potential damages
• Description of any potential litigation, including potential damages
• Settlement documentation for any previous litigation
• List of all real property owned by the firm
• Recent appraisals and property surveys
• Titles, mortgages, deeds of trust and any other agreements relating to company-owned real property
• Detail of any easements or other encumbrances
• Leases and sub-leases

**Tax**
• Full details of company’s tax return and current tax position
• Details if company tax advisers
• Description of any fines or penalties the company has had to pay in the last five years relating to tax

**Governmental regulations**
• Copies if any permits and licenses and, if the company is operating in a fully regulated industry, all other relevant details
• Copies of reports made to government agencies
• Detail of any enquiries made by any local or national government agencies
Appendix #3: Table for Calculating important key numbers:

<table>
<thead>
<tr>
<th>Free Cash Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBITDA</td>
</tr>
<tr>
<td>- Depreciation</td>
</tr>
<tr>
<td>EBIT</td>
</tr>
<tr>
<td>- Interest expense</td>
</tr>
<tr>
<td>EBT</td>
</tr>
<tr>
<td>- Tax</td>
</tr>
<tr>
<td>Net Income</td>
</tr>
<tr>
<td>+ Interest expense</td>
</tr>
<tr>
<td>NOPAT</td>
</tr>
<tr>
<td>+ Depreciation</td>
</tr>
<tr>
<td>- Capital expenditures</td>
</tr>
<tr>
<td>- Change in Working Capital</td>
</tr>
<tr>
<td>FCF</td>
</tr>
</tbody>
</table>

*Source Weston and Weaver 2001*

<table>
<thead>
<tr>
<th>NOPLAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>EBIT</td>
</tr>
<tr>
<td>- Tax</td>
</tr>
<tr>
<td>+ Change in deferred Tax</td>
</tr>
<tr>
<td>NOPLAT</td>
</tr>
</tbody>
</table>

*Source Copeland et al 1990*
### Appendix #4: Table of current largest LBOs:

