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VALUING COMPANIES IN M&A SITUATIONS
- A STUDY OF FINNISH SMALL & MIDDLE-SIZED COMPANIES

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The goal of this study is to examine valuation in small and middle-sized, private companies’ mergers and acquisitions in Finland. This study attempts to answer the following questions: How are companies valued in M&A in the small and middle-sized, private firm context? What are the most critical issues affecting valuation and M&A processes in this context?

This research uses qualitative methods as information gathering from private companies is challenging. These methods enable to reflect issues of interest even on a small sample. We use method triangulation as the topic is studied by numerous procedures. First, there’s a questionnaire directed for companies involved in M&A. Second, the results from the first phase are presented to experts who give their own opinions on the matter. Finally, previously gathered views are scrutinized with academic outlook. Therefore this study attempts to create a discussion between academics and practitioners on the matter of valuation in small, private company M&A.

Results of this paper are ample. Valuation should be seen as a part of the M&A process and this procedure should be properly planned and executed in order to harness the expected value. There are many ways to derive a value for the target and one can’t unambiguously determine the best method. The selection of the method depends on the expertise of the analyst and on the information available. There are special issues in private company valuation. The unreliability of the information used in valuation and personification of the company should be taken into consideration. Availability of funds for the transaction has also crucial role on the process. The results of this study should not be completely removed from their context as qualitative methods usually resemble case studies.

This research provides guidelines for future work on this issue, as similar studies made with this research structure have apparently not been done. For a company involved in M&A this paper gives information on where to focus in the process.

Keywords
Mergers, acquisitions, valuation

Additional information
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1 INTRODUCTION

Companies are looking for different ways to thrive in their respective markets, and in the pursuit of better market share and value they can use various different methods. One way of trying to secure the future of the company is by making different types of changes in the structure of the company. Mergers and acquisitions are of primary interest for such companies. Mergers and acquisitions (M&A) can be done in order to grow the company, to make the company more efficient or one can buy a competitor from the market; just to give some examples.

In Finland, the age-class distribution of inhabitants is skewed and there will be numerous companies that are in need of new owners in the upcoming years. A Finnish study (Varamäki, Tall, Sorama & Katajavirta, 2012) that examines the future of aging companies and their owners reveal that nearly 40% of the owners are expecting to sell their company to an outsider once they retire. This sell-side research emphasizes that there are many reasons for M&A activity.

In order to be a successful part of a continuing business, the target of the acquisition should be reasonably valued. In a transaction of an entity, both the seller and the buyer are looking for a price that maximises their utility. The intrinsic value of the target should be assessed so that the parties can start negotiating the deal even further.

The goal of the valuation is to derive a value to the entity in question. Theories of valuation state that the value of a company is comprised of the future cash flows that the company is expected to generate (Kallunki, Martikainen & Niemelä, 1999). Multiple studies (Eccles, Lanes & Wilson, 1999 & KPMG, 2006; et cetera) show that a substantial part of M&A transactions do not create the value that was expected of them. Transactions that are destructing the company value are clearly not justifiable. We will take a closer look at these studies on this paper.

The respondents of the Finnish study (Varamäki, et al., 2012) list the valuation of the target as the second hardest task of M&A process. Finding a suitable partner for the transaction is the only thing seen as more difficult. These results show that the
questions of valuation in M&A situations are still of major concern - even when there are lots of articles written on this matter.

Arguably the major focus of the public and academics is on large, publicly traded companies. Still, the quantities and problems are more pronounced in smaller, non-publicly traded companies. Issues such as information opacity and personification of the company are more significant in small and middle-sized, non-public companies.

In Finland, the amount of private companies is substantially larger than the number of public corporations. That is why this study focuses on small and middle sized companies. European Commission has defined a small and medium-sized firm as follows: A company can be classified as a small and medium-sized company if the staff consists of maximum of 250 people; and the annual revenue is 50 million Euros or the total value of the balance sheet is 43 million Euros, at maximum.

This study focuses on the buyer’s side since the problems listed above are greater than on the seller-side. The possibility of misvaluation creates risks for the acquirer; hence it is justifiable to concentrate on the M&A process from the buyer’s perspective.

The empirical research of this paper is executed in two sections. First part consists of a survey that targeted private companies that have been involved as a buyer-side in M&A activities. The final sample has 25 small and middle-sized Finnish companies that conducted acquisitions during 2008-2011. The survey attempts to capture the views of the companies on the matter of valuing targets and doing mergers & acquisitions. In order to complement this survey, the second part of this research consists of three interviews with experts of this field. These interviews reflect the results of the survey and focus more intensively on the subjects of valuation and M&A in small and middle-sized, private companies in Finland.

The aim of this study is to seek answers to the following questions: How are companies valuated in M&A in the small and middle-sized, private firm context? What are the most critical issues affecting valuation and M&A processes in this context? This paper attempts to answer these questions by creating conversation
between academics and practitioners on the matters of valuing companies as a part of the M&A process.

This paper is constructed as follows: In chapter two we will take a look at the valuation as a part of the acquisition process. Chapter three introduces some of the various methods of valuation. The special issues of valuation in private companies are the subject of chapter four. The structure of the theoretical part of this paper is loosely based on the author’s Seminar Thesis “Arvonmääritys yrityskautassa” (2013). Empirical results will be demonstrated in chapter five and the discussion between academic and empirical views follows in chapter six. Chapter seven summarizes.
2 VALUATION AS A PART OF ACQUISITION PROCESS

2.1 Reasons for Mergers and Acquisitions

Companies can have many objectives they are trying achieve. One could argue that companies might have a wide range of motives, but this paper focuses on the business objectives. Maximising the profits of the company, gaining a bigger share of the market or securing the position of the company are some of the possibilities how a company can try to create value to owners. (Kallunki, Martikainen & Niemelä, 1999:31.) When companies are trying to reach their goals set in the company strategy, they can use different methods in the process.

Companies usually have two choices when trying to improve at a certain field: they can either do it themselves, internally; or they can acquire the relevant factor from an outside source. These endeavours can for instance be related to developing new product facilities or furnishing new intelligence to the organization. (Bäck, Karsio, Markula & Palmu, 2009:14.) Acquisitions should be considered as a viable option in these situations.

Companies acquire other entities for various reasons. Acquisitions can be used as a shortcut to reach the strategic objectives of the firm. (Damodaran, 2002:967.) Motives to do acquisitions can involve reasons such as starting a new business, expanding the current business or trying to realize synergies. But all of these actions should aim at creating value of the company.

Damodaran (2002:974) defines synergy as the potential additional value that comes from combining multiple entities. According to Damodaran (2005) synergy is stated as the most used and misused reason in mergers and acquisitions. Synergies can be categorized into two groups. Operating synergies include for instance economies of scale and greater pricing power, whereas financial synergies consist of greater debt capacity and tax benefits.

A simplified way of illustrating synergy is to take a look at the following equation (1):
\[ V(AB) > V(A) + V(B), \] (1)

where,

\[ V(AB) = \text{Value of the combined firm} \]
\[ V(A) = \text{Value of the independent firm A} \]
\[ V(B) = \text{Value of the independent firm B} \]

Synergy is gained if the value of the combined firm is greater than the sum of the independent firms. (Damodaran, 2002:975.)

Pursue of synergy is stated as a major motive for numerous mergers and acquisitions. Bhide (1993) reports that operating synergies are the primary motive in one-third of the acquisitions of the sample gathered from years 1985 and 1986. Still, acquisitions that are trying to harness the synergy fail quite often. A study of KPMG (2006) shows that almost two-thirds of acquisitions do not realize the synergies set as a goal for the transaction. The study was conducted by a research company in 2005 and it includes numerous interviews of corporations. The results from the interviews are supplemented by performance measures calculated from information of DataStream database. (KPMG, 2006.) These results show that goals of the acquisitions are usually closely related to synergy realization.

Finding the motives and valuing these motives of M&A activity are challenging as every transaction is different. We will take a closer look at the classification and valuation of synergies later on in this paper in chapter three.

2.2 Process of Acquisition

Acquisitions can be either friendly or hostile (Damodaran, 2002:969). In this paper we are mainly focusing on acquisitions that are made in a friendly manner. Acquisition process and a proper valuation of the target are needed, regardless of the type of transaction that takes place in the acquisition. Naturally, the process of valuation can differ notably depending on whether the entity is acquired by an in-house group or by an outsider. There is need for more throughout inspection when
the acquirer comes from outside of the entity as they are not as familiar with the target as the possible buyers that come from within the company. This paper focuses on transactions that involve outsiders as acquirers.

The actual process of acquisition can be divided into five steps as shown in figure one.

![Figure 1. Steps of the acquisition process (Adapted from Bäck, et al. 2009:26)](image)

An acquirer should go through these steps when doing the M&A proceedings. Depending on the familiarity of the target and the sector in focus, one can go through this process quite quickly. (Bäck, et al. 2009:26.) Someone who doesn’t have enough expertise on the matter might have to use significant amount of time and energy on this. There are many specialists who are providing services on the acquisition process – we will take a deeper look at their role later in chapter five.

Next we will take a closer look at the steps of the acquisition process and some issues affecting the process.
2.2.1 Developing acquisition strategy and planning the acquisition

Acquisitions should be seen as a part of implementing the company strategy and the acquisition strategy should be formulated in line with the goals of the company. The strategy of acquisition should state the goals for the investment and the priorities that are to be kept in mind during the process. Usually, the guidelines of the acquisition come from the upper management or board of directors, so these guidelines should give enough information to the manager in charge of the process. (Bäck, et al. 2009:26.) Damodaran (2002:972) points out that all of the acquirers do not formulate a clear strategy or they choose not to implement the strategy they formed. As we will see in the discussion with the experts in chapter five, companies might get too eager to move forward in the transaction, abandoning the strategy. Still, the formulation of an acquisition strategy helps to scrutinize the process more objectively (Bäck, et al. 2009:27).

After outlining the motive for the acquisition, company can start to look for the possible targets with the motive as a dominant factor (Damodaran, 2002:980). The process of finding prospective targets can be diversified into two. First, the acquirer can find the targets from their sector and other viable sectors using only loosely defined qualifications. Secondly, after the preliminary search the acquirer can go through these entities one by one and rank them based on the motives set before. This is done with the help of the information they have. (Bäck, et al. 2009:27.) The acquisition strategy might hold multiple motives and in these situations the prospective targets should be ranked by the dominant motive (Damodaran, 2002:982). Based on the long list-short list process previously conducted, the acquirer will eventually have selected a handful of the most prominent targets (Bäck, et al. 2009:27).

How does a company actually choose the potential targets? There are academic studies that have studied this issue. Most of the research focuses on the financial similarity of the companies. Rhodes-Kropf & Robinson (2008) study the valuations of the parties of M&A activities. They find evidence suggesting that companies with similar valuation ratios engage in transactions with each other. The authors present the idea of ‘like buys like’, meaning that companies with high valuation buy
companies with high valuation and so on. The rationale behind this is the so-called property rights theory of companies, which predicts that entities with complementary assets and technologies should combine. (Rhodes-Kropf & Robinson, 2008.)

Preliminary valuation of the most promising targets is also conducted at this stage alongside with the initial planning of the actual transaction. Before reaching out with a proposition, the acquirer should be as well prepared as possible. This is to ensure that the actual process can be put into effect if the seller is willing to move forward quickly. (Bäck, et al. 2009:27.)

2.2.2 Executing the acquisition

After some preliminary negotiations, the two parties might agree on exclusivity that allows the buyer to negotiate with the seller without other possible acquirers also doing the same process simultaneously. A non-disclosure agreement, NDA, is usually made and it states that the possible information granted to the acquirer should not be distributed to any external parties. (Katramo, Lauriala, Matinlauri, Niemelä, Svennas & Wilkman 2011:48.)

After being granted the exclusivity and access to internal information, the buyer can start analysing the data received about the target. The information received might include the latest financial statements, sales forecasts, insights about the sector and the competitive situation, knowledge about the staff and information about possible liabilities the company has. Letter of Intent may also be composed at this stage; the motive for it is just to signal the willingness of both parties to move forward in the process. It should be noted that this Letter does not obligate either of the parties to finish this acquisition process. (Bäck, et al. 2009:29.)

Based on this tentative research on the target, the seller usually expects an indicative bid from the acquirer. Prior to this bid, the parties might already have engaged into extensive negotiations about the content of the deed of sale. This deed classifies the structure of the trade, the purchase price and purchase price adjustments, representations and warranties of the seller, among other things. (Bäck, et al. 2009:29.) The process of forming a consensus about the matters in hand might be
painful and time-consuming since both parties are trying to maximise their own utility.

