

# MASTER THESIS

*Motives, valuation and pricing: a small sample analysis of Small- and Medium Enterprises in the Netherlands*

## Price -vs- Value



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## Preface

This Master Thesis is the final part of my study Business Administration, track Financial Management, at the University of Twente (Enschede). The main topics of this research are: motives, valuation and pricing. It is a small sample analysis of Small- and Medium Enterprises (SMEs) in the Netherlands. The research was executed at “Brouwers Corporate Finance” (Zwolle) in the period from May 2010 until June 2011.

The report starts with a literature review and the theory is discussed by using a framework. It is a theoretical framework that contains the main topics and shows the problem statement (price vs. value) and the explanations. The chapter results will answer the main question by analyzing the data from the fifteen Small- and Medium Enterprises in the Netherlands. The purpose of this research is to provide more insights in the valuation and pricing and to explain the difference between the two. Research about acquisitions does not occur much in Small- and Medium Enterprises and most theories about valuations are based on publicly traded companies.

The completion of this research would not be possible without the support of some important people. Several people have guided, supported and encouraged me during this project, which helped me to carry out this research. I would like to thank particularly my supervisors, prof. Dr. M.R. Kabir and Drs. G.C. Vergeer, for their guidance and their valuable feedback.

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Luke te Woerd

## Management Summary

This research is about the difference between valuation and pricing in acquisitions of SMEs. It was performed based on a theoretical framework that includes the three main topics of this research: motives for acquisitions, valuation and pricing. In reality the value of a company is not the same as the transaction price of a company. Several explanations determine the difference between value and price. This research identifies, explains and rates these explanations. The purpose is to clarify the difference and to open the eyes of SMEs in acquisitions. After the identification, these explanations were rated to what extent these explain the difference between valuation and pricing. It is important to reduce the difference, because in that way the price comes closer to the expectations of the emotional buyers and sellers in and valuations will have an added value in that case.

This report was performed at the Corporate Finance department of Brouwers in Zwolle (the Netherlands). There is not a lot of research about acquisitions in Small- and Medium Enterprises, but the most are based on publicly traded companies (Nunnally, 2006). That means this research adds interesting insights in the SME area about the topics discussed above.

The research question is:

*What are the explanations for the difference between valuation and pricing of fifteen acquisitions in Small- and Medium Enterprises in the Netherlands?*

The research is an explanatory study and it uses survey research in a small sample. It focuses on a small sample of fifteen acquisitions in Small- and Medium Enterprises in the Netherlands. The secondary data was collected from scientific books and articles and the primary data was collected through semi-structured face-to-face interviews with owners or financial directors (buyers and sellers) from these fifteen companies. These companies were involved in acquisitions in the last three years and are from different industries and have different sizes.

### *Results*

The valuation and pricing start with the motives. Synergy and corporate control are the most important motives for buyers in the sample. Looking at the motives for the sellers in the sample, circumstances that relate to the owners are the motives to sell the company.

The explanations for the difference between valuation and pricing could be the choice of valuation methods, the value drivers and the price drivers. These were rated on a Likert-scale from 1 to 5 and the scores for each explanation were added. The explanations could be objective or subjective. Objective explanations could be calculated and subjective explanations are not visible and different in different cases. The value estimations (in the value drivers and the valuation methods) and the price drivers are subjective. Synergy is also an explanation for the difference and is very subjective and should be included in the valuation. The DCF method attempts to include synergy into the calculation and the multiples method does not include this.

The results are that the acquisition related benefits (synergy) are the most important explanations for the difference between valuation and pricing in the sample. These explanations are followed by the bargaining strengths and the motives for acquisitions, these explanations explain the difference to a large extent. The other explanations in order of rank (interests for acquisitions, presence of advisers, financing acquisitions, trends in economics and politics, risks, others, multiple bidders and choice of valuation methods & valuation errors), explain the difference to a small extent according to the results from the interviews.

Not the DCF method, as could be expected from the literature, but the valuation method using multiples was used the most in the fifteen acquisitions. This is an easy and subjective method and less accurate than the DCF method. Buyers and sellers in SMEs prefer to use their feeling and an easy valuation method. If buyers and sellers in SMEs want to reduce the difference between valuation and pricing, they have to use more accurate valuation methods, they have to pay more attention to the valuation and the importance of these valuations has to be recognized by them. In this way more aspects will be included into the valuation and the difference will be smaller.

The right value drivers also have to be identified and have to be implemented in the valuation method, otherwise valuation errors could occur. Also the SMEs have to take into account the price drivers, because these could deviate the transaction price from the valuations. Some price drivers (example advisers) could be influenced by the buyers and sellers and some could not (example interests in acquisitions). The explanations which affected the valuation process and the pricing process (acquisition related benefits, trends in economics & politics and risks), should be implemented better in the valuations, so that a smaller gap arises. A difference between the valuation and the transaction price of companies will always remain, because the valuation and pricing are partially objective and partially subjective. Also the difference between buyers and sellers (motives, interests and more) will always remain and the price drivers cannot be easily influenced. Emotions are also important in acquisitions in SMEs, these could influence the price. The buyers and owners should try to switch off their emotions and be more objective. Owners, CFOs and advisers have to accomplish the above to give a good estimation of the price and to limit the emotions of buyers and sellers when there are major differences in value and price. All this is a major goal for the future.

# 1 Introduction

The central themes of this Master Thesis are valuation and pricing of acquisitions in SMEs. This thesis was performed at the Corporate Finance department of “Brouwers” in Zwolle (the Netherlands). They supported and assisted the research. Brouwers is active in the following areas: accountancy, consultancy, staff services and corporate finance. The 160 employees are working in Zwolle, Deventer, Genemuiden and Arnhem.