<table>
<thead>
<tr>
<th>Deal No</th>
<th>Acquirer name</th>
<th>Acquirer country code</th>
<th>Target name</th>
<th>Target country code</th>
<th>Target Industry Classification Benchmark</th>
<th>All Deal values th. USD</th>
<th>Deal status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Home Depot Inc., The</td>
<td>US</td>
<td>5375 / 5379</td>
<td>100,000,000.00</td>
<td>Rumour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Dow Chemical Company, The</td>
<td>US</td>
<td>1357 / 1353</td>
<td>54,000,000.00</td>
<td>Rumour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>BT Group plc</td>
<td>GB</td>
<td>6536 / 6575</td>
<td>48,383,975.23</td>
<td>Rumour</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Texas Energy Future Holdings LP</td>
<td>US</td>
<td>TXU Corporation</td>
<td>US</td>
<td>7536 / 7573</td>
<td>45,000,000.00</td>
<td>Pending</td>
</tr>
<tr>
<td>5</td>
<td>Medallion Parent LLC</td>
<td>US</td>
<td>Equity Office Properties Trust</td>
<td>US</td>
<td>8737</td>
<td>39,000,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>6</td>
<td>Medallion Group LP, The</td>
<td>US</td>
<td>Equity Office Properties Trust</td>
<td>US</td>
<td>8737</td>
<td>38,300,000.00</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>7</td>
<td>UGG Parent LLC</td>
<td>US</td>
<td>Equity Office Properties Trust</td>
<td>US</td>
<td>8737</td>
<td>37,443,000.00</td>
<td>Withdrawn</td>
</tr>
<tr>
<td>8</td>
<td>Medallion Group LP, The</td>
<td>US</td>
<td>Equity Office Properties Trust</td>
<td>US</td>
<td>8737</td>
<td>36,000,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>9</td>
<td>Hercules Holding II LLC</td>
<td>US</td>
<td>HCA Inc.</td>
<td>US</td>
<td>4533</td>
<td>33,000,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>10</td>
<td>Texas Pacific Group Inc.</td>
<td>US</td>
<td>Harrah's Entertainment Inc.</td>
<td>US</td>
<td>5756 / 5753</td>
<td>27,800,000.00</td>
<td>Pending</td>
</tr>
<tr>
<td>11</td>
<td>Thomas H Lee Partners LP</td>
<td>US</td>
<td>Clear Channel Communications Inc.</td>
<td>US</td>
<td>5553 / 5555 / 5756</td>
<td>26,700,000.00</td>
<td>Announced</td>
</tr>
<tr>
<td>12</td>
<td>Knight Holdco LLC</td>
<td>US</td>
<td>Kinder Morgan Inc.</td>
<td>US</td>
<td>577</td>
<td>22,000,000.00</td>
<td>Pending – awaiting regulatory approval</td>
</tr>
<tr>
<td>13</td>
<td>Carlyle Group, The</td>
<td>US</td>
<td>Finescale semiconductor Inc.</td>
<td>US</td>
<td>9576</td>
<td>18,850,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>14</td>
<td>Cinven Group Ltd</td>
<td>GB</td>
<td>NTL Inc.</td>
<td>GB</td>
<td>5553</td>
<td>18,807,536.27</td>
<td>Rumour</td>
</tr>
<tr>
<td>15</td>
<td>Supervalu Inc.</td>
<td>US</td>
<td>Albertson’s Inc.</td>
<td>US</td>
<td>5337 / 5333 / 5379</td>
<td>17,400,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>16</td>
<td>GUS plc</td>
<td>GB</td>
<td>GUS plc</td>
<td>GB</td>
<td>5337 / 5333 / 5379 / 9533</td>
<td>16,225,613.29</td>
<td>Rumour</td>
</tr>
<tr>
<td>17</td>
<td>Kemble Water Ltd</td>
<td>GB</td>
<td>Thames Water Holdings plc</td>
<td>GB</td>
<td>7537</td>
<td>15,946,391.55</td>
<td>Completed</td>
</tr>
<tr>
<td>18</td>
<td>Nordic Telephone Company APS</td>
<td>DK</td>
<td>Telia A/S</td>
<td>DK</td>
<td>6536 / 6538 / 6575 / 5553</td>
<td>15,800,000.00</td>
<td>Announced</td>
</tr>
<tr>
<td>19</td>
<td>Carlyle Group, The</td>
<td>US</td>
<td>Hertz Corporation</td>
<td>US</td>
<td>5377</td>
<td>15,000,000.00</td>
<td>Completed</td>
</tr>
<tr>
<td>20</td>
<td>Carlyle Group, The</td>
<td>US</td>
<td>Dominion Resources Inc.’s oil and gas assets</td>
<td>US</td>
<td>0533 / 0537</td>
<td>15,000,000.00</td>
<td>Rumour</td>
</tr>
</tbody>
</table>

Table is extracted from Zephyr research database
### Appendix #5: LBOs defined in Industry by SIC® code

<table>
<thead>
<tr>
<th>SIC code (Target)</th>
<th>Time period (Deal latest date)</th>
<th>Number of deals</th>
</tr>
</thead>
</table>

---

99 Standard Industrial Classification of all economic activities (SIC)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Holding and investment offices</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>35</td>
<td>24</td>
<td>34</td>
<td>74</td>
<td>76</td>
<td>81</td>
<td>157</td>
<td>39</td>
<td>535</td>
<td></td>
</tr>
<tr>
<td>Hotels &amp; other lodging places</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>7</td>
<td>22</td>
<td>13</td>
<td>36</td>
<td>44</td>
<td>50</td>
<td>78</td>
<td>27</td>
<td>288</td>
<td></td>
</tr>
<tr>
<td>Personal services</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>11</td>
<td>17</td>
<td>9</td>
<td>17</td>
<td>4</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Business services</td>
<td>41</td>
<td>80</td>
<td>171</td>
<td>410</td>
<td>365</td>
<td>399</td>
<td>543</td>
<td>756</td>
<td>958</td>
<td>1221</td>
<td>314</td>
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### Appendix #6: World historic number of M&A and value

239,490 deals broken down by: Time period (Announced date) and Deal value (mil USD) with n.a. estimated

Figures refer to: Number of deals

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Appendix #7: Background information on Respondent and Companies

Appendix #7.1: Private equity/ Søren Westh Lonning/ Axcel
Axcel is the largest Private equity fund in Denmark in regard to capital and employees. The fund was founded in 1994, by a group of investors. Among others are the largest pension funds, institutional funds and large Danish corporations. Axcel has three investment funds with a total of DKK6.6 billion. It has to date invested in 29 different projects and sold of 17 of these again. The main business area is Danish medium-sized companies, but the focus is expanding as Axcel recently opened an office in Stockholm, Sweden.