After the indicative bid, the acquirer can start the actual Due Diligence process (Bäck, et al. 2009:29). Due Diligence can be defined as “a thorough evaluation of the target, and its sectors”. The goal of the Due Diligence process is to limit the risks of the transaction and to help both parties in formulating a common view of the value of the target. (Immonen, 2011:24.) Due Diligence should scrutinize the state of the legal issues, financial issues, human resource issues and operative & business issues of the target entity (Nachescu, 2010). Valuation of the target, the subject that is the focus of this study, is a part of the financial due diligence. Deriving a sensible value to the entity based on all of the information gathered during the acquisition process and through the Due Diligence process is one of the more important tasks in the whole Due Diligence procedure.

The challenges in the Due Diligence process and valuation can be significant and help from an outside expert might be useful. The usefulness of consultants in deriving the value of the target is questioned in the academic papers. Elnathan, Gaviouss & Hauser (2010) study the differences in analyst estimations between public and private companies in Israel. Their results show that experts that analyse private companies are significantly reliable on the reported earnings of those firms, despite the fact that the earnings can be grossly manipulated. Authors also imply that the value of the analysis of the experts is not significant when compared with the analysis of the acquirer. Final result of the study is that the valuations that the experts report might be in line with the views of the customer. (Elnathan, et al. 2010.)

After finishing the Due Diligence process, the acquirer can formulate their assessment into a final offer and the resulting negotiations take place. If both, the buyer and the seller accept the terms then the completion of the deal is the final phase of the execution stage. (Bäck, et al. 2009:32.) The method of payment and the accounting treatment are also important things of consideration for the acquirer (Damodaran, 2002:1002). There are potential benefits achievable if these procedures are handled properly.
Other possible parties, outside of the buyer and seller that are affected by the transaction should also be taken into consideration while planning and executing the deal. Usually the most important additional participant is the one who offers funding for the transaction. (Katramo, et al. 2011:245.) As seen later on in this paper, the role of the external financing is pronounced in small and middle-sized companies’ mergers and acquisitions. Thus it is important to include the financier in the process and provide them with enough information.

2.2.3 Integrating the Target & Evaluating the Acquisition

After receiving the property rights of the target, the acquirer can start the process of integrating that entity into a part of their own business and processes. Communicating both internally and externally is important, alongside with controlling human resources, technological procedures and aligning other functional systems so that they are coherent with the prevailing ones. (Bäck, et al. 2009:32.)

A KPMG survey (2006) states, that it takes approximately nine months in average for the acquirer to feel that it has sufficient control of the target entity. Integrating promptly can be seen as a key factor determining the success of an M&A process (Gadiesh, Ormiston & Rovit, 2003). A quick integration is also motivating employees to stay as a part of the company. It is also clear that the style of leadership affects the outcome of the integration. (Schweizer & Patzelt, 2012.)

The process of integration should be a major priority in acquisitions, since the realization of the expected positive outcomes is heavily dependable on how the buyer is able to harness the value that the acquired entity holds. We will see later in this paper that many acquisitions fail to realize their full, expected potential. One possible explanation is that the expected synergies are not reached since the integration is unsuccessful.

At the end of an acquisition process, the management should evaluate the procedure and the results objectively and try to adjust the conditions for better, concerning the situation in hand, and for possible future acquisitions as well. The target should be included as a part of the existing business and evaluation should be conducted in a
way that the company usually uses in performance evaluation. (Bäck, et al. 2009:32.) Sophisticated companies might examine the transaction more in depth, inquiring the opinions of key personnel involved in the process as well as making scenario analysis of the impacts of the deal.
3 METHODS OF VALUING COMPANIES

There are probably as many ways to derive an estimation of an acquisition target as there are people conducting these valuations. Still, there are some methods that are acknowledged by both the academics and practitioners. In this chapter we will take a look at the theoretical background of the most common valuation methods.

When looking at the broader picture, one can identify three different approaches to valuation: methods based on discounted cash flows; with relative valuation – by using comparables; and contingent claim valuation, which is based on option pricing theory. (Damodaran, 2002:14.) Given the problems of information gathering and reliability on private firms, there hardly is enough useable information for option pricing. The challenging issues concerning private firm valuation are discussed more in chapter four. Option pricing based valuation is thus ignored in this paper.

First we will try to understand how the value of an entity is formed and how that value is composed in an acquisition.

3.1 The components of the value of an entity

![Figure 2. The components of the value of an entity in an acquisition (Eccles, et al. 1999)](image-url)
The price in which the acquisition is executed is higher than the substance value in many occasions (Eccles, et al. 1999). This is the situation when distressed companies and other companies that are undervalued for some reason are excluded (Damodaran, 2002:980).

The value of an acquisition target can be dissected as seen in figure two. The intrinsic value of the company is the expected future cash flows discounted into the present, with an assumption that the entity will continue under the current management and relatively stable circumstances. The growth of the company is assumed to be in line with the expectations that the market has. (Eccles, et al. 1999.) An intrinsic value can be defined as a value that has been given by an all-knowing analyst, who knows the future cash flows and the correct discount rates and thus manages to value the cash flows correctly (Damodaran, 2002:16). This definition is clearly a theoretical one but it still gives the optimal setting that all valuations should try to duplicate. This chapter presents some of the methods that can be used in trying to reach that desired state of accuracy.

Market might add a premium on top of the basic value of the entity. This premium is added to reflect the likelihood that an offer for the company will be made. Therefore it reflects the market’s view of the value of the company (Eccles, et al. 1999). There are numerous studies focusing on this effect, but in this paper we will not pay a closer attention to it. In the context of publicly traded companies, the market value can be easily observed; but when it comes to non-public companies, the observation is much harder. We will discuss these challenges later in chapter four.

Purchase price is the price that the acquirer anticipates having to pay for the target (Eccles, et al. 1999). As previously stated, the formulation of the purchase price might involve a lot of negotiations and research. Eccles, et al. (1999) point out that the target price is quite definitely not the same for different acquirers since the potential value of the target is dependable on the synergies attainable. Synergy value is the expected added value that the target should create for the acquirer.

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3.2 About synergies

Synergy value is the value added to the new entity that comprises of the acquirer and the target. The classification of possible synergies (Eccles, et al. 1999) used in this study is the following:

- Revenue Enhancements
- Cost Savings
- Process Improvements
- Financial Engineering
- Tax Benefits

Other possible classifications are also available, like Damodaran’s (2005) classification into operational and financial synergies. This paper uses the broader classification of Eccles, et al (1999). Next we will take a look at these five sources of synergy.

Revenue enhancements can be realized by a consortium with a higher level of sales compared to what the individual entities could attain (Eccles, et al. 1999). For example, this can be a result of larger distribution network or if the target’s brand name is used to advertise the products of the acquirer (Huyghebaert & Luypaert, 2013). It should be stated that the evaluation of these benefits is quite hard, since they involve external variables that are not controllable by the management of the company (Eccles, et al. 1999).

Cost savings are the most obvious type of synergies and the easiest to estimate (Eccles, et al. 1999). These are achieved through economies of scale and economies of scope. Economies of scale come from spreading the fixed costs of operations over several units, whereas economies of scope relate to the costs of distribution of multiple products by single company instead of multiple separate firms. (Huyghebaert & Luypaert, 2013.)
Improvement of processes, merging the best practices of the joining entities can also create additional value to the consortium. The development of the processes in use can result in cost savings and revenue enhancements. (Eccles, et al. 1999.) The role of the management is critical when combining the processes and looking for the optimal way to operate.

Improvement of the financial situation of the firm without any operational adjustments is not really an ideal motivation to make an acquisition. Still, there is a possibility for realizing gains through financial engineering following an acquisition. (Eccles, et al. 1999.) Damodaran (2005) lists some sources of financial synergy. A combination of two entities, one of which is holding excess cash and other has projects yielding high returns. Together they can sum up to a higher value than what they independently generate. A consortium can increase the debt capacity if the predictability and stability of the business is more evident after the transaction. The cost of debt is usually lower for less risky companies (Huyghebaert & Luypaert, 2013). Diversification through acquisitions can add value for the owners of privately held companies since in these situations the owners’ wealth might be allocated mainly into this single company. Owners of publicly held companies can achieve diversification more easily by creating a diversified portfolio of assets. (Damodaran, 2005.) The owner of a publicly traded company is usually able to hold smaller portions of shares of the company and therefore has a better chance of owning shares of multiple companies.

Tax benefits can enhance value of the joined entities in M&A situations if the net operating losses are used to shelter income, or if the transaction leads to a write up of the target’s assets. An acquirer that is profitable can acquire an entity which is losing money. The new entity may be able to use the losses of the target to limit the taxes. Also, a company that manages to increase the amount of depreciation through the acquisition could cut back in taxes. (Damodaran, 2005.) Tax benefits can be realized at least when financing the transaction partially with debt. This is one of the results of the paper that studies a sample of leveraged buy-outs in years 1990-2006. The leverage results in tax shields that lead to increased cash flows. (Guo, Hotchkiss & Song, 2009.) This result can be quite relevant, as most of the companies in the sample of this study used debt to finance their transaction.
How often do synergies actualize following an acquisition? There are several studies on this matter and majority of these studies conclude that a remarkable amount of deals do not manage to create the expected value mostly because of not harnessing synergies. A KPMG study (1999) of 700 large deals between 1996 and 1998 concludes that only 17% created value and 53% destroyed value. Whether a deal created value was determined by comparing the development of acquirer’s equity to an industry benchmark. The data was retrieved from Bloomberg. (KPMG, 1999.) Ghosh (2001) finds no evidence of post-deal improved operating performance when compared to adequate performance and size adjusted benchmarks. Higson & Elliott (1998) examine the abnormal returns of UK companies involved in transactions during 1975-1990. Authors find no abnormal returns in the three years after the acquisition.

Transactions that do not create the expected value can lead to divestitures, as the deals are reversed. A study focusing on large acquisitions made between 1971 and 1982 shows that nearly 44% of the acquired entities were divested by the buyer by the end of 1989. (Kaplan & Weisbach, 1992). There are studies that present opposite results, such as Franks, Harris & Titman (1991). They investigate the performance of the shares of acquiring companies in a sample of 1975-1984 and suggest that the weak results in other papers are a result of errors in benchmarking. (Franks, et al. 1991.) As usual, there is academic discussion on this matter but a large amount of studies suggest that M&A activities do not create the value that is expected. Even though these studies focus mostly on large public companies, there is a reason to believe that the same effects are visible in the small and middle-sized companies as well.

The results given above show that synergy is not that easy to materialize. Mukherjee, Kiymaz & Baker (2004) survey the motives for M&A activity. Their questionnaire was targeted for Chief Financial Officers (CFO) of companies and the results show that the companies doing acquisitions are mostly motivated by potential operating synergies. Berkovitch & Narayanan (1993) present similar evidence. The cumulative abnormal returns of the acquirer and the target are calculated from the sample of years 1963-1988. The correlations of the returns of the companies indicate that synergies are the dominating motive. (Berkovitch & Narayanan, 1993.) Seth, Song &
Pettit (2000) examine the motives for foreign acquisitions on U.S.-based companies and determine that synergy is the prevailing motivator in their sample of 1981-1990. Thus, despite the unflattering empirical evidence, companies are focusing on capturing the possible value of synergy from acquisitions. It is clear that additional research on the topic is therefore needed. This study will present a view of the private, small and middle-sized companies in Finland when it comes to the importance of the synergies mentioned above.

3.3 Discounted cash flow models

Majority of valuation models are based on the idea of examining expected future cash flows at their present value. Those cash flows of the company that are chosen to the given model are thus discounted to present value. (Kallunki & Niemelä, 2004:102.) This idea of using the present value of future cash flows as a basis of the valuation means that the party doing the analysis should have reasonably reliable estimations of the future periods. They should also be able to find a proper proxy for the risk to derive sensible discount rates. (Damodaran, 2002: 20.) These tasks might be hard to fulfil when it comes to privately held companies.