Everyday when you open a newspaper or watch the news on the television, a news item about acquisitions shows up. Some questions that could come to mind are: What were the motives to buy or to sell the company? What was the value of the company? What was finally paid for it? There are a lot of acquisitions in the modern world and these acquisitions are an important element in the corporate finance world (Martynova and Renneboog, 2006). All these acquisitions bring separate companies together to form larger ones.

Taking over the ownership of another organization is called an *acquisition* (Johnson, Scholes and Whittington, 2006). A strategy has to be developed before the start of an acquisition. An acquisition is a way to acquire another firm by buying the ownership stakes from the target company in exchange for cash, shares, or other securities. Buying all the assets from the selling could also be an acquisition, but this research does not include asset deals (Ross, Westerfield, Jaffe and Jordan, 2008).

The buyers and sellers in acquisitions have different motives for acquisitions. Valuation is one of the most important and most difficult aspects in acquisitions. Many articles and books have been published about valuation. Firm value is the present value of the future free cash flows expected from operations (Nunnally, 2006). Several factors and characteristics of companies have to be valued and there are different methods to calculate the value of companies (Koller, Goedhart and Wessels, 2005). The transaction price of a company is the amount of money that has to be paid at the end of an acquisition (Damodaran, 2001; KVK, 2010). This price can be broken down in several components and several factors determine the price (Damodaran, 2002). The valuation is made prior to the bargaining process between buyer and seller and the price is determined after the bargaining process between them (Damodaran, 2001).

## **1.1 The research**

This paragraph introduces the research. The research was performed based on a framework that includes the three main topics of this research. These three topics could also be found in the title of this Master Thesis. The valuation is determined by using different valuation methods and value drivers. The transaction price is determined by several price drivers and consists of different components. The result is a discrepancy between the valuations and the pricing of a company. This research identifies, explains and rates these explanations, to clarify the difference and to open the eyes of SMEs in acquisitions.

The report focuses on fifteen acquisitions of Small- and Medium Enterprises (SMEs). The primary data was collected through semi-structured interviews with owners or financial directors from these sample. These companies were involved in acquisitions in the last three years (Saunders, Lewis, Thornhill, 2007).

The research contributes to the literature about valuation and pricing in acquisitions, especially in Small- and Medium Enterprises (SMEs). There is not a lot of research about acquisitions in Small- and Medium Enterprises and most value determinations are based on publicly traded companies (Nunnally, 2006). That means this research adds interesting insights in the SME area about the topics discussed above. More about the data & methodology can be read in the third chapter.

### **1.1.1 Problem statement**

The company Brouwers wanted to get more insights into the explanations for the difference between the value and the acquisition price. They asked me to do a research about this problem.

Different motives for buyers and sellers in acquisitions result in a difference between valuations. The discrepancy between both valuations and the price is a problem. In a perfect world the value of a company should be the same as the transaction price, but in reality the value of a company is not the same as the price of a company (Gondhakelar, Sant and Ferris, 2004; Walking and Edminster, 1985; Sudarsanam and Sorwar, 2010; Desmond and Amster, 1994; Chiu and Siegel, 1990).

How is it possible that there is a gap between the value of a company and the transaction price of a company? What are the explanations for these differences? These questions will be answered in this research. Possible explanations for the difference could be over- or undervaluation by using different valuation methods, over- or underpayment by different motives/interests for takeovers, the valuation of goodwill and intangible assets, the bargaining process, the period of time, the managers involved, the role of the advisers, the amount of potential buyers and more.

Another question is to what extent these explanations determine the differences. The explanations will be rated by the interviewees on a scale from 1 to 5. Next to that also assumptions could be made about the data according to firm size or business sector (Wilcox, Chang and Grover, 2001).

### **1.1.2 Research question**

The research question is:

*What are the explanations for the difference between valuation and pricing in the acquisitions of Small- and Medium Enterprises in the Netherlands?*

To answer this research question, the following sub questions are used:

- How do acquisitions in SMEs look like?
- What are the differences between buyers and sellers in acquisitions?
- What are the motives for acquisitions in SMEs?
- What is according to the literature the common way of valuing SMEs?
- What are the value drivers in a company?
- What kind of valuation methods were used in the sample of SMEs?
- What are the components of the transaction price?
- What are the price drivers that influence the transaction price of a company?

### **1.1.3 The structure**

This Master Thesis consists out of seven chapters. The first chapter contains an introduction into the research. The second chapter reviews the literature and the chapter after that is about data and methodology. In that chapter methods will be justified. The fourth chapter contains the results from the interviews and answers the main question. The conclusions & limitations of this research can be found in chapter five. The last two chapters consist out of the references and the annexes.

## 1.2 Introducing the topics

The research question focuses on the topics valuation and pricing. Buyers and sellers could have the following questions: What is a company worth? Did I pay too much? Can I influence the explanations for the difference? This research provides more insights into these questions. This paragraph introduces the main topics of this research.

Buyers and sellers will have other priorities and interests and these will be reflected in the motives (Damodaran, 2001). The motives for acquisitions could be value-increasing, value-decreasing or circumstances that relate to the owners (Damodaran, 2001; McCarthy and Weitzel, 2009). After the motives are determined, a valuation takes place.

A major step in an acquisition is the valuation. A valuation measures and calculates the value of a company at a certain moment. It is a function of three factors: cash, timing and risk (Luehrman, 1997). The value can be calculated by different valuation methods. The possible valuation methods for SMEs are: the book value method, earnings capitalization method, valuation using multiples and the Discounted Cash Flow method (Fernandez, 2002).