Source Presentation of Axcel

Søren West, is a project-/ investment manager. He graduated from Copenhagen Business School in 2002 as a Master in Science of Finance and Accounting. He has been working as a consultant at McKinsey for two years and the last two years at Axcel, first as an associate later as a manager.

Appendix #7.2: Investment bank/ Mikael Gillismark/ FIH
FIH was founded in 1958 as the “FinansieringsInstitutet for Industri og Håndværk A/S”. Its business area was primarily semi-long term financing for Danish companies. FIH was purchased by a holding company in 2000 and was withdrawn from the Danish stock exchange. In 2004 the holding company was acquired by the Icelandic bank Kaupthing Bank. Kaupthing bank is the 8th largest bank group in the northern part of Europe. FIH had in 2006 315 employees, and a profit of 935 million Danish kroner. The main business areas are financial services to companies, subdivided in following areas: Business, Property Financing, Corporate Banking, Structured Finance, Capital Markets, and Investment Banking. The bank evolved into a more regular bank, with a broader product portfolio, although still only within the business market.

Source: http://www.fih.dk/ and http://www.fih.dk/omfih/, the 5th of April 2007

Mikael Gillismark, is account manager for financial services. He started working in the financial sector in 1980 in Jydske Bank. In 1993 he graduated with a business degree in Finance from Copenhagen Business School. He has been in FIH for the last one and a half year. He works in the finance department, and has direct contact with the costumer companies, selling the FIH products.

Appendix #7.3: Consultancy house/ Niels Stidsen/ Deloitte
Deloitte Touch Tohmatsu is a consultancy and auditing firm. It is a firm built and grown on mergers and acquisitions, from its creation in 1833. By 2007 it is located in 140 countries and has 135000 employees and aggregated revenue of $20 Billion. Its main business areas are Auditing, Taxation, Consulting and Corporate Finance. The respondent is from the Corporate Finance department in the Financial Advisory Services Business area.
Deloitte is one of the leading consultancy houses in Acquisition and Sale of companies in Denmark. The financial advisory services have 55 employees. Deloitte often uses different departments to support in an M&A

Source: http://www.deloitte.com/dtt/section_node/0,1042,sid%253D253D6719,00.html and http://www.deloitte.com/dtt/section_node/0,1042,sid%253D253D76339,00.html, the 5th of April 2007

Presentation of Deloitte Financial Advisory Services, 2007
Niels Stidsen, assistant manager in Corporate Finance. Niels is educated from Copenhagen Business School in 2005, with Master of Science in Finance and Accounting. He started working as Controller Assistant in Carlsberg Nordic IT Services 2003- to 2004. Niels has been working at Deloitte in Corporate Finance since 2005.
Appendix #8: Interview letter, and questions for semi-structured interviews

This was the letter original sent to Søren West at Axcel on email prior to the interview.

Background:
Theorists argue that an acquisition is a homogenous process where every step in the process affects the final outcome. Never the less most research in Merger and Acquisitions often focus on integration and synergies of the post-deal. This school of theory often neglects the more basic financial criteria that have to be met for the acquisition to be feasible in the first place. Other schools of theories are focused on the financial valuation of a Leveraged buyout (LBO) and the financing of it, delimitating other aspects than financial.

The purpose of this thesis will be, from an academic point of view, to explain the transaction process of an LBO leading the way for the high bidding prices.

This will be facilitated by drawing from and combing the more general Merger and Acquisition theory with the more financial valuation theory, to create a holistic framework explaining the process. The framework will aim at identifying and explaining what it is that justifies the premium paid by the Private equity companies.

The research and findings will be compared to the qualitative data collected through interviews with professionals from the industry. The data collected will then be compared to the academic framework of an LBO. It will be tried proven whether or not the created framework has an explanatory value in relating the two schools of theory to the actual LBO process.

Framework:

The created framework is based on a generic model by Haspeslagh and Jemison (1991). This model comes from the process school. The model focuses on the whole process and its affect on the post-deal integration/ outcome. The model relies much upon the human factors and their influence on the process. To be able to identify more indebt where the financial valuation and due diligence takes place the WatsonWyatt deal-flow model has been connected to the previous model. This gives a more detailed picture of the pre-deal process. This part of the framework is from the more general and sustainable part of the Merger and Acquisition theory.