The structure of performing valuation using discounted cash flow methods can be presented in the following form (figure 3):
First one should analyse the history of the financial and strategic situation of the company. Based on these views one can form projections about future financial forecasts and also take an outlook on the strategic and competitive position of the company in the future. This is followed by determination of the cost of capital which can be done separately for each business unit and to the whole company. Based on the previous analysis one can calculate the present value of the future cash flows. These results should be scrutinized and interpreted. (Fernandez, 2007.) All of the discounted cash flow methods follow this structure. The main factors that are chosen given the various models are the company’s cash flows and the discount rate in use. Next we will take a look at these models more in depth.

3.3.1 Dividend Discount Models

The basis for the more advanced discounted cash flow (DCF) models is the dividend discount model (Kallunki & Niemelä, 2004:103). Damodaran (2002:448) states that
even though some of the practitioners dismiss this procedure as no longer usable, the intuition behind all DCF models is an essential part of the dividend discount models.

The equity value of the company is given by the following formula:

\[
P_0 = \frac{D_1}{1 + r} + \frac{D_2}{(1 + r)^2} + \frac{D_3}{(1 + r)^3} + \ldots,
\]

(2)

Where,

\( P_0 \) = Value of the share at time 0, \( D_t \) = Dividend distributed at time \( t \); and \( r \) = Cost of equity. (Kallunki & Niemelä, 2004:103.) Thus the value of the share of the company is the discounted present value of the future dividends (Kallunki, 2000).

In the scenario where the dividend that the company distributes grows at a stable rate, one can present the equation (2) in the following form:

\[
P_0 = \frac{D_0(1 + g)}{1 + r} + \frac{D_0(1 + g)^2}{(1 + r)^2} + \frac{D_0(1 + g)^3}{(1 + r)^3} + \ldots,
\]

(3)

This formula (3) can be simplified to:

\[
P_0 = \frac{D_0(1 + g)}{r - g} = \frac{D_1}{r - g},
\]

(4)

Where, \( g \) = the stable growth rate of the future dividends. (Kallunki & Niemelä, 2004:104.) This model is the so-called Gordon Growth Model (GGM) (Gordon, 1959).

The Gordon Growth Model is not applicable in many situations as the amount of dividends paid varies in many companies year-on-year. The assumption of stable growth can be relaxed by using multiple stages of growth in the formula. The two-stage formula is:
\[ P_0 = \frac{D_1}{1 + r} + \frac{D_2}{(1 + r)^2} + \cdots + \frac{D_t}{(1 + r)^t} + \frac{P_t}{(1 + r)^t}, \quad (5) \]

This can be simplified by using formula (4) to calculate the dividends from the year \( t \) onwards:

\[ P_0 = \frac{D_1}{1 + r} + \frac{D_2}{(1 + r)^2} + \cdots + \frac{D_t}{(1 + r)^t} + \frac{D_t (1 + g)}{r - g}, \quad (6) \]

The idea of the model is that there are two separate stages of growth: First, the period of uneven growth, followed by a period of the stable growth. (Damodaran, 2002:455.)

The usability of the dividend discount models can be improved by making the model more complex. Damodaran (2002:470) presents various alterations to the basic model, but one can argue that the advantage of the dividend discount approach is the simplicity and the lack of difficult restrictions. Next we will take a look at the more sophisticated DCF models.

3.3.2 Free Cash Flow Models

Valuation based on the stated cash flows of the company is justified by the fact that modifications of the financial statements do not affect the cash flows. Important is also the fact that cash flow-based calculations can focus on the drivers that affect the value of the company in the long run. (Kallunki, 2000.) These drivers can be evaluated while forming the calculations for the future cash flows as modelling usually involves making projections on issues such as sales growth, change in variable costs and the level of fixed costs. There are numerous cash flow-based methods available, but this paper focuses on the free cash flow model. This is since it is said to be the most used of the cash flow models (Katramo, et al. 2011:130).

Free cash flow models can be used to either derive the value of equity or the value of the firm. The free cash flow to equity (FCFE) of the firm can be derived as follows:
\[ FCFE = Net \text{ Income} - (CAPEX - \text{Depreciation}) \]

\[ - (\Delta \text{Non-cash Working Capital}) \]

\[ + (\text{New Debt Issued} - \text{Debt Repayments}) \]  

(7)

Where, CAPEX = Capital Expenditure and \( \Delta \text{Non-cash Working Capital} = \text{Change in the Non-cash Working Capital} \). As seen in equation (7) free cash flow to equity is the amount of cash available to be paid out to the shareholders. (Damodaran, 2002:486.)

Same as in all of the present value models, the free cash flow model is based on the idea that the value of the company equals to the discounted future cash flows. (Kallunki, 2000.) In a form of an equation, the free cash flow to equity can be calculated as:

\[ P_0 = \frac{FCFE_1}{1 + r_e} + \frac{FCFE_2}{(1 + r_e)^2} + \frac{FCFE_3}{(1 + r_e)^3} + \ldots \]  

(8)

Where, \( r_e = \text{the cost of equity} \). (Kallunki & Niemelä, 2004:109.) The widely used method of calculating the cost of equity, or the expected return of the company, is the so-called Capital Asset Pricing Model (CAPM). It is usually presented as in a form of an equation:

\[ r_e = r_f + [\beta (r_m - r_f)] \]  

(9)

The CAPM comprises of the risk-free rate \( (r_f) \), the beta risk \( (\beta) \), and the market risk premium \( (r_m-r_f) \). This equation can be solved as a regression using information available in the markets. (Easton, et al. 2010:12-9.) However, there are several notable issues when focusing on private companies. We will list these issues later on in chapter four.

Free cash flow to the firm (FCFF) can be calculated by:

\[ FCFF = EBIT (1 - \text{tax rate}) + \text{Depreciation} - CAPEX - \Delta WC \]  

(10)
Where, EBIT = Earnings Before Interests and Taxes, CAPEX = Capital Expenditure and ∆WC = Change in Working Capital. (Damodaran, 2002:531.) The general version of the FCFF model is as follows:

\[
\text{Value of Firm} = \frac{FCFF_1}{1 + WACC} + \frac{FCFF_2}{(1 + WACC)^2} + \ldots
\]  

(11)

Where, WACC = Weighted Average Cost of Capital. (Damodaran, 2002:539.) The weighted average cost of capital is given as the sum of the after-tax \((1 - T_C)\) cost of debt \((R_D)\) times the ratio of debt to the intrinsic value of the company \((D/V)\); and the cost of equity \((R_E)\) times the ratio of equity to the intrinsic value of the company \((E/V)\) (Easton, et al. 2010:12-13):

\[
WACC = \frac{E}{V} * R_E + \frac{D}{V} * R_D * (1 - T_C),
\]  

(12)

Free cash flow approach can also be modified into multiple-stage models as discussed with the dividend discount model (Katramo, et al. 2011:134).

3.3.3 Residual Income Model

One of the more recent valuation models is the so-called Residual Income Valuation (RIV) Model. This model is based on the information retrieved from financial statements of the company. In the residual income model, the value of the equity is based on the book value of the equity; and the present value of the sum of the future abnormal earnings. In the form of an equation, it can be presented as:

\[
P_0 = BV_0 + \frac{ae_1}{1 + r} + \frac{ae_2}{(1 + r)^2} + \frac{ae_3}{(1 + r)^3} + \ldots
\]  

(13)

Where, \(BV_0\) = Book Value of Equity at time 0, \(r = \text{Cost of Equity}\). (Katramo, et al. 2011:136.) The abnormal earnings at time \(t\), \(ae_t\), can be derived as:

\[
ae_{t+1} = Earnings_{t+1} - (r * BV_t)
\]  

(14)
So, the measure of abnormal earnings is the difference between the forecasted and expected returns of the company. (Adams & Thorton, 2009.) The abnormal earnings can naturally be either positive or negative. When the company has been able to generate additional value to the owners, the measure is positive. When \( a_{t} \) is negative, the actions taken by the company erode the value of the equity. (Katramo, et al. 2011:136.)

The residual income model can be used when the company does not pay any dividends or to the amount paid out varies a lot. Then the previously presented dividend discount model is not reliable. (Ohlson, 1995.) As the residual income model is partially based on the accounting value of the company, the potential estimation errors of the future cash flows are not as critically misleading as in the dividend discount and free cash flow models. (Katramo, et al. 2011:137.)

We will take a closer look at the differences of the various methods and their usage later on in this chapter.

### 3.4 Relative valuation

The popularity of relative valuation stems from the simplicity of the procedure. The method requires less assumptions and it is easier to understand. Also, the result of relative valuation reflects the mood of the market with more precision, because it is not based on intrinsic values. (Damodaran, 2002:635.)

The multiples that are used in the relative valuation procedures can be derived from:

1. Publicly available data of comparable companies
2. Multiples from actualized M&A situations
3. Multiples from expected returns and/or growth

These multiples can be observed either from the company level or from the level of the industry. (Katramo, et al. 2011:104.) The issue of retrieving data is discussed with experts on chapter five.
As we can see from figure four, the multiples of relative valuation can be classified into multiple categories. Next we will take a closer look at some of the most common multiples.

Earnings based multiples are the most used of relative valuation multiples (Damodaran, 2002:657). These multiples measure the value of the enterprise divided either by Earnings Before Interests and Taxes (EBIT) or Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) (Katramo, et al. 2011:106). EBIT and EBITDA are used in order to focus solely on the operative earnings, thus making it easier to compare firms that might differ when it comes to their methods of accounting.

Damodaran (2002:657) states that the simplicity of P/E ratio makes it the most common and most misused of all multiples. The biggest problem of P/E ratio is that it does not take into account the effects of the financial status of the company in focus. Factors such as the risk and the expected growth of the company affect the multiple and make the interpretation harder. A company that has a good probability

<table>
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<tr>
<th>Earnings-based</th>
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<tr>
<td>P/E</td>
<td>Price of Equity</td>
<td>Forecasted Earnings</td>
</tr>
<tr>
<td>EV/EBIT</td>
<td>Enterprise value</td>
<td>Earnings Before Interest and Taxes</td>
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<tr>
<td>EV/EBITDA</td>
<td>Enterprise value</td>
<td>Earnings Before Interest, Taxes, Depreciation &amp; Amortization</td>
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<th>Cash Flow-based</th>
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<tr>
<td>P/CE</td>
<td>Price of Equity</td>
<td>Cash-based profit</td>
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<tr>
<td>P/FCF</td>
<td>Price of Equity</td>
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<th>Volume of Business-based</th>
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<tr>
<td>P/S</td>
<td>Price of Equity</td>
<td>Sales</td>
</tr>
<tr>
<td>EV/Sales</td>
<td>Enterprise value</td>
<td>Sales</td>
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<table>
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<th>Book-based</th>
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<tr>
<td>P/B</td>
<td>Price of Equity</td>
<td>Book value of Equity</td>
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of high growth should have a P/E ratio higher than a company that is expected to
grow at a lower rate. Also a company that has higher risk should have a lower P/E
ratio compared to a low-riskier company. In addition, when using the P/E ratio in
comparing companies, one should be very careful when choosing the relative firms.
Even companies from the same sector might have critical differences that lead to
unrealistic results. (Kallunki & Niemelä, 2004:71.)

The most used of the book value based multiples is the ratio between price of the
equity and book value of equity. Book value of equity is the value of equity from the
financial statements of the company. P/B ratio is also quite easy to calculate and
interpret. It tells how many times the market has valued the equity over the
accounting value. (Katramo, et al. 2011:113.) The profitability of the company is
affecting the P/B multiple. The price of a more profitable company is higher when
compared to a similar company that is not as profitable as investors are willing to pay
a higher price for the more profitable company. (Kallunki & Niemelä, 2004:87.) The
person using relative valuation methods such as P/B multiple should therefore be
cautious when comparing different companies. Other cause of concern is that as all
book values are affected by accounting decisions, the reliability of the calculations
might be low (Damodaran, 2002:717). Thus, P/B multiple should always be
accompanied by other models when valuing companies.

There is one way to derive a value for the target that has not received that much
attention in academics. Multiplying an item of the income statement by a certain
figure is used as a rough estimator of the entity’s value. Examples of these income
statement items are EBIT and EBITDA. The appropriate multiplier can be derived by
comparing to the previous deals made in the industry or it can be based mostly on
analyst’s view of the company and the market. This methodology is quite simplified
but it is used in practise, as we will see in chapter five.

3.5 Issues in using the methods

The previous section presented some of the most widely used methods of valuation.
The important follow-up questions are: what model should be used in the valuation
and what are the issues that should be remembered while assessing the results? This chapter attempts to answer those questions.