After the valuation starts the negotiation about the price. The transaction price depends on the market price of a company and the acquisition premium (the amount that is paid too much). The buyer wants to pay a price that is as low as possible and the seller wants to receive a price that is as high as possible. Both parties have to bargain until both are satisfied with the final price of the company. If not, then the deal will be canceled. At the end, important in buying another company is knowing the maximum price you can pay and then having the discipline not to pay a euro more. About the motives, the valuation and the pricing more in the next chapter.

### 1.2.1 Small- and Medium Enterprises

The research focuses on Small- and Medium Enterprises. There are many definitions for the term SME, varying from country to country. In the Netherlands, SMEs represent about 99% of all firms, the SMEs employ a lot of people and drive innovation and competition. In table 1, the SME definition of the European Commission can be found:

SME Definition				
Enterprise category	Ceilings			
	Staff Headcount (number of persons expressed in annual work units)	Turnover	Or	Balance sheet total
Medium-sized	< 250	≤ € 50 million		≤ € 43 million
Small	< 50	≤ € 10 million		≤ € 10 million
Micro	< 10	≤ € 2 million		≤ € 2 million

Table 1: European Commission SME definition (European Commission, 2009)

According to this table, a company in Europe is a SME if it meets two of the three criteria mentioned in the table. SMEs have a maximum of 250 employees, a turnover with a maximum of 50 million euros and a balance sheet total up to 43 million euros (European Commission, 2009). This is the definition for SMEs in Europe, the numbers specifically for the Netherlands are lower. In the Netherlands the SMEs have a maximum of 100 employees, have a turnover with a maximum of 34,5 million and a balance sheet total up to 17,5 million euros. Also a qualitative definition could be used. The upper limit of the SME definition is where “the entrepreneur stops and the manager starts”. In that case the ownership and the risks are not longer in one hand. The functions that the entrepreneur had are now split up into the management (supporting staff) (MKB servicedesk, 2010). Both definitions could be used, but this research will use the Dutch definition for the turnover and the balance sheet total, because that one is more applicable to the Netherlands.

In January 2009 the Central Office of Statistics in the Netherlands counted 844.450 active SMEs. The distribution according to the number of employees in SMEs was as follows: independants: 56%, 1-10 employees: 35%, 10-49 employees: 7%, 49-250 employees: 1% and > 250 employees: 1%. These SMEs (99% of all firms) are responsible for 58% of total turnover in the country and employ 60% of the employees in the Netherlands (MKB servicedesk, 2010; European Commission, 2009). All this information shows that SMEs are important for the economy of the Netherlands. Some differences between SMEs and larger enterprises are: SMEs use acquisitions more as an external growth option, SMEs are more likely to withdraw from a deal (flexibility) than larger firms and in acquisitions of SMEs equity financing is preferred over debt financing (Weitzel and McCarthy, 2009).

## 2 Literature review

This chapter discusses published information in particular areas. Step by step a framework will unfold in which all of the three topics are presented, described and connected.

### 2.1 *Motives for acquisitions*

#### 2.1.1 Acquisitions

When one company takes over another company and establishes itself as the new owner, the purchase is called an acquisition. The key principle behind an acquisition is to create (shareholder) value over and above the sum of the two companies, so maximize the value (Koller, Goedhart and Wessels, 2005). Acquisitions can be friendly or hostile. Potential sellers in friendly acquisitions welcome acquisitions and potential sellers in hostile acquisitions do not welcome them (Damodaran, 2001). The recent economic crisis has little influence on a planned acquisition. Only a quarter of the Medium Enterprises in the Netherlands postpones the sale of their company or accepts a lower price (Staalbankiers and Jonker Advies, 2010).

Most of the theory about acquisitions in the literature was developed for the study of large deals by large firms. Something to keep in mind is the difference between large (public) companies and Small- and Medium Enterprises in acquisitions. There is a difference between them in risks, valuations, references, stakeholders, emotions, method of payment, influences and more.

#### *The process*

Looking at the process of an acquisition, the average time for an acquisition is approximately between the six and eight months. For buyers the following consecutive steps can be defined in an acquisition: 1) make an acquiring strategy; 2) determine the motives for an acquisition; 3) analyze the company; 4) a valuation of the company; 5) the negotiations & pricing about the company; 6) the closing of the acquisition & the transfer of the company and 8) the aftercare. These steps were described by the scientific articles from Roll (1986) and Damodaran (2001) and combined to these eight steps.

For sellers the steps in acquisitions are different than for buyers, sellers will use the following steps: 1) investigate if the company is ready for sale; 2) make the choice to sell the firm and organize the sales process; 3) execute valuation; 4) compose and underpin pricing; 5) compose sale documents; 6) negotiations/bargaining; 7) closing and transfer of the company; 8) Aftercare.

### *Buyers and sellers*

There are three types of buyers: personal buyers, financial buyers and strategic buyers. Buyers could be family, competitors, the management or a participation company (investors) (Staalbankiers and Jonker Advies, 2010; Blok, Derksen, Diagos, Lomeijer, Notenboom, Post, Sluis, Smeets and Wijs, 2002). An acquisition by the management could be distinguished in a Management Buy-Out (MBO) and a Management Buy-in (MBI). In a MBO the management of the company takes over the company from the owners and in a MBI a management from outside the company will takeover the company from the owners. Looking at the buying side: families and MBIs are personal buyers, participation companies and MBOs are financial buyers and competitors are strategic buyers (Blok, Derksen, Diagos, Lomeijer, Notenboom, Post, Sluis, Smeets and Wijs, 2002).

All these buyers and sellers are different parties and will have different motives, interests, emotions and ideas about acquisitions. For example, in a family business that is looking for a successor, the continuation of the company is more important than the price. On the other hand, the transaction price will be more important in an acquisition with competitors. At the end of an acquisition process, buyers want to pay a price that is as low as possible and sellers want to receive a price that is as high as possible.