Based on the previous parts of the framework, it is possible to identify where in the LBO process the valuation and due diligence takes place. The framework now examines further the implication of an LBO. In this phase the financial methods identified and utilized by scholars are listed when valuating an LBO.
Through this framework it will be evident which methods are attributed, by scholars, to the financial valuation in regard to a successive outcome, and how the price can be justified.

Background information about company/department:
I have here briefly summed up the background data on your company/department to be able to justify and verify the validity of the source in regard to this research. I would appreciate if you would skim it to secure the accuracy.

Axcel
Is the largest Private equity fund in Denmark in regard to capital and employees. The fund was founded in 1994, by a group of big investors. Axcel has three investment funds with a total of DKK6.6 billion. It has to date invested in 29 different projects and sold of 17 of these again. The main business area is Danish medium-sized companies.

Respondent: Søren Vest. Professional data?

Questions for the semi-structured interview.
The chosen structure of the interview is known as semi-structured. I have chosen this approach as I am confident that my respondent has superior knowledge concerning this topic than I have. By following this structure the interview is guided in a direction, but the questions will be open ended and the respondents have broad boundaries to secure that no information is missed due to wrongly formulated standardized questions.

Entry questions:
How would you define a Leverage buyout (LBO)?
What could explain the big increase in LBOs?
How do you think an LBO differentiates itself from a regular (sustainable) acquisition?
Where would you place you company, or the services your company provides, in the LBO process?

LBO motive/Target questions:
What do you/or your company state as being the main motives for engaging in an LBO?
Examples: Unexploited growth, weak management, wrongful valuation - low share price
What do you/or your company state as being the main objectives when facilitating an LBO?
Examples:
Debt/Equity ratio: The heavy use of debt to finance the acquisition. Making bigger targets obtainable and by creating tax shields.
Incentives to management: The Private equity often increases the salary and bonuses for the management, to secure better management (agency theory).
Time horizon: The Private equity only expects a payoff in the end of the period (5-7 years), which makes it “easier” for the management to restructure the company, without thinking of the reactions from investors based on the quarterly financial statement as they first have to be responsible when selling of the company - so to speak.
Growth opportunity: It appears that the companies are not always managed efficiently when acquired. Hence growth opportunities exist.
Trimming of company: It is assumed from Private equity that cost cutting and trimming, optimizing can be done to achieve lower cost.
Macro environmental changes: There have been changes in the interest rates, amount of capital, risk aversion, EU etc. which all have made larger Buyouts possible.
Exit strategies: Different exit strategies can be exploited when terminating the fund/selling company. (IPO, recapitalization etc.)

Based on previous answers which factors would you describe as the most important in weight order?

How would you define the process of an LBO transaction?
How does this differentiate from the theoretical framework above?
Financial due diligence:
How do you define due diligence?
What are the main objectives in your due diligence?
How often do you utilize due diligence?
What does a properly conducted financial due diligence tell you? Only financial or also side effects, spin-offs, and spillovers?

Valuation methods:
Which valuation methods do you normally apply when making the financial valuation?
What key ratios do you utilize when making the financial valuation? (e.g. P/E, DCF, WACC, CAPM, APV appears to be mostly acknowledge by theorists).
If “Efficient Market Hypothesis” is acknowledged, how can the high bidding prices be justified?
If “Efficient Market Hypothesis” is accepted, are financial opportunities feasible as the overall main objective?

Sum up questions:
If objectives are divided into two groups, are the management and strategy opportunities more important than the financial opportunities?

Last questions:
How would you define a good LBO target?
Appendix #9: Interview CDs, is only to be found in main opponent’s report
### Appendix #10 The sampling frame (member list of DVCA)

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Appendix #11 Bibliography of literature that have been read but not sourced to this research

Books:

Articles:
Cosh, A.D., Hughes, A. (1993), Takeover Success or Failure? The experience of Large and Small UK Companies, Working paper Number 30, University of Cambridge.
Gertsen, M.C. and Søderberg, A-M., (1999), A business systems perspective on international acquisitions: The case of a Danish company with British and German owners- part 1, Strategic Change, Volume 8, November, page 413-319.