When using discounted cash flow methods one should remember that the methods have a sound theoretical background. In principle, all of the DCF models would produce similar valuation, given that the factors used in the models are properly measured. (Kallunki & Niemelä, 2004:124.) However, challenges in issues related to information gathering and accurate estimation of factors tend to lead to situations where the methods give differing results.

There are certain clear limitations in using the dividend discount model. First, as the framework of the model expects the cash flows to continue until eternity at a steady rate, other performance measures of the company are also supposed to grow at the same rate. If the dividends grow at a higher rate, then the dividends will eventually exceed earnings. The pay-out ratio would converge to zero if the earnings grow at a faster rate. Second, the growth rate of the company cannot be greater than the rate of growth of the economy in which the company operates. (Damodaran, 2004:449.) Otherwise the company would theoretically become larger than the whole economy at some point.

Dividend discount model has been criticized for the use of dividends as the basis of the valuation. Modigliani & Miller (1958) show that the dividend policy of the company does not affect the value of the company, as the investor can upset the impact of dividends through her own decisions. In a situation where abnormal actions like mergers and acquisitions are restricted, the dividend discount model might give more reliable results than the more complex alternatives (Kallunki & Niemelä, 2004:125).

Free cash flow methods are critically sensitive to the level of the discount rate chosen for the calculations. The cost of equity \( r_e \) and the weighted average cost of capital (WACC) should be derived as meticulously as possible from the information available. (Damodaran, 2002:536.) This suggests that the results of the valuations should be viewed by sensitivity analysis that reveals how the outcomes change when the critical factors are altered (Katramo, et al. 2011:141). Sensitivity analysis can
indicate the possible problems in the assumptions of the model, as altering a certain variable might lead to unrealistic outcomes. However, if the value of the adjusted variable is reasonable this might indicate that the model has caveats.

Various studies have shown that the residual income method is the prevailing model of the DCF framework. Francis, Olsson & Oswald (2000) conduct a survey that scrutinizes the three methods. They use a sample of publicly traded companies during 1989-1993. The results show that the residual income method yields significantly better estimates than the dividend discount or free cash flow methods as the prediction errors measured were notably smaller in the case of the RIV model. Authors list the reliability of book value as a measure for the intrinsic value of the company and the predictability of abnormal earnings as possible reasons for the superiority of the residual income model. The results of the study suggest that as the RIV model has both a stock (BV) and cash flow (ae) component, the results are more accurate. (Francis, et al. 2000.) Penman & Sougiannis (1998) measure the valuation errors of the three methods in a sample of years 1973-1990 and show that the residual income model has the smallest estimation errors. Couple causes of concern for the RIV model are that in the private companies’ framework the accounting value might be misleading and also the predictability of abnormal returns might be low. These subjects are covered in chapter four.

Even though these studies show that the RIV model is more accurate, there are papers stating that the differences in the results of the DCF methods are due to the problems in estimation and on the reliability of the information used. Lundholm & O’Keefe (2001a) present the most common errors that lead to differing results while using the methods. Penman (2001) responds to Lundholm & O’Keefe stating that the methods are similar in theory but in practise the results may not be equivalent due to differences in accounting standards. Lundholm & O’Keefe (2001b) return with another paper reassuring their view. These papers stating that DCF methods should give equivalent results lean on the theoretical fact that these methods yield the same outcomes. (Lundolm & O’Keefe, 2001a,b; and Fernandez, 2013) The conversation that arises between these papers is mostly academical as the valuation process is affected by various problems in the practise and it is unrealistic to assume that
different methods will yield same results. The challenges discussed in this paper typically lead to varying results.

When using relative valuation the focus should be on choosing the appropriate multiple and the right comparable firms. The simple idea of relative valuation enables to practically justify any result as there is not much transparency on how the multiples and comparable firms are chosen. (Damodaran, 2002:636.) Therefore, the results of the valuation should be closely scrutinized as they might be significantly biased by the simplistic assumptions. Lie & Lie (2002) study the reliability of multiples valuation. An extensive sample of companies for years 1998-1999 are chosen from the Compustat database. The authors select earnings, asset and volume–based multiples and study the precision of those multiples. The results show that all of the multiples produced slightly negatively biased results as the valuation errors were negative. Also, the accuracy varies largely based on the company size, profitability and the portion of intangible assets. (Lie & Lie 2002.) The sample used in this study was gathered in the wake of the dot-com bubble. This raises the question of unexpected changes in the valuations of some companies that were affected by the unprecedented rise in the popularity of their shares.

When comparing the accuracy of DCF methods and relative valuation, the results show that the observations of DCF calculations are positioned more closely around the actual values. Still, both methods might include estimation errors. Hence, it is wise to use both methods together. This should yield more accurate results. (Kaplan & Ruback, 1996.)

The choice of the right valuation method depends on the demand of the appraiser. The state of the economic fundamentals of the entity dictates the selection. (Kallunki & Niemelä, 2004:124.) One thing that is to be kept in mind is that the method of valuation should be as simple as it can be since the more complex methods require more assumptions, and violations of these assumptions can lead to biased results. Damodaran (2002:514) points out that if the company is in a stable situation then the method can be a simple, one-period model like those presented earlier in this chapter. But if the company has significant changes in their business then the valuation
should be carried out in multiple stages that take into account the changes in the growth and riskiness of the company.

Overall, it is desirable to use several ways to derive a value for the target. This ensures that possible errors are more easily revealed when the process is conducted multiple times and with different methods. If it is not possible to use multiple methods one should select one that best suits that situation. As there are some specific issues that should be taken into account while doing the valuation for private companies, in the next chapter we will take a closer look at these matters.
4 VALUATION IN PRIVATE COMPANIES

The valuation of a target entity is challenging as it is but when we focus on privately held companies there are many thorny issues to be considered. Arguably, the focus of the majority of the academic studies and other publications is on the large, publicly traded companies. One possible reasoning behind this is that every company should try to achieve a state in which it is rational to go public. Theoretically, every company should try to grow and once the company has reached a certain limit of growth they tend to go public (Pagano, Panetta & Zingales, 1998). Still, the amount of private companies compared to public companies is considerable.

It is quite clear that the influence of non-public companies is remarkably large in many European countries. Thus these issues of privately held companies should have a major role in the general discussion. This chapter will present the valuation framework when it comes to private companies.

The idea behind valuation is the same as in the case of publicly traded companies. There are some differences that are of importance on the valuation of private companies. Damodaran (2002:626) lists four of the more important points of consideration.

- Publicly traded companies have usually more strict accounting standards than privately held firms. Those rules compel the publicly traded companies to formulate their financial statements in a certain way. This makes the financial statements more comparable as all of the public companies are required to release similar information. Private companies, on the other hand, might have varying accounting standards. Even if they operate under the same legislation.
- Publicly traded companies disclose relevant information about their financial status quarterly or even more frequently. This is due to regulation and current practises. Privately held companies are not expected to report as frequently, as they usually release their financial statements annually. Also the amount of information is much larger with the public companies since they need to report their status more closely.
• The current price and the historical prices of public companies are easily available whereas the information on privately held companies is not. Also, the gradual non-existence of the markets for the private companies leads to problems of illiquidity. Therefore, the implementation of transactions on private firms is usually more difficult and more expensive.

• When it comes to public companies, the owners and managers are usually separated. The owners of public companies tend to have a share on multiple companies since they hold a well-diversified portfolio. In the context of private companies, the owners usually act as managers and their wealth is largely placed on this one company. Hence, the use of company and private funds can become more indistinctive and the effect of non-diversification might affect the private company.

All of the issues mentioned above might affect the valuation of a privately held company through varying discount rates, cash flows or expected growth rates (Damodaran 2002:927). We will take a closer look at each of these matters individually along with few other significant issues.

Commonly used accounting standards for publicly traded companies are the so-called International Financial Reporting Standards (IFRS). IFRS were created in order to harmonize the standards of accounting in the European Union. For instance, the Finnish accounting legislation defines this standard as the norm for publicly traded companies. Nowadays IFRS is widely used around the globe. IFRS makes analysing and comparing targets more straightforward as companies are required to release their information in a specific form. (Yritystutkimusneuvottelukunta, 2006:1.) Privately held companies, on the other hand, do not have a similar framework that would require them to follow a certain pattern in their accounting. This allows private companies to adjust their financial statements more freely, thus making the analysis harder.

De Franco, Gavious, Jin & Richardson (2008) state that the accounting methods and procedures of internal auditing are more simple in private companies than in the case of public companies. This is due to the more loose regulation of private companies. Burgstahler, Hail & Leuz (2006) study the differences in earnings management of
private and public companies within the EU countries. The exhaustive sample of public and private companies from 13 European countries consists observations over the fiscal years from 1997 to 2001. The results show that private companies are more prone to earnings management than companies that are raising capital from public markets. Also, the structure of the legal system affects the amount of earnings management. In countries with weaker legal execution the earnings are more commonly adjusted. Authors show that in this matter there are differences even between countries within the EU. (Burgstahler, et al. 2006.)

The empirical results presented above clearly state that there are differences in the reliability of financial information given by private and public companies. The possibility of adjusting the information given for analysis is undoubtedly used in many occasions in private companies. Managers of privately held companies can alter their information based on their own agendas. This is prone to happen in situations like when attempting to sell the company. Henock (2004) suggests that the post-deal underperformance of the acquirer is partly due to effects of earnings management that has occurred before the transaction. Officer (2007) studies the differences in prices of transactions of publicly and privately held companies. The sample from SDC Database from 1979 to 2003 examines successful and unsuccessful acquisition bids of public and non-public companies. The results of the research show that asymmetric information contributes to the lower prices of private deals. (Officer, 2007.)

The Finnish Financial Supervisory Authority (Finanssivalvonta in Finnish) states in The Securities Markets Act that

“Act obliges issuers of securities admitted to trading on a regulated market to publish all its decisions and all information on the issuer and its activities materially affecting the value of the company's securities. The information must be disclosed without undue delay.”

(Financial Supervisory Authority, 2013.) This commandment distinctly ensures that there is timely information available on publicly traded companies. Private companies usually report their financial status annually and they are not required to
disclose relevant information to outside parties once the information is gathered in the company. All in all, the information is not as easily retrievable as it is for the public companies.

The lack of timely and reliable information results to limited attention from analysts and other professionals who provide additional, applicable information (Damodaran, 2002:945). The role of analyst is widely discussed and debated. Still, everyone should agree on the fact that all additional information that is provided about the private company sector is valuable. Later on in chapters five and six we will take a closer look at the contribution of experts in the process of valuation and M&A process.

Structured markets provide a reasonably reliable source of price information for the assets that are traded on those markets. Public companies’ current and historical prices are visible and the latest quote can be assumed to signal the present value of the company. (Damodaran, 2002:945.) This matter is based on the efficient-market hypothesis which states that financial markets are, on average informationally efficient (Fama, 1965). The efficient-market hypothesis, as it is, seldom holds true when looking at private companies since there might not be proper markets for these companies.

Damodaran (2002:22) reminds that the usage of discounted cash flow methods is tricky when it comes to non-public companies since deriving a proper measure for the risk is not as straightforward as in the case of publicly traded companies. The historical values of the entities are easily retrievable when it comes to public companies. As the DCF methods use the historical data as the basis for the risk measures the reliability of the whole valuation might get biased if there is not enough information available to derive trustworthy risk estimators.

Relative valuation, as any other form of valuation, is based on the idea that the prices of the entities are correct in average in the markets (Damodaran 2002:23). This assumption might not hold when we scrutinize the almost non-existent, illiquid and informationally opaque markets of private companies.
These problems of non-existent analyst information and missing historical prices imply that fundamentals of the private firm are in an emphasized role when estimating the value of the entity. (Damodaran, 2002:945.) Fundamentals of a company should be closely researched in order to derive reasonable outcomes.

The lack of properly constructed markets for private companies can lead to a situation where the willing buyers and sellers might not find each other. The process of acquisition is also harder to conduct and thereby more expensive. In financial theory, this phenomenon is called illiquidity. As private companies suffer more profoundly from illiquidity, the price of a privately owned company is usually lower that the price of the corresponding public company. The former price is impacted by illiquidity discount. (Feldman, 2005:91.) Amihud & Mendelson (1989) present that the reason for illiquidity discount is followed by the fact that investors tend to determine the price of an asset based on the returns net of trading costs. And as the costs of trading are higher for private companies, the required price of an asset should be lower.