This paragraph elaborated about acquisitions, the acquisition process and the difference between buyers and sellers. About the motives for buyers and sellers more in the next paragraph.

#### **2.1.2 Motives**

A good strategy and clear motives are the starting point for an acquisition. Motives show why companies want to buy a company or want to sell a company. Several scientific articles discussed the motives for acquisitions and wondered what kind of motives are the most important in acquisitions. The three motives for buyers that were discussed in the theory the most are: synergy, agency and managerial hubris (Hayward and Hambrick, 1997; Berkovitch and Narayanan, 1993; Martynova and Renneboog, 2006).

When acquisitions occur because of economic gains that result by combining the resources of the two firms, the motive is synergy. The motive is agency if acquisitions are motivated by the self-interest of the management and the result is that the buyer will be worse off. Managerial hubris is the motive if managers make mistakes in the valuation (analysis) of potential sellers and engage in acquisitions even when there is no synergy (Berkovitch and Narayanan, 1993). The last two are explanations for acquisitions and the company finds out after the acquisition, because then the company finds out the mistakes in the analysis.

There are also other motives next to these three motives. The motives for buyers could be categorized in value-increasing and value-decreasing theories. The motives for sellers could be categorized in circumstances that relate to the owners. The value-increasing theory and the motives for sellers are motives that are clear before an acquisition. The value-decreasing theories are explanations for an acquisition, instead of motives. No company will have the motive to decrease the value, but after the acquisition it could be determined that these theories were explanations for certain motives. After the acquisition, it could become clear what the idea is that lies behind the motive.

All the motives for acquisitions combined in a table will lead to the following clarifying table with motives for acquisitions and the firm characteristics of the sellers (McCarthy and Weitzel, 2009; Damodaran, 2001).

<b>Party</b>	<b>Theories</b>	<b>If the motive is...</b>	<b>Then the seller...</b>
Buyers	Value-increasing theories	Synergy	Can create operating or financial synergy for the buyer
		Market power (diversification)	Will enlarge the market power of the buyer
		Corporate control	Is a badly managed firm whose stock has underperformed the market
	Value-decreasing theories	Managerial hubris	Is evaluated wrong and acquired even when there was no synergy (overpaying)
		Managerial discretion	Has a lot of liquidity and so the management will make bad decisions, because the quality of their decisions will be less challenged
		Agency (empire-building or entrenchment)	Has characteristics that best meet management's ego and power needs
Sellers	Circumstances that relate to the owners	Age	Wants to retire (babyboom generation)
		Illness	Wants to sell the company
		Financial need	Needs to sell the company
		Dissatisfaction within the company	Wants to sell the company, because cooperation with the owners and the management is impossible
		A good bid from a buyer	Wants to be financially independent

Table 2: Motives and selling firm characteristics for acquisitions (McCarthy & Weitzel, 2009; Damodaran, 2001)

If companies have more than one motive in an acquisition, the most important motive will be the leading motive in acquisitions. These motives could influence the value and the price of a company. Two examples: the explanation managerial hubris (value-decreasing) influences valuation and the motive corporate control (value-increasing) influences the price.

The motives for buyers in Small- and Medium Enterprises were ranked (high/medium/low) in the literature. According to that ranking, synergy is the most important motive for acquisitions in SMEs and that is why it has the ranking high. Market power, corporate control, managerial hubris and managerial discretion have the ranking medium. For a few acquirers the motive is agency and that is why this motive has the ranking low (McCarthy and Weitzel, 2009).

For buyers, synergy is the main reason for acquisitions in SMES and this motive will be explained. Buyers generally base their calculations on five types of synergies: cost savings, revenue enhancements, process improvements, financial engineering and tax benefits (Eccles, Lanes and Wilson, 1999). Synergy can be operative or financial. Operating synergy can lead to cost savings by creating economies of scale and can also lead to higher growth, because companies can open new markets or expand existing ones. On the other side there is financial synergy. This can mean tax benefits for the buyer or other financial benefits for the buyer. (McCarthy and Weitzel, 2009).

The motives for sellers are assembled in the category circumstances that relate to the owners. Age, illness, financial need, dissatisfaction within the company and a good bid from a buyer are motives to sell a company. Age is associated with the distribution of the population in the Netherlands, because at the moment there is a babyboom generation in the country and people want to retire.

The motives for buyers and sellers are not the same. Motives will determine and lead to two different valuations made by the buyers and the sellers. These motives also influence the final transaction price that buyers want to pay and sellers want to receive. The more important the motives for a buyer, the higher the valuation and the transaction price will be. The more important the motives for a seller, the lower the valuation and the transaction price will be. Only in cases of dissatisfaction within the company or a good bid from a buyer it could be the other way around. The valuation and the pricing should be the same in a “perfect” world, but because of different explanations in the valuation- and pricing process, there is a difference in the value and the price. In the sequel of this chapter and this framework, that discrepancy will be illustrated and explained. All this lays the foundation for the beginning of the framework (see below). The next paragraph will continue with the literature about the valuation.