The size of the illiquidity discount has been subjected to numerous studies. Block (2007) compares the valuation of private companies and publicly traded companies between 1999 and 2006. The value of the companies is measured with multiples such as P/E, EV/EBIT and EV/BV. The average discount between the figures of public and private companies in this setting is 20%-25%. The variation shows that there are differences in the discount in separate industries. (Block, 2007.) Another study shows that the average discount for unlisted entities is between 15% and 30%. The major reason found for this discount is related to the issues of liquidity. (Officer, 2007.) Damodaran (2002:949) points out that the size of the illiquidity discount is likely to vary across potential buyers. This is because different companies have differing needs for liquidity.

Valuations seem to be affected by the overall status of the markets. Study by Bouwman, Fuller & Nain (2007) show that the acquisitions that are done during low-valuation markets exhibit higher long-run operating performance. Authors use an extensive sample from 1979 to 2002. (Bouwman, et al. 2007.) This diminishes the probability of unjustified interpretation as that time period covers multiple economic
cycles. Overall, mergers are also more common in booming markets. This is indicated from a study of annual data of 1885-1995 that compares merger and stock market capitalization to GDP (Jovanovic & Rousseau, 2001). Merger waves are affected by the availability of capital used for the transactions (Harford, 2005). Companies planning on participating in a transaction should be aware of these external issues that might affect the valuation.

The problem of information opaqueness makes the process of acquiring a target quite challenging. The seller is capable of adjusting the financial information and other distributed intelligence in accordance with their objectives. The acquirer has only limited means to avoid the possible problems resulting from the seller's actions. The safest way for the buyer is to try to establish adequate trust with the seller. This is enhanced by a throughout Due Diligence process and prolonged negotiations. A lengthy process is naturally more expensive, thus making it harder for the transaction to generate value.

The reliability of the seller might be questioned due to the facts stated above. Thus, a completely trustworthy trading partner could face a situation where the acquirer does not have confidence in the material provided. This is apt to lead to problems in the negotiations and the outcome might be unsatisfactory to both parties. Hence, companies try to signal their value also via external partners. Establishing good relationships with trustworthy associates such as banks and other financial intermediaries give a valuable signal of the status of the company. In Finland for instance, collaboration with the government-based organizations like Finnvera and Tekes might give some authenticity for the prospective partner. If these well-known organizations have trusted the entity, then it might be safe for others to do so as well. This can facilitate the acquisition process significantly.

The management and ownership of small private companies are usually intermingled so that the owner is actually acting as a manager in the firm. This might lead in to problems when trying to value the company based on the presented financial information as the contribution of the owner-manager might not be clearly visible in the company’s salaries. The owner might either collect most of their income as dividends or they might include their personal expenses into the company’s accounts.
Prior to actually valuing the target, the financial statements should be revised in case there are some items that belong to the personal accounts of the owner.

In relatively small companies the roles of the owner and other key personnel are usually remarkable. In a situation where the control of the company changes the actual value of the company might be lost. This can result when the long-term owner of the company steps down and the core knowledge of the business is lost. Customers and other external associates can also feel that the company is no longer the same when the trusted owner leaves. The possible turbulence during the change of ownership might result in resignation of key personnel. The estimation of value of certain people in a company is challenging. One can try to limit the risk of losing company value by engaging the old owner and key personnel for the transition period.

As discussed in this chapter there are certain aspects that need to be taken into account when valuing private companies. The information that is used on a basis of the valuation might be biased, and the value of the company can be tied to certain people. The valuation process can be quite challenging and the outcome should not be taken as a definite. The interesting thing is how companies and other professionals handle these thorny issues.

The following figure (5) presents an outline of the issues affecting valuation in M&A in the small and middle-size, private company context. These issues should be taken into consideration before and during the procedure. Valuation is a part of the acquisition process and the goal of every transaction should be value creation. Theories behind these issues have been discussed on the previous chapters. Next chapters present and discuss the results of the empirical research that scrutinizes issues presented in the figure, based on practitioners’ views.
Figure 5. The issues affecting valuation in small, private company M&A
5 EMPIRICAL PART

5.1 About Methodology

As this paper shows, there are plenty of issues that should be considered in the process of valuing companies during M&A activities. The input of academic models has been significant in developing the framework for company valuation. The applicability of academic theories should be tested in an empirical setting that aims to reveal possible caveats.

As mentioned before, the main focus of previous studies is on large, publicly traded companies. The problems such as retrieval of information have left the small and middle-sized, private companies into a secondary position on the field of research. There are some papers that mainly focus on private M&A activity and valuation (e.g. Mukherjee, et al. 2004). In Finland the most comprehensive research on the matter has been conducted by Juha Tall, Elina Varamäki & their research team.\(^2\) Still, as far as one knows, there are no studies made with a similar structure to this one.

The structure of this empirical research is following: First there’s a questionnaire that was presented to a sample of companies. This questionnaire examines the experiences of companies that have been involved in M&A activities. Secondly, the results of the questionnaire were presented to a group of experts that were interviewed on the matter of valuing companies as a part of M&A process. Outcomes of these inquiries are then linked with the prevailing academic research. The goal of the study is to link together the views of academics, experiences of companies and opinions of experts.

The phenomenon that this study is trying to observe is hard to monitor as information about small and middle-sized companies is not easily retrievable. This is the reason

\(^{2}\) Read more, e.g. "Liiketoiminnan kehittyminen omistajanvaihdoksen jälkeen : Case-tutkimus omistajanvaihdoksen muutostekijöistä’’ (2012) Varamäki, Elina; Tall, Juha; Sorama, Kirsti; Länsiluoto, Aapo; Viljamaa, Anmari; Laitinen, Erkki K.; Järvenpää, Marko; Petäjä, Erkki
why this research is organized as it is. Qualitative methods such as interviews allow the research to focus on smaller group of companies, thus making it possible to survey actions and approaches of individual operators. These methods attempt to get information from the people who are actively involved in the field of valuation and M&A. As discussed, there are several parties who can give their view on the matter and thus reinforce the relevance of the research. This study uses method triangulation, as the subject is examined with multiple research methods. Triangulation is useful in practical studies such as this one (Eskola & Suoranta, 1996:41).

When it comes to significance of this study, in qualitative research the importance of reliability and validity are mostly secondary. The important issue should be the quality of the study. (Koskinen, Alasuutari & Peltonen, 2005:256.) This affirms that qualitative research should be assessed differently than quantitative research. The relevance of studies like this arises from the quality of the process that leads to meaningful results. The research questions in this study are formulated quite broadly - as in many other qualitative studies (Saaranen-Kauppinen & Puusniekka, 2006). As there apparently are no previous studies on this subject that are made with this type of setting, this research provides guidelines for future work. The relevance of this study is scrutinized more in chapter seven.

The focus in the first phase of the empirical part of the research is towards small and middle-sized Finnish companies that are privately owned and have participated in M&A activities as a buyer. The challenge of conducting this type of survey is that there are no such databases readily available in Finland. Parties like banks and other financial intermediaries that might have comprehensive information about such companies do not share this information due to reliability issues. Therefore composing a viable group of companies requires a lot of legwork.

Eventually the sample was gathered from the annual publications of Finnish Talouselämä magazine, as the Yritysraportti reports contain information about acquisitions made in the past year. From the reports through 2009 to 2012, the companies that satisfy the following restrictions were chosen:
• The transaction was conducted between limited liability companies
• The companies involved in the transaction were private and based in Finland
• Over 50% of the ownership changed hands
• Revenue minimum of 1 million €
• All industries included, except financial sector

The prospective companies were contacted by a phone call and their willingness to participate was enquired. The initial sample had 47 companies that had agreed to participate in the survey. The web-based questionnaire was then sent to the companies as a link in an e-mail. The purpose was to make the participation as easy as possible for the respondents. The questionnaire was easily accessible and had clear instructions. This follows the design of respondent-friendly questionnaire (Dillman, Tortora & Bowker, 1998). The prospective respondents who did not produce their results received additional e-mail messages as encouragement. This was also to make sure that the questionnaire actually reached all of the 47 companies. The final sample consists of answers from 25 companies, so the response rate is a satisfactory 53.2%.

The questionnaire gathers information about the opinions of managers of small and middle-sized companies. The questionnaire includes questions that are surveying the issues that are presented in this paper. The initial goal is to get information on how companies do the valuation and how valuation is seen as a part of the M&A process. Most of the questions are based on the typical five-point Likert scale (Likert, 1932). The final questionnaire had 35 items. The questionnaire can be found from appendix 1.

As the questions that focus on the background of the respondents of the questionnaire will highlight, the companies in this questionnaire form quite a representative sample of Finnish small and middle-sized private companies. So the sampling error can be estimated as low (Groves, 1989). The response rate was satisfactory as slightly over half of the companies that received the questionnaire replied with their answers. Mukherjee, et al. (2004) argue that a response rate of circa 12% is common in academic studies like this one. Therefore activity of the answerers of this
questionnaire was good when portraying against the results of Mukherjee, et al. (2004).

Slightly under half of the companies who received the questionnaire did not reply with their answers. This raises the question of non-response error (Groves, 1989). Is there a possibility that certain group of the companies did not respond, thus falsifying the results of the questionnaire? We will discuss this fact further in chapter six. Even though the sample size in this questionnaire is quite small, the age and the level of education of the respondents were quite evenly distributed. The industry distribution also supports the view that this sample is representative. One could also argue that as this study has qualitative features, it is mostly a case study (Eskola & Suoranta, 1996:38). Thus the results should be eyed in the proper context.

The results from the questionnaire reflect the views of Finnish small and middle-sized non-public companies. One could argue that this mass is so heterogeneous that there cannot be any assumptions made based on those results. To diminish these arguments the results of the questionnaire were also presented to a group of experts. They give their own insight on the feasibility of the results and also provide further information on the matter in hand. Arguably, method triangulation that is used here leads to more relevant results.

This research includes interviews with experts from three different organizations. Each of the individuals who were interviewed in this section has a prolonged experience in the matters of mergers & acquisitions and valuation. All of the experts can be considered as leading practitioners in their area. Additional information about the interviewees can be found on appendix three. It should be stated that the views they give are based on their own opinions and the outlook of the company they represent might be different. However, the aim of these interviews is to compile insights from people who continuously deal with the issues of valuation and M&A processes.

The interviews were conducted face-to-face in three separate occasions. Each of the interviews lasted roughly an hour. The interviews were recorded and the transcriptions of the recordings were used to assemble chapter 5.3 of this study.
The interviews were conducted in a semi-structured form. The interviewees received a list of questions and the results from the questionnaire in advance so they were able to gather their thoughts before the actual interview. The interviews were loosely guided by the interviewer, but the interviewees were able to express their opinions freely and focus on issues they saw important. This usually leads to best results in an interview (Koskinen, et al. 2005). The normative structure for the interviews can be seen in appendix two.

The results of the empirical segments are presented next. The structure of the segments follow loosely the structure of the original questionnaire. After that we will attempt to combine the views of different parties.

5.2 Questionnaire to the Companies

5.2.1 Demographic results

Age of the answerers is between 30 and 67 years and the average age is 45 years. As the questionnaire was targeted towards owners and top-level managers of private companies the age distribution is quite expected. On average, the answerers are neither in the beginning nor at the end of their respective careers. Quite interestingly, the final sample has only one female respondent with one answer was left blank. One could argue that the amount of females in top-level positions is generally lower compared to males, but the average ratio might not be as skewed as in this sample. Still, this fact should not affect the reliability of this study. Chart one presents the demographical results of the questionnaire.
Chart 1. The Demographics of the Questionnaire Sample

<table>
<thead>
<tr>
<th></th>
<th>Initial Sample</th>
<th>Final Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of the Answerer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Max</td>
<td>67</td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>45.3</td>
<td></td>
</tr>
<tr>
<td><strong>Gender of the Answerer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Roughly half of the respondents have an academic degree and the rest of the answerers have a lower educational background, as seen in chart two.

Chart 2. Level of Education of the Answerer

The possible effects of education on the implementation of the valuation process are briefly discussed later in chapter six.

The companies presented a wide range of different industries. The distribution of industries can be seen in chart three which is based on the classification of Varamäki, et al. (2012a). The one remarkable issue is the amount of companies that do not identify their own industry from the original list available. Those four companies are stated as “other” in this classification.
The companies had on average 108 employees when the M&A transaction was conducted. This is in the range given by the European Commission for the small and middle-sized companies. Also the variety in industries supports the view of satisfactory representativeness of the sample. Unfortunately, the small sample does not encourage engaging in significance measurements between answers.