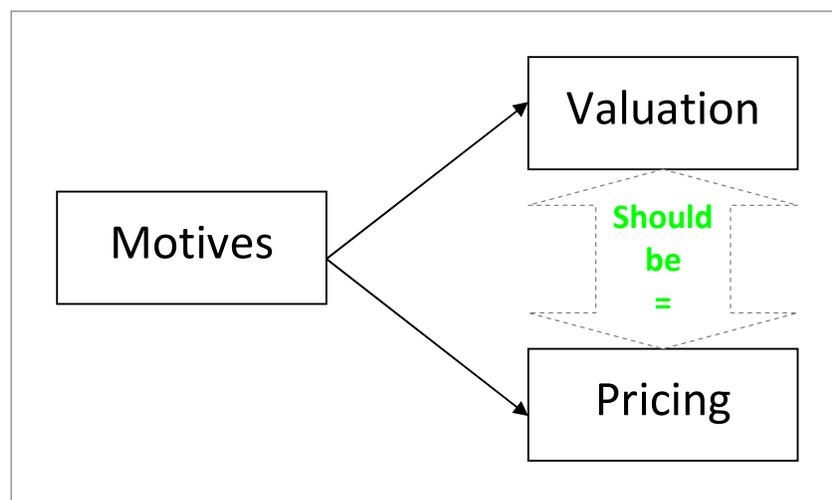


Figure 1: Motives that influence the valuation and the pricing of companies

## **2.2 Valuation**

Motives lead to low valuations or high valuations. Buyers would like low valuations for other companies and sellers would like high valuations for their company (Tobler, 2006). If there is illiquidity and non-diversifiable risk in a company, then there should be a discount on the value. In this way the motive for valuation matters (Damodaran, 2002). For some target companies, the valuation is very difficult. Examples are: firms that have negative earnings, young firms and unique firms with a few or no comparable firms (Damodaran, 1999). This subsection will discuss the valuation in Small- and Medium Enterprises.

Valuation of a company is a major step in the acquisition process. A valuation is an expression of an opinion about the value of a company. Valuation of small firms has become increasingly important in recent years, because of the large amount of Small- and Medium Enterprises in the world and the differences between countries (Ribal, Blasco and Segura, 2010; European Commission, 2009). Certain value drivers determine the value of a company. About these value drivers more in the next paragraph.

The choice for valuation methods by advisers is based on technical factors (the firm's industrial and business characteristics), contextual considerations (institutional context) and clients. An estimation of the price is set on the basis of one or a combination of valuation methods.

Businesses need valuations for several types of situations: bankruptcy, litigation other than bankruptcy, estate- and gift tax determination, estate settlement, mergers, acquisitions, sale of a business and contribution to an Employee Stock Ownership Plan (Dukes, Bowlin and Ma, 1996). More than one fifth of the entrepreneurs in Medium Enterprises who want to sell their company, has no clear view about the value of their business. A reason for this could be the uncertainty about the development of value during the recent economic crisis. Three out of four entrepreneurs also expects that in two years the value of the company will be higher than before the economic crisis (Staalbankiers and Jonker Advies, 2010). So the crisis is a chance to create more value, because the efficiency could be improved.

### **2.2.1 Value drivers**

In valuing a company, a number of factors or value drivers can influence the value of a company. There are two types of value drivers: subjective- and objective value drivers. Objective value drivers could be easily measured by valuation methods and subjective value drivers are difficult to measure. These subjective value drivers are important for buyers and less important for sellers or the other way around. The following table shows the value drivers. These value drivers are classified in the following five categories: intern, extern, financial, strategic and operational. If these factors are present, strong, positive or good then they will increase the value, because they will add value to a company (Desmond and Amster, 1994; Chiu and Siegel, 1990).

<i>Value drivers</i>				
<i>Intern</i>	<i>Extern</i>	<i>Financial</i>	<i>Strategic</i>	<i>Operational</i>
Degree of risk	Industry	Sales trend	Unique location and/or marketposition	Degree of (in)dependency of owner/personnel
History of the business	Ease or difficulty of entry	Stability of earnings	Takeover motives	Investment level / innovativeness
Construction Workforce	Economic and political trends	Financial status of the company	Secured brands and patents	Quality of management
Construction of customer base	Competition			Marketing factors
Reputation				Product quality

*Table 3: Value drivers of a company (Desmond and Amster, 1994; Chiu and Siegel, 1990)*

These value drivers have to be indicated in the analysis of a company and after that a valuation has to be made.

### **2.2.2 Valuation methods**

All the valuation methods can be classified in categories. The four main categories are: balance sheet-based methods, income statement-based methods, cash flow discounting-based methods and mixed methods (Fernandez, 2002). The balance sheet-based methods are based on assets, the income statement-based methods are based on earnings, the cash flow discounting-based methods are based on cash flows and the mixed methods are based on assets and goodwill (Pricer and Johnson, 1997). Most of the valuation methods in Small- and Medium Enterprises are based on the earnings or the cash flows of the companies (Sim and Wilhelm, 2010; Staalbankiers and Jonker Advies, 2010).