Most of the acquisitions were conducted in the main industry of the acquirer, as 92% of the deals in the sample were focused on the main industry. The experience of the companies from the industry in which the transaction was made is remarkably high. On average the company had worked in that industry for 29 years. These results imply that companies tend to focus on acquisitions on the sector where they are operating and that they have a long history from that industry. This might have an effect on the M&A process and on how the valuation is implemented. These issues are discussed later in chapters five and six.
5.2.2 Objectives of the Acquisition

Chart 4. The Main Goal of the Acquisition

What was the main goal of the acquisition?

- Pursuing synergies
- Expanding the current business
- Starting a new business

In the sample six out of ten companies pursued expansion of the current business as the main goal of the acquisition. This is illustrated in chart four. 16% were starting a new company and 24% were primarily pursuing synergies. Still, 80% of the companies were pursuing synergies in the acquisition. Chart five divides synergies into five categories by Eccles, et al. (1999): These synergies are presented in chapter 3.

Chart 5. The Role of Synergies in the Acquisitions

Synergy can be defined as a cumulative effect of multiple actions. The acquisition was pursuing synergies?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synergies</td>
<td>20</td>
<td>5</td>
</tr>
</tbody>
</table>

Synergies can be divided into five categories. How important were the following synergies in the acquisitions?

<table>
<thead>
<tr>
<th>Synergy</th>
<th>Highly insignificant</th>
<th>Insignificant</th>
<th>Significant</th>
<th>Highly significant</th>
<th>Don’t know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost savings</td>
<td>1</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Revenue Enhancements</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>Process improvements</td>
<td>0</td>
<td>3</td>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Financial engineering</td>
<td>2</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Tax benefits</td>
<td>12</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

The 20 companies who were pursuing synergies stated the significance of the given synergies. Revenue enhancements were seen as significant or highly significant in all companies, whereas cost savings were seen as insignificant or highly insignificant in nine companies. This result is quite puzzling as one could argue that revenue enhancements and cost savings go hand in hand. Process improvements were seen as
significant or highly significant in 85% of the companies. Financial engineering and tax benefits were not seen quite as significant.

5.2.3 Execution of the Valuation

Chart 6. The Usage of Experts in the Valuation

<table>
<thead>
<tr>
<th>Did you use the help of an expert in the valuation?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The expert helped in the valuation process?</th>
<th>The expert would have helped in the valuation process?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>1</td>
</tr>
<tr>
<td>Agree</td>
<td>9</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
</tbody>
</table>

From the companies in the sample as many as 40% did not use the assistance of an expert in the valuation process, as shown in chart six. Given the complexity of the valuation process and the significance of a proper target value, this result is quite surprising. Majority of the companies that used an expert thought that the expert brought something to the valuation process. This result is interesting when comparing with the views of the companies who did not use expert help. Only 30% thought that the expert would have mitigated the process.
Companies that did not use the help of an outside expert had to conduct the valuation somehow. Chart seven shows which valuation methods the companies in this sample chose. The results indicate that the more sophisticated methods of modelling and comparables are not as commonly used among the companies. The companies who used valuation models or financial statement multiples notified that the valuation method played a crucial role in the valuation process.

The companies in the sample do not think that the valuation process is particularly difficult as only half of the respondents viewed the process as challenging. 56% of the companies though that acquisitions are at least partially common in their industry. These results are displayed in chart eight. These results go hand in hand as one might think that the challenges that companies face in valuation are quite common in the respective industry and as the acquisitions become more common, the troubling issues are solved.
Chart 8. The Experiences of the Valuation Process & the Prevalence of the Acquisitions

The process of valuation was experienced as challenging?

| Strongly disagree | 1 |
| Disagree          | 11 |
| Agree             | 7 |
| Strongly agree    | 5 |
| Don’t know        | 1 |

Acquisitions are common in your industry?

| Strongly disagree | 1 |
| Disagree          | 10 |
| Agree             | 9 |
| Strongly agree    | 5 |
| Don’t know        | 0 |

5.2.4 Financing the Transaction & the Effect of Acquisition on Profitability

Chart 9. Funding of the Acquisition

Did you use debt to finance the acquisition?

| Yes       | 21 |
| No        | 4 |

Debt was available?

| Strongly disagree | 5 |
| Disagree          | 2 |
| Agree             | 7 |
| Strongly agree    | 7 |
| Don’t know        | 0 |

The availability of funding affected the execution of the acquisition?

| Strongly disagree | 4 |
| Disagree          | 4 |
| Agree             | 9 |
| Strongly agree    | 5 |
| Don’t know        | 0 |

As seen in chart nine, over eighty percent of the companies used debt in financing their acquisition. Two out of three companies who borrowed money for the transaction felt that debt was available. In a third of the whole sample the availability of funds did not affect the implementation of the transaction. The funding of M&A activities is of considerable focus later in this and the following chapter.
All of the companies in this study stated that the acquisition affected the value of the company. This is quite expected as the transaction rarely leaves the state of the entity to its previous form. Chart 10 dissects the influence of the acquisition on the profitability measures of Return on Investment, Earnings Before Interests and Taxes & Profit on the companies of the sample.

Chart 10. The impact of the Acquisition on the Measurements of Profitability

Return on Investment changed due to the acquisition?

<table>
<thead>
<tr>
<th>Change</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased significantly</td>
<td>1</td>
</tr>
<tr>
<td>Decreased slightly</td>
<td>5</td>
</tr>
<tr>
<td>Did not change</td>
<td>4</td>
</tr>
<tr>
<td>Increased slightly</td>
<td>10</td>
</tr>
<tr>
<td>Increased significantly</td>
<td>3</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
</tr>
</tbody>
</table>

EBIT changed due to the acquisition?

<table>
<thead>
<tr>
<th>Change</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased significantly</td>
<td>2</td>
</tr>
<tr>
<td>Decreased slightly</td>
<td>4</td>
</tr>
<tr>
<td>Did not change</td>
<td>1</td>
</tr>
<tr>
<td>Increased slightly</td>
<td>11</td>
</tr>
<tr>
<td>Increased significantly</td>
<td>6</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
</tr>
</tbody>
</table>

Profit changed due to the acquisition?

<table>
<thead>
<tr>
<th>Change</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decreased significantly</td>
<td>1</td>
</tr>
<tr>
<td>Decreased slightly</td>
<td>6</td>
</tr>
<tr>
<td>Did not change</td>
<td>2</td>
</tr>
<tr>
<td>Increased slightly</td>
<td>1</td>
</tr>
<tr>
<td>Increased significantly</td>
<td>5</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
</tr>
</tbody>
</table>

Changes between these three measures are not remarkable and the overview is that roughly 40 percent of the companies achieved moderate increase in their profitability as a result of the acquisition. Given the price, most acquisitions were seen as the most cost efficient way to reach the goals that were set for the transaction, as only 12% of the respondents disagreed. These results indicate that the companies in this sample were able to gain some sort of advantage throughout the transaction, and that the given improvement could not have been realized more efficiently by other methods.
5.2.5 Views on Process of Acquisition

Chart 11. The Length of Negotiations and the Accuracy of Valuation

<table>
<thead>
<tr>
<th>The length of the negotiations leading to the transaction, in weeks?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average 23.4</td>
</tr>
<tr>
<td>Min 4</td>
</tr>
<tr>
<td>Max 50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The price given by the valuation was realistic when comparing to the final price?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree 1</td>
</tr>
<tr>
<td>Disagree 2</td>
</tr>
<tr>
<td>Agree 17</td>
</tr>
<tr>
<td>Strongly agree 5</td>
</tr>
<tr>
<td>Don’t know 0</td>
</tr>
</tbody>
</table>

The negotiations that the parties undergo before the transaction actually takes place are usually quite long-lasting as seen in chart 11. The negotiations took in average about half a year even though the price of the target from valuation was appropriate. This result would indicate that the negotiations include also other challenging issues apart from the actual valuation and negotiation of the price.

The complete process of acquiring the target was seen as challenging in two-thirds of the transactions in the sample. This result is notable when compared to the views that companies had on the process of valuation, hence corroborating with the previous remark of additional challenges faced during the acquisition process. Still 80% of the companies will engage in M&A activities in the future. These results are listed in chart 12. It is promising to see that despite the challenges that the acquirers face, companies are willing to use M&A also recurrently.
Chart 12. The Challenges of the Acquisition Process & Possibility of Future Acquisitions in the Companies

The acquisition process was experienced as challenging?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>7</td>
</tr>
<tr>
<td>Agree</td>
<td>14</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>2</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1</td>
</tr>
</tbody>
</table>

Your company will do acquisitions in the future?

<table>
<thead>
<tr>
<th>Response</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>0</td>
</tr>
<tr>
<td>Disagree</td>
<td>2</td>
</tr>
<tr>
<td>Agree</td>
<td>8</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>12</td>
</tr>
<tr>
<td>Don’t know</td>
<td>3</td>
</tr>
</tbody>
</table>

The answers of this questionnaire were based on views of certain group of Finnish companies. The generalisation of these results will be discussed more in depth later on in chapter seven. Also the compatibility of these conclusions with the views of the experts and current academic intuition is considered.

### 5.3 Interviews with the Experts

First we will take a look at the views of the experts on the results of the questionnaire. After that we will review some deeper thoughts of the experts on the issues of valuation and M&A in small, private companies. The results from the interviews are presented in a similar order in which the questionnaire was organized in order to maintain a clear structure.

#### 5.3.1 Demographic Results

The level of education of the person in charge of M&A activities in a company does not have an effect on how companies view the situation. Some entrepreneurs are more sophisticated when it comes to these matters and if the person has been involved in multiple transactions before, that gives them valuable experience. Transactions are usually made in the company’s main industry or in the industry which is targeted as the main industry for the future. M&A activity is continuation of
the company strategy and in the strategy the company has defined the goals and means to accomplish those goals. Still, in smaller companies the focus is on the daily activities and the possibility of acquiring a target usually appears uncoordinatedly, one of the experts reminds. So the small companies do not necessarily actively recognize the link between acquisitions and implementation of the strategy in their activities. One of the interviewees state, that bigger companies might have considered the future more and the managers keep the strategic issues implicitly in mind.

Based on the demographic answers the experts also suggest that this sample might be representing Finnish small and middle-sized private companies pretty well, as the sample is randomly selected and the companies operate in various industries. These opinions reinforce the author’s view on the quality of the empirical research.

The experience from the industry is long in the sample, and it has an effect on the process of valuation. Experienced acquirers know the circumstances on the industry and might actually know the target they are acquiring. Inexperienced, young entrepreneurs on the other hand are usually too optimistic. However, one expert states that long experience can be a hindrance as well as those companies might have views that are out-of-date. One noteworthy matter is the influence of the experience on the M&A process as some of the respondents of the questionnaire seemed to be able to value the target based on their extensive knowledge of the industry. One interviewee concludes that as the companies that have extensive history on the industry are familiar with the value drivers of the industry and they are able to assess the demand of the products, they might be theoretically capable of forming an estimate of the value of the target. The biggest challenge is the assessment of the talent of the management of the target. This involves also the greatest deal of risk. All in all the acquirer is able to value the target better than the seller as the buyer can capitalize the entity in their operations.

5.3.2 Objectives of the Acquisition

One expert lists creation of value as the only goal for acquisitions. Pursuing synergies, starting a new business and expanding the current one are means to reach
that goal, which of the latter is the most obvious one. Expansion of the current business is quite a broad issue, as it includes things as new products, new markets and such. Smaller companies focus primarily on employing themselves and expansion is a secondary motive.

When it comes to synergies, companies might have classified the synergies well but the realization of synergies is rare. The possible synergies are lost in the integration phase which is not properly constructed. Especially small and middle-sized companies suffer from this as they do not have specified personnel who would make sure that the last stages of the acquisition process are handled accordingly. Implementation of the processes after the transaction should be conducted with care. This is due to the fact that the implementation might take years if Due Diligence and processing has not been properly managed. Long processes are harmful and very expensive.

All of the experts that were interviewed agreed that cost savings should be at least as important as revenue enhancements when it comes to importance of synergies, as most of the acquisitions should pursue the improvement of the cost structure. Revenue enhancements are important as well since the company gets a larger amount of sold products to cover the fixed costs. Financial engineering might be overlapping with cost savings and process improvements, one expert points out.

Pursuing tax benefits is rarely an important objective for an acquisition. Tax issues are still important and take a lot of time during the process. Tax benefits are rarely realized in transactions at least when focusing on smaller companies. All things considered, there is a lot of fluctuation between the awareness of managers when it comes to possible benefits that can be realized in an acquisition.