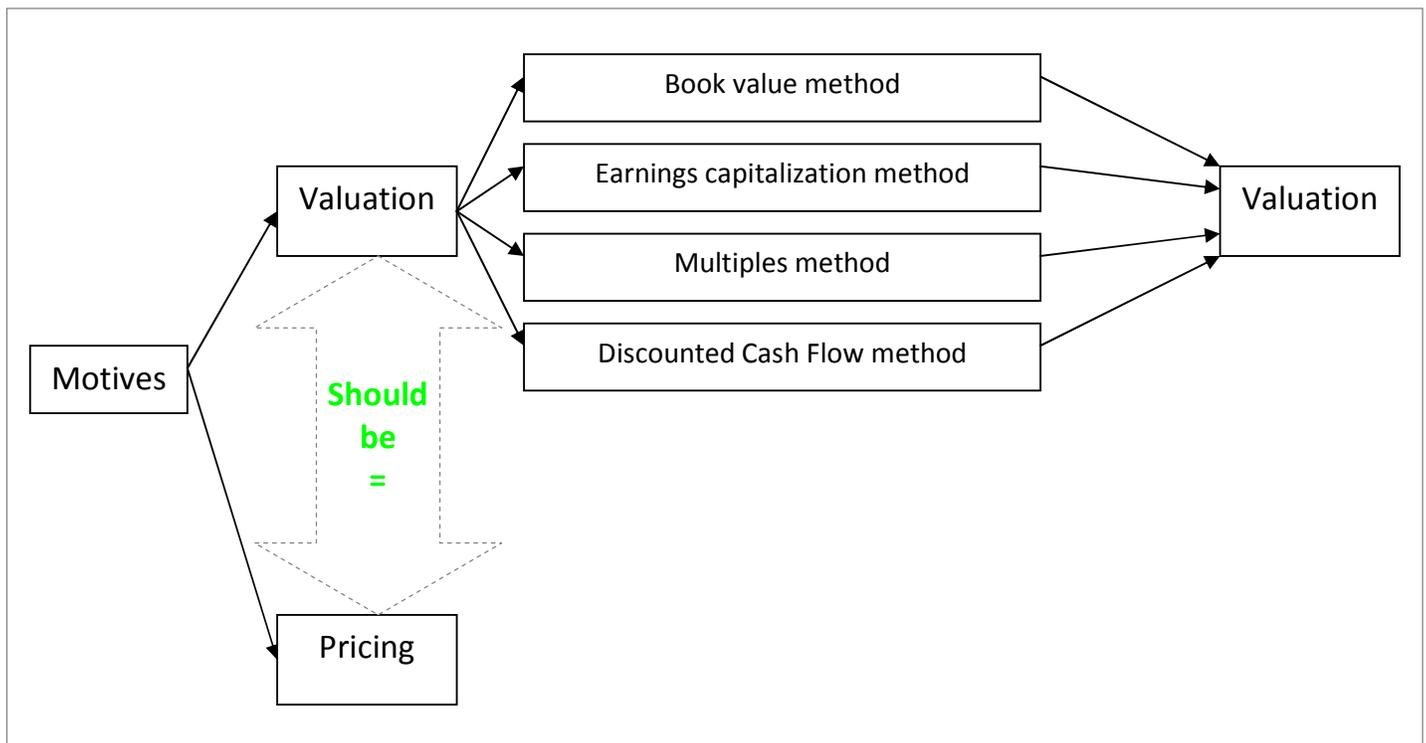
Looking at family businesses, the total value of these companies is not only the financial worth and the private benefits, but also the emotional components according to Astrachan (2008). Central in that article are the family businesses. Family business owners do not see their businesses as a financial tool for profit maximization only. Also emotional returns affect the total value positively and the emotional costs affect the total value negatively. All these returns and costs return in the total value formula. The total value of privately held family businesses is the financial value plus the emotional value. Examples of emotional returns are achieving financial and non-financial goals (pride, independence, togetherness, opportunities etcetera). Emotional costs result by not achieving financial and non-financial goals. Examples of emotional costs are: family tension, conflicts, obligations, dependence, rivalry and the reduction of leisure time.

This shows that the feeling of the entrepreneur and the emotional returns and emotional costs are very important for the total value of a family-owned firm (Astrachan, 2008).

Valuation is always a function of three factors: cash, timing and risk (Luehrman, 1997). There are various methods to value. These methods differ from easy to difficult and frequently more than one method was used by analysts or advisers to control other methods (Imam, Barker and Clubb, 2008).

In this paragraph and the next one, the most common and major valuation methods in SMEs will be discussed: the book value method, the earnings capitalization method, the Discounted Cash Flow (DCF) method and the multiples method. The Discounted Cash Flow method will be discussed in the next paragraph, because it is a major valuation method (Koller, Goedhart and Wessels, 2005; Chiu and Siegel, 1989; Lippit and Mastracchio, 1993; Nunnally, 2006; Fernandez, 2001; Fernandez, 2002; Heaton, 1998).

These four valuation methods will be added to the framework that was established so far. The choice of one of these valuation methods, the additional valuation errors and the application of the methods could lead to different valuations between buyers and sellers. This leads to the following figure, that will be extended in the next paragraphs.



*Figure 2: The valuation should be the same as the pricing in theory, but in practice the (choice of) valuation methods and the valuation drivers determine the valuation of buyers and sellers (Koller, Goedhart and Wessels, 2005; Chiu and Siegel, 1989; Lippit and Mastracchio, 1993; Nunnally, 2006; Fernandez, 2001; Fernandez, 2002; Heaton, 1998).*

### *Book value method*

Book value belongs to the category balance sheet-based methods. Book value is the assets of a small business minus its liabilities. It is the value of the equity stated in the balance sheet (components of equity, capital and reserves). The strength of this method is that information is immediately available and the assets are the drivers for generating future income. The method does not have a lot of support in the literature (Dukes, Bowlin, Ma, 1996). It is a snapshot and does not include the intangible assets (goodwill) that are not on the balance sheet of small businesses, like reputation, managerial expertise or relationships (Heaton, 1998). Book value is based on the historical costs of the assets and not on their market value. Other disadvantages are: book value does not take into account the future, the earnings, the skills of the personnel and the fact that accounting practices and depreciations vary between companies (Pricer and Johnson, 1997; Fernandez, 2002). The adjusted book value tries to overcome the shortcomings of the normal book value (Fernandez, 2002). Because of the many shortcomings, the book value is not often used as a valuation method.

### *Earnings capitalization method*

Earnings capitalization is an income statement-based method, it is a valuation based on earnings. Two variables are important in earnings capitalization: the earnings and the capitalization rate. The earnings should reflect the true nature of the business, such as the the average of the last three years, the current year and/or projected years. The expected earnings are derived from the results in the past. Earnings can be capitalized by taking the earnings and divide these by the rate of return on the investment. The reason for using a capitalization rate is to remove sporadic influences. A company with high earnings and low asset value is worth more than a company with low earnings and high asset value. The formula to determine the value of a company according to the earnings capitalization method is:  $\text{Earnings} / \text{Capitalization rate}$  (Lippit and Mastracchio, 1993). The capitalization rate depends on business risk and interest on long-term debt. It could be determined by comparing rates that are available for similar risky investments. The formula above can change if constant growing earnings are implemented in the formula. Then the formula will be:  $\text{Earnings} / (\text{Capitalization rate} - \text{growth rate})$ .