5.3.3 Execution of the Valuation

The result of the questionnaire stating that four out of ten companies did not use experts in the valuation was considerable for the experts. One interviewee commented that both parties of the transaction should use the help of an expert in valuing the components of the entity. Expert’s opinion is that most of the small and
middle-sized companies use the help of some specialist in the acquisition. It might be that some of the companies have gained knowledge of M&A activities and thus are able to conduct the transaction by themselves. Larger companies might have teams that concentrate on M&A activities. This ensures that the risks of participating in a transaction are limited. One expert notes that one should not have blind confidence in the views of the experts since they tend to produce valuations based on the expectations of the customer.

Companies that used experts were satisfied with the help they received. The value of the expert is that the valuation given by the specialist moves the price negotiations into a sensible range. More throughout evaluation also provides more tools for the negotiations. A well-known company that provides the valuation is an asset as the familiar brand adds assertiveness. Still, the use of an expert does not guarantee that the transaction is successful, one of the experts points out.

Companies that did not use any help from outside might be just as satisfied with the result but the outcome could have been something better with the help of an expert. One interviewee points out that valuations based on gut feeling might be just as correct as the more sophisticated methods. The experience from the industry might help in strengthening the gut feeling. Valuations can be correct but the risks involved in those estimates are large. Eventually, if the buyer and the seller agree to make the deal at a certain price, then that price is the correct one. Therefore the market has worked. One expert mentions that usually the deals that have been completely unsuccessful are not mentioned anywhere. So it is hard to get an objective answer to these issues.

Process of valuation is challenging, the most troublesome part of it is to model the business for the future and to assess the future cash flows accordingly. Many companies who are taking part in acquisitions are not familiar with the valuation process. Information asymmetry causes problems in the Due Diligence process and this complicates the valuation. The seller has to know how to present the valuable tacit knowledge that they have on the target. The actual computational part is quite straightforward.
Small and middle-sized companies are involved in M&A activities quite often. Despite that there are numerous acquisitions every year, most of the companies die out following the transaction. The most promising companies will survive and be active in M&A in the future. There are differences between the industries as some of the more fragmented sectors are consolidating. One of the experts state that transactions are quite common and they are used as the last resort when trying to rescue the financial foundation of the company and eventually the personal wealth of the owner as well.

5.3.4 Financing the Acquisition & the Effect of the Acquisition on Profitability

Most of the companies use debt to finance acquisitions as it is the most cost-efficient way. Actions taken by banks and the availability of debt ushers the markets of acquisitions. When it comes to smaller companies only a few can afford the acquisition without financing it with debt.

The availability of debt changes over time. The economic turmoil that started in 2008 has led to a more tightly controlled market. There are more expectations that the company should have a bigger portion of internal funding and there are more restrictions that should be obeyed if a company wants to receive funding from banks. More regulation leads to meagre financing with more expensive terms and fewer acquisitions are therefore profitable. Banks will lend money if the business is solid, the company has enough equity and the company agrees on the covenants that the bank proposes.

Small and middle-sized companies do not know how to find funds outside of the traditional bank sector. But as it is not part of their core business, they are not supposed to do it by themselves. This calls for the help of an expert. The scarcity of available funds is actually a good thing as only the most viable businesses will be financed. All of the experts agreed that availability of funding affects a great deal on the realization of acquisitions.

The question of whether acquisitions add value for the buyer sparks different views from the specialists. One expert remarks that as value creation of synergies is
difficult, most of the transactions do not yield the expected outcome. The integration of the target is not properly managed and the implementation of desirable synergies fails. Following an acquisition the performance of the small company usually dips and the faster the company can get back on the right track, the better. Unfortunately many companies never recover from the dip. One expert says that deals are made since they are profitable. The time horizon that is used to examine the creation of value influences the situation. When considering the present value of the future cash flows, the value creation is instant. Whether that value is ever realized – that is completely another issue.

The goals that are set for the acquisition dictate if the company could reach them internally. Creating new products and building new markets might be hard to establish through organic growth. The strategic work and planning can be done in the company but the implementation has usually some problems. The integration of the target will become more efficient after the company has previously gone through that process. Experience is valuable and experts can help in these situations, as there are consultants who provide assistance throughout the entire M&A process.

5.3.5 Views on Process of Acquisition

Lengthy negotiations during the M&A process are normal. The resulting price depends on the situation in which the deal is made. If there are multiple potential buyers then the seller might be able to negotiate a higher price and vice versa. The final price is a result of exchange and the value of the target is different for each party. In smaller companies the negotiations can also be affected by emotional issues as the old entrepreneur has a hard time giving up the company. In these situations the financial value of the entity might not actually be the pivotal issue. The role of the valuation is to create a range for the price that can be settled in the negotiations. The closer the price given by the valuation is with the final price the better.

The acquisition process is certainly difficult. The biggest issue is seizing the business activities of the target and integrating the operational systems. In the process itself the amount of details, complexity of deals and legislative factors make it demanding.
The process is stressful. The biggest issue for the acquirer is to gather funds at a reasonable price and feasible terms.

All of the experts agreed on the view that as mergers and acquisitions have become more common there are companies who will repeatedly get involved in transactions. This will develop the field of M&A even further.

5.3.6 Deeper Thoughts of the Interviewee’s

In addition with the interpretation of the results the experts provided more profound thoughts on the topic of valuing companies in M&A situations. The experts clarify what type of methods they use in valuation and how they see the challenges of valuation in the context of private, small and middle-sized companies. This subsection of the chapter focuses on those results of the interviews.

The first issue that was discussed with the experts was the selection of valuation methods that the expert and their organization use. One of the experts rely on academically sustainable methods. The decision of the method depends on what value is determined. When deriving the value of a company, they mainly use three different methods. Discounted cash flow methods are the most widely used. Multiples are commonly used to support the view that the DCF methods provide. Net asset value is used if it yields sensible results on that particular industry. They base the assessments on the business models that the parties of the transaction provide. They reflect those results with the results that they receive from the data that their company has gathered. That data includes for instance relevant information from the industry and fundamentals of the economy. If this view is in contrast with the estimates that the parties of the acquisition provided, then that view will be challenged and the reliability of those valuations will be scrutinized more closely. Other primary sources are the projections from the managers that are subjected to sensitivity analysis. The objective is to derive a consensus that can be the basis for the valuation. Based on the given presumptions, specialists will give a range for the value of the target. The goal is not to produce an opinion similar to analysts’ recommendations as following non-public companies closely enough is too cumbersome.
Another expert states that he does not make the valuations by himself. The parties of the transaction usually have some sort of value in mind that can be challenged if it seems to be clearly miscalculated. The methods for valuation range from simple gut feeling to specific models. Usually the bigger deals involve more rigorous measurements. Valuations that are based on future models derived from accounting information are not reliable in his view. Projections can be made and the reliability of those estimates is hard to assess. Valuation that is based on historical views of the company can help to form an idea of how the company can manage on day-to-day activities also from now on.

Third expert uses three methods that are based on the expected income of the target, market-based models and cost-based models. The usage of different methods depends on the circumstances of the company and the information that can be used in the valuation process. Sometimes residual income or option-based valuation can be used as well. The information that is used comes from the company and part of the data is gathered from the markets. Big expert organizations are able to retrieve lot of data from within their company. Features of the industry, the state of the competition, information about similar deals and the availability of funding are crucial inputs to the data.

The consultants list many issues as major challenges for the valuation procedure in the small and middle-sized companies’ framework. The reliability of the information that is retrieved from the seller in the course of the process is poor. Buyers are often too excited about the possibilities that the acquisition might grant that they pass on proper due diligence procedure, states one of the experts. The reliability depends on the amount of data retrieved and the source. The models that the seller is providing are usually “hockey stick models” that project high growth for the distant years. Those projections are hard to assess as the accuracy deteriorates with time. Still, those models should be challenged based on additional information. Commercial due diligence has a crucial role as issues such as the situation on markets, backlog of the company, market share and financial fundamentals can be used to formulate an opinion about the buyer’s predictions.
The approximation of the future of the financial world is challenging at the moment. It makes the valuation harder as the outlook of the economy is short. The availability of funding and the demand of equity are hard to estimate, says one of the experts. Risks are more pronounced and the uncertainty about the future has increased, adds another expert.

The valuation of the goodwill of the target is tricky. Machinery & equipment and floating assets can be valued but how should factors like the input of the key employees be measured. In smaller companies the essence of the business might have personified in for instance the old owner-manager. This is a hard thing to measure and the acquirer usually tries to persuade the old owner to stay with the firm for the period of transition. As already mentioned, the company might also have some sentimental value to the old owners and this might affect the transaction process.

The view of the experts on the success of M&A activities in the small and middle-sized companies’ framework is quite pessimistic. One of the experts says that big part of the deals do no create the expected value. Possible reasons for this are that the price of the acquisition has been wrong or the new owner might not have capability to manage the target well enough. Also the state of the economy creates obstacles. The acquisition strategy has not been formulated well enough for the days following the transaction. The part of integration is overlooked. Experts should be used when trying to harness the synergies as companies are lacking on information about seizing the target. The integration should be taken into account already during the M&A process.

One expert raises the question of how do we actually measure the profitability of the transaction. If one considered the amount of write-downs on goodwill on company accounts, this happens by the billions. Still, the acquirer might have paid the right price of the target. The circumstances can change from the time of the transaction.

The financial turmoil of the last few years has decreased the amount of transactions and the valuations are more moderate. The acquirers are trying to find the right price level for every deal as the expectations for the future are more pessimistic.
Companies that are taking part in M&A activities are not as willing to bet on the future. This has calmed the M&A market down.

The experts shared their views on the matters of valuation and M&A process. The answers they provided highlight the notion that there are various challenges in this field and that there are also many ways to deal with those issues. The experiences from companies and consultants should be adjoined with the interests of academics. Next chapter attempts to generate a discussion between these three parties.
6 DISCUSSION BETWEEN ACADEMICS, EXPERTS & COMPANIES

This paper has presented three parties with somewhat differing views on the matters of valuation and the M&A process. As one of the objectives of the study is to create discussion between these parties, this chapter is devoted to this issue. Hence, we will present the views of academics, companies and experts and try to create a consensus whenever achievable. For the sake of clarity this chapter attempts to follow the structure of the company questionnaire.

The results of the questionnaire show that companies tend to make acquisitions on their primary industry, as more than nine out of ten companies made their transaction on the main industry. Companies also had a relatively long experience from that sector. It seems that acquisitions are mostly made in an industry that is very familiar to the company. This view was confirmed by the experts who stated that in the case of small and middle-sized companies the parties of the transaction might even be familiar to one another. This notion has also been studied academically. Rhodes-Kropf & Robinson (2008) indicate that companies do search for targets that are similar to themselves. These results seem to indicate that companies are critical on the targets they choose to attempt to acquire, as the deals will mostly focus on the sector that is familiar and seen as most potential. These results also suggest that the experience the acquirer has affects the process of valuation.

One of the most highly regarded motives for acquisitions by the academics is the potential synergy gain following the transaction. As mentioned already in this paper, Mukherjee, et al. (2004) list operating synergies as the primary motivator for M&A activity. The respondents of this paper’s questionnaire did not share this view, albeit most of the companies were pursuing synergies in their deals. Both the academics and experts highlight the importance of cost savings whereas the companies in the sample did not share this view. This raises the question whether typical Finnish small and middle-sized companies fully realize the benefits of economies of scale and economies of scope.

Tax benefits are mentioned by the academics as one possible source of significant synergies. Still both the answers of the questionnaire and the views of the experts
hint that this is not the case with Finnish small and middle-sized companies. One possible explanation is that the sizes of the deals in this market are considerably smaller than on the markets that the other studies have focused on. When considering publicly traded companies, these tax benefits might be more pronounced as the sizes of the transactions are usually larger.

The issue of the value of experts in the acquisition process received mixed answers in the questionnaire, as the companies who used help were mostly satisfied with it and the companies that did not use help felt that they did not need assistance. Consultants naturally emphasize their role and claim that they add value to the M&A process throughout its every step. The academic views on this matter are not as encouraging when it comes to the benefits of using experts during the process.