An advantage of earnings capitalization is its simplicity. The information of earnings is available in companies and with a structured capitalization rate the method is quite objective. It also takes into account the future earnings and the valuation method above (book value) does not. The dangers of this valuation method are: the subjectivity of some variables in the formula (earnings and the risk factor in the capitalization rate), it also assumes that the growth rate will continue with the same rate and that the company will exist until infinity (Pricer and Johnson, 1997; Lippit and Mastracchio, 1993). Other disadvantages are: the valuation method does not take into account the financing structure of the firm or the presence of excess assets and it focuses especially on historic performances.

### *Multiples method*

Valuation methods using multiples use performance measures and multipliers to calculate the value of a company. This valuation method can be categorized as an income statement-based method, because it mainly focuses on earnings and sales. The earnings, gross sales, cash flows or other performance measures will be multiplied with a certain industry multiplier or with the multiplier of comparable companies. The result of the formula is the value of a company (Koller, Goedhart and Wessels, 2005; Kaplan and Ruback, 1996). Valuation using multiples nearly always have a broad dispersion, that is why these are not recommended. In stable companies with each year the same cash flows, this valuation method could be used. However, this valuation method can be useful to check the main valuation method and show the differences between the methods (Fernandez, 2001).

Valuation methods using multiples are more quickly and need fewer assumptions than for example the discounted cash flow valuation. It is also easier to understand and easier to present to stakeholders than other valuation methods. The last advantage is that it reflects the mood of the market, because it does not measure the intrinsic value.

Looking at the disadvantages of this valuation method, then the strengths are also the weaknesses. The ease of the method can lead to inconsistent estimates of value. When a comparable firm is overvalued, the firm that has to be valued, will also be overvalued and vice versa. This valuation method also focuses especially on historic earnings and not on forecasts. The last disadvantage is that the method is vulnerable for manipulation. An adviser or analyst can pick a multiple or a comparable firm that gives the best value but not a realistic value (Damodaran, 2002).

Multiples can be divided into four groups: earnings multiples, book value or replacement value multiples, revenue multiples and sector-specific multiples (Damodaran, 2002). Factors that affect the multiplier are: historical earnings, income risk, terms of sale, business type, business growth, location/facilities, marketability, desirability, competition and industry growth (Sliwoski and Jorgenson, 1996). These factors have been mentioned in the paragraph about value drivers.

An example of a major earnings multiple is the Price Earnings Ratio (PER). The PER calculates the value by multiplying the annual net income by the price earnings ratio. This ratio is calculated as the quotient between the market value and earnings per share. That is called the recovery time and it shows how long it would take the investor to get back its investment if all earnings were paid out as dividends.

The disadvantages of this ratio are: it is a sensitive ratio and it can be distorted by different accounting practices and different levels of leverage. Almost similar to the PER is the Price Cashflow Ratio (PCF), only here cashflows are used instead of earnings. Cash Flows are more objective, are comparable and eliminate valuation adjustments (Ribal, Blasco, Segura, 2010). Sales multiples will be used in industries with a certain frequency.

A book value multiple is the price divided by the book value ratio. This ratio is estimated using the value of the firm and the book value of all assets. If we take a look at the revenue multiple, then this multiple is not an accounting measure like the earnings- and the book value multiples. An example of a revenue multiple is the value divided by the sales ratio.

An advantage of revenue multiples is that it is easier to compare firms in different markets with revenue multiples than with the multiples discussed above. Sometimes also sector-specific multiples are used in valuations of companies (Damodaran, 2002).

Examples of earnings multiples are: value of the company divided by the Earnings Before Interest and Taxes (EBIT) and value of the company divided by the Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA). Another multiple is the value of the company divided by the operating cash flows (Ribal, Blasco and Segura, 2010).

In Spain, the multiple value of the company divided by EBITDA is often used in the valuation of companies. EBITDA prevents distortions caused by different financial structures and tax policies. This multiple is the best in the category multiples, because of a small variability rate. Preferred in multiples of prices is the the PCF ratio (Ribal, Blasco, Segura, 2010). An interesting question that remains is what kind of valuation method and multiple is preferred in the Netherlands?

The rules of thumb approach is the easiest valuation method and it is a valuation based on industry formulas. An example is that the value of a bakery is two times the annual revenues. Rules of thumb are not really relevant in small businesses, because these rules are based on industry averages and small firms are unique and are difficult to compare with larger firms (Heaton, 1998).

According to Medium Enterprises the future earnings (earnings capitalization) and the free cash flows (DCF method) have the most influence on the value of a company. The multiples method could focus on several performance measures. The historic results and turnover are not that important for the value of a company (Sim and Wilhelm, 2010; Staalbankiers and Jonker Advies, 2010). This results in the fact that nowadays the earnings capitalization, the valuation method using multiples and the DCF method are the valuation methods that are the most important and the most used in SMEs according to the literature. According to the literature the most suitable way of valuation is the DCF method (Koller, Goedhart and Wessels, 2005; Heaton, 1998; Fernandez, 2002; Dukes, Bowlin and Ma, 1996). It is an accurate and difficult valuation method and it takes into consideration the future, the risk, the return, the cash flows and the cost of capital.

Is the most suitable valuation method also the method that is used in SMEs? In the recent past the DCF method was not often used in SMEs, because it was difficult to calculate. That was why in practice the earnings apitalization method, the multiples and other historical earnings based models were popular (Lippit and Mastracchio, 1993). Is this still the situation or was there a switch?

In the next paragraph the Discounted Cash Flow method will be discussed extensively just like the other valuation methods. In the chapter results can be read what kind of valuation method the sample preferred and used. Do they prefer the easy and not very accurate multiples method or do they use the difficult and more useful (takes into account various aspects) Discounted Cash Flow Method? What kind of valuation methods do the SMEs use now? All these questions will be answered in the chapter results.

### 2.2.3 Discounted Cash Flow (DCF) method

Having discussed some of the other valuation methods, now the attention is going to a major valuation method, the Discounted Cash Flow (DCF) method. This valuation method fits into the category of cash flow discounting-based methods and is also used in SMEs.

DCF is the present value of the cash flows of a firm over multiple periods (Demirakos, Strong and Walker, 2004). Important factors in DCF valuation are: a calculation of net cash flow for the current period and future periods, a horizon period for the cash flows, a growth rate for the cash flows, a discount rate for the cash flows and a terminal/residual value for the cash flows (Nunnally, 2006; Luehrman, 1997; Ribal, Blasco and Segura, 2010). The formula below is the formula to calculate the value of the firm with the DCF method. The time horizon for the estimation of cash flows is three to five years according to a survey by Dukes et al. (1996). According to a research in Denmark, almost 65 percent of the analysts use an average time horizon between one and five years (Ribal, Blasco and Segura, 2010). The growth rate (h) for the cash flows is the rate the cash flow will grow each year.

$$EV = \frac{CF_1}{(1+k)} + \frac{CF_2}{(1+k)^2} + \dots$$

$$\dots + \frac{CF_n}{(1+k)^n} + \frac{CF_n \cdot (1+h)/(k-h)}{(1+k)^n}$$

EV: value of the firm  
 CF: the cash flow of the firm  
 n: the number of time periods  
 k: the discount rate (WACC)  
 h: the growth rate

Figure 3: The DCF formula (Ribal, Blasco and Segura, 2010)

Cash flow discounting can be divided into five basic stages. The first stage is a historic-, financial- and strategic analysis of the company and the industry. Then projections (financial, strategic, competitive, consistency) of future cash flows will be made. In the third stage the cost of capital (required return) will be determined. After that the net present value of future flows will be calculated. The last stage in the cash flow discounting consists out of an interpretation of the results (Fernandez, 2002).

#### Cash Flows ( $CF_n$ )

The Discounted Cash Flow method first estimates the future cash flows after all expenses, investments in working capital and capital expenditures (Heaton, 1998). To estimate the cash flows of a company, a company has to observe how much cash is going out and how much cash is coming in. That is an easy way of keeping up with the cash flows. To calculate the cash flows in another way, some elements need to be added and subtracted from the net income and depreciation and other non-cash charges are added to the net income. Also the annual change in working capital and the annual change in long-term debt are added to net income. The capital expenditures are subtracted from the net income.

All this creates the following formula for calculating the cash flows:

$$CF = E + D - CAPEX + \Delta WC + \Delta LTD.$$

CF is the annual cash flow, E is the annual net income, D is the annual depreciation charge, CAPEX is the gross annual capital expenditures,  $\Delta WC$  is the annual change in working capital and  $\Delta LTD$  is the annual change in long-term debt (Lippit and Mastracchio, 1993).

After calculating the cash flows for multiple periods, these cash flows have to be discounted to the present value or the amount of money that a potential buyer is willing to pay for a company (Heaton, 1998; Fernandez, 2002). The DCF method will be used if companies have different cash flows, examples are companies which grow, companies with a good strategy and firms which often have new policies.

*Terminal value ( $CF_n \cdot (1+h)/(k-h)$ )*

The terminal or residual value consists out of cash flows that will occur after the horizon period, but a precise estimation is not possible. The terminal value is the last part of the formula ( $CF_n \cdot (1+h)/(k-h)$ ) and it also needs to be discounted. It can be calculated by multiplying the cash flow of the horizon year by the assumed growth rate past the horizon year, divided by the difference between the assumed growth rate past the horizon year and the discount rate. The terminal value is difficult to determine and it is around the 40-50% of the total value of a company (Nunnally, 2006).

*Discount rate (k)*

One of the most difficult and influential parts of the DCF method is the determination of the discount rate (Fernandez, 2002) The discount rate is the rate of return demanded by the suppliers of capital. It is the return available for other investments with the same risk (Heaton, 1998). The discount rate in large companies is approximately around the 15% and the discount rate in SMEs is around the 25%. The basic principle of the discount rate is the Weighted Average Cost of Capital (WACC). The costs of capital (k) are the weighted average costs of the different components of financing (debt and equity) an investment. It consists out of the cost of equity, the after tax cost of debt and the optimal capital structure of the company (Ribal, Blasco and Segura, 2010; Sim and Wilhelm, 2010; Heaton, 1998; Ross, Westerfield, Jaffe and Jordan, 2007).

$$k = WACC = \frac{E \cdot k_e + D \cdot k_d \cdot (1 - t)}{E + D}$$

k: discount rate  
WACC: Weighted Average Cost of Capital  
E: amount of equity  
k<sub>e</sub>: cost of equity  
D: amount of debt  
k<sub>d</sub>: cost of debt  
t: corporate tax rate

Figure 4: The WACC formula (Ribal, Blasco and Segura, 2010)

Empirical research shows that smaller firms normally have a higher cost of capital and are riskier than larger firms (Sim and Wilhelm, 2010). In selecting a discount rate for these small businesses, analysts need to keep in