The results of the study by Elnathan, et al. (2010) are questioning the importance of the usage of experts. The notion that consultants use information that is received from the target company is confirmed by the interviewees of this paper. One of the experts indicated that the valuations of the experts might be tilted in order to justify their own commissions. However, the experts who were interviewed for this paper pointed out that they are only creating a range of values that facilitate the transaction process. Therefore their goal is not to present exact price tags for the target entities. This discussion shows that every company facing a valuation situation should assess the need for additional help based on the circumstances of the given deal.

How do different parties conduct the actual valuation? Based on the questionnaire the companies rely on more simple methods as valuation using some sort of modelling was not that common. It should be said that the companies that used discounted cash flow models in their valuation had a director that had received an academic degree. This might suggest that companies would be willing to use more sophisticated methods if they had the required knowledge. One issue that supports the more simplistic methods for the companies is that if they are familiar with the target they might be able to value it accurately enough by using just those simple methods.
Experts admit that conducting a valuation by using those not-so-sophisticated methods can yield as accurate estimations as any other method. Nevertheless, the primary methods that the specialists who were interviewed use are academically sound discounted cash flow models. There are also academic studies that try to figure out which methods of valuation are used most commonly. Lie & Lie (2002) point out that despite the significant focus of the academics is on the more specified methods such as the discounted cash flow models, the analysts usually choose a more simple method like P/E-multiple based relative valuation. Demirakos, Strong & Walker (2004) study the method of analysis of reports on British public companies. This research shows that analysts prefer either a P/E model or a multi-period DCF method. As these results are based on studying publicly traded companies, there is a chance that analysts use different methods for private companies.

The adequate valuation of the company is clearly linked to the success of the transaction. The question of ability of value creation of the acquisitions is one of the most interesting. The companies in the sample of this paper seemed to mostly be able to add value through the transactions. This result is in contrast with the views of the experts. They see that a large fraction of the deals do not create enough value. This is also the conclusion that many academic researchers have come to. For instance Kaplan & Weisbach (1992) and Eccles et al. (1999) present that mergers and acquisitions do not realize the value that was expected of them.

This raises the concern of a biased group of respondents in the sample of companies in the questionnaire of this study. Is it possible that companies that have performed well due to the acquisition are more eager to disclose this information when compared to the companies that were not as successful? As the results of the companies on this paper were based solely on their own views, objectivity might be an issue. Therefore one of the areas of interest for the future research could be to link assessment of success of the acquisitions based on the financial data of the companies to a survey such as this.

One interesting aspect on the motives for conducting M&A is given by Angwin (2007). The paper suggests that there might be other reasons for managers to engage in M&A than maximising value of the owners. Author lists reasons that can be seen
as motivators for M&A transactions that do not add direct value for the shareholders. These reasons include issues such as appreciation of social economic matters like enhancing the status of employees; or affecting the competitive field of the sector by acquiring smaller competitors and closing them down. (Angwin, 2007) This idea might make one question the rationale behind the intuition of company valuation. But as most of the financial theories are based on the idea of maximising the monetary value of the given asset, we will leave this notion into a secondary position.

All of the experts that were interviewed for this study underlined the impact of the funding on the realisation of the transaction. Most of the small and middle-sized companies who are acquiring need external funding. This was also seen in the questionnaire. It is important to acknowledge how the situation of the financial markets affects the market of M&A. There are academic studies that confirm the view that the times of high merger activity are correlated with booming markets (Jovanovic & Rousseau 2001). Experts interviewed for this study stated that the economic turmoil that started in 2008 has somewhat decayed the M&A market.

The experts pointed out also that the valuations of the targets have become more moderate as the risks are seen as more pronounced. Academic results support this view of varying levels of valuation based on the situation of the markets (Bouwman, et al. 2007). This suggests that the ongoing financial distress actually yields better results for the companies who manage to get funding for their acquisition. Experts confirm this idea. One expert stated that it is actually good that availability of the funds is minor. Another expert pointed out that the most prominent transactions will find necessary funding.

All of the experts admitted that the process of acquiring an entity is challenging, since there are many things that should be taken into consideration. One of the biggest issues should be to outline the post-deal actions, as the efficient integration seems to dictate the success of the transaction to a large extent. This view is supported by other studies as the respondents of KPMG’s study (2006) list earlier post-deal planning as the primary adjustment for their next transaction. But it is an
encouraging sign that companies are planning to participate in mergers and acquisitions also in the future.
7 SUMMARY

The goal of this study is to explore issues concerning valuation on mergers & acquisitions of small and middle-sized, private companies. Focusing on the buyer-side in Finland, this paper attempts to answer the following questions: How are companies valuated in M&A in the small and middle-sized, private firm context? What are the most critical issues affecting valuation and M&A processes in this context?

Valuation should be seen as a part of the acquisition process and the whole process should be planned and executed with precision. As the role of external funding is pronounced in small companies, the acquisition process should be conducted in coordination with funding parties.

The actual valuation can be carried out with many methods that are differing on theoretical assumptions and on the usage of information. Academic discussion presents that sophisticated discounted cash flow models are prevailing, whereas practitioners use a wide range of methods. As the experts interviewed for this research note, the most simplistic ways to derive an estimation for the value of the target can be as accurate as the more sophisticated and theoretically sound models. One significant issue is the expertise that the appraiser has on that particular industry. The appraiser should choose the most suitable method based on the ability to use the given method and on the information available.

Less strict regulation on private companies may lead to situations where pre-deal earnings management occurs. Academic studies show that private companies adjust their financial data in line with their motives and this might have an impact on acquisition performance. Possibility of information asymmetry can prolong the acquisition process and thwart it altogether. These issues can be tackled by forming a climate of trust between the parties. When the acquisition process is conducted in partnership with the seller, the possible problems of losing company value with the parting of the old owner can also be handled.
Usage of experts can also diminish the risks of the transaction. Academics are questioning the role of external help, whereas experts naturally emphasize their significance in successful transactions. But as the interviewees point out, the goal of valuation in a practical setting is to come up with a range of values that assists the negotiations. Moreover, experts can help in the acquisition process if the parties of the transaction do not have sufficient knowledge themselves.

The reason for participating in M&A is to create value for the company. Even though most of the companies in the questionnaire of this research stated that value was created, academics and experts’ opinion is that significant amount of transactions do not create value. The most important factor in a successful acquisition seems to be a controlled integration of the target. Proper integration contributes to realisation of synergies that are in a considerable role in value creation.

Majority of studies on this topic are focused on public companies in bigger marketplaces in the U.S. and Europe. Still most of the results of this research are in line with previous studies. The discussion on this matter is placed in chapter six. As this study is qualitative in nature, the results of this research should be viewed in proper context. The possible problems in the results of the questionnaire are handled by using method triangulation – thus including additional sources of information as well. The views of the experts are their own and therefore are subjective. But as the goal of this study is to create discussion between academics and practitioners, there are no absolute truths available.

There seems to be no previous studies made with similar empirical setting on this issue, so this research provides new suggestions on how to examine valuation in M&A. For a small and middle-sized, private company debating on whether to take a part in mergers and acquisitions this paper gives clear outlook on issues that should be taken into consideration.

One limitation of this research is that as the amount of companies in the questionnaire sample is moderate, no significance tests were made. These tests could determine whether there are notable differences between companies that conduct the valuation and the acquisition processes in differing manners. Therefore a larger
sample of companies should be attempted to gather for next research. Also, as the answers to the questionnaire measure only the perceptions of the participants, the results might be biased due to behavioural reasons. This issue could be tackled by including measures of company profitability before and after the transaction. This numeric data could be used to verify the results from the questionnaire. Future studies should be made with that research setting.
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Yritystutkimusneuvottelukunta ry. (2006) IFRS-Tilinpäätöksen keskeiset periaatteet
APPENDIX 1

The Questionnaire to the Companies

The questionnaire was conducted as a web-based survey, and it was sent to 47 Small and Middle-sized companies in Finland that had participated at the buy-side in M&A activities during 2008-2011. Eventually 25 companies provided their answers; so the response ratio was a satisfactory 53,2%.

1. Age of the answerer.
2. Gender of the answerer.
3. Level of education of the answerer.
   a. Elementary-, middle- or primary school
   b. Vocational College
   c. Upper Secondary
   d. Vocational Upper School
   e. Academic degree
4. The main industry of your Company.
5. Was the acquisition conducted in your main industry?
6. In years, how long experience do you have from the industry in which the acquisition took place?
7. The amount of personnel prior to the acquisition?
8. What was the main goal of the acquisition?
   a. Starting a new business
   b. Expanding the current business
   c. Pursuing synergies
9. Synergy can be defined as a cumulative effect of multiple actions. The acquisition was pursuing synergies.

Synergies can be divided into five categories. How important were the following synergies in the acquisitions?

   a. Highly insignificant
   b. Insignificant
c. Significant
d. Highly significant
e. Don’t know

10. Cost savings
11. Revenue enhancements
12. Process improvements
13. Financial engineering
14. Tax benefits

15. Did you use the help of an expert in the valuation?
16. The expert helped in the valuation process.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

17. The expert would have helped in the valuation process.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

18. You did the valuation by yourself. How did you conduct the valuation? Multiple choices possible.
   a. Valuation model
   b. Relative valuation
   c. Multiplying financial statement digits
   d. Something else, what?

19. You used a valuation model in the valuation. It had a critical role in the process.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know
20. You used a relative valuation in the valuation. It had a critical role in the process.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

21. You used financial statement multipliers in the valuation. It had a critical role in the process.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

22. The process of valuation was experienced as challenging.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

23. Acquisitions are common in your industry.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

24. Did you use debt to finance the acquisition?

25. Debt was available.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know
26. The availability of funding affected the execution of the acquisition.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

27. Acquisition affected the company value.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

28. Return on Investment changed due to the acquisition.
   a. Decreased significantly
   b. Decreased slightly
   c. Did not change
   d. Increased slightly
   e. Increased significantly
   f. Don’t know

29. EBIT changed due to the acquisition.
   a. Decreased significantly
   b. Decreased slightly
   c. Did not change
   d. Increased slightly
   e. Increased significantly
   f. Don’t know

30. Profit changed due to the acquisition.
   a. Decreased significantly
   b. Decreased slightly
   c. Did not change
   d. Increased slightly
   e. Increased significantly
   f. Don’t know
31. The acquisition was the most cost efficient way to reach the goals set for it, given the price of the acquisition.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

32. How long did the negotiations on the acquisition last?

33. The price given by the valuation was realistic when comparing to the final price.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

34. The acquisition process was experienced as challenging.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know

35. Your company will do acquisitions in the future.
   a. Strongly disagree
   b. Disagree
   c. Agree
   d. Strongly agree
   e. Don’t know
APPENDIX 2

Themes for Semi-Structured Interviews

The goal of the experts’ interviews was to get the practitioners’ view on the results of the questionnaire and also additional opinions on the issues of valuation and acquisitions.

The structure of the interviews was the following:

- Background of the interviewee.
- Interviewee’s take on the results of the questionnaire.
- How is valuation conducted in the acquisition process of small and middle-sized companies?
- What are the biggest challenges in the valuation of acquisitions process of small and middle-sized companies?
- What is the role of the method of valuation in the process?
- Do acquisitions manage to create value to companies?
- How well does the average entrepreneur of a Finnish small and middle-sized company know the possibilities that acquisitions may bring?
- How do you see the valuation as a part of the acquisition process?
- How does the valuation as a part of an acquisition process differ from other valuations?
- How would you assess the availability of the finance when it comes to the acquisitions of Finnish small and middle-sized companies?
### Background of the Interviewees

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<tr>
<th>Date</th>
<th>Firm</th>
<th>Interviewee</th>
<th>Interviewee’s background</th>
<th>Duration</th>
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<tr>
<td>September</td>
<td>KPMG Oy Ab</td>
<td>Senior Manager, Tax Advisor</td>
<td>M-Sc. (econ) Certified Accountant. 9 yrs. in KPMG, focusing on issues related to M&amp;A and valuation</td>
<td>75 min</td>
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<td>12th, 2013</td>
<td></td>
<td></td>
<td>M-Sc. (econ), 2 yrs. In KPMG, focusing on issues of company taxation</td>
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<tr>
<td>September</td>
<td>Oulun Uusyrityskeskus</td>
<td>CEO</td>
<td>Has been working on issues of M&amp;A and valuation for over 12 years.</td>
<td>63 min</td>
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<td>September</td>
<td>PwC Oy</td>
<td>Partner</td>
<td>MBA, on PwC since 1989. Twenty years of experience on issues of valuation and M&amp;A.</td>
<td>53 min</td>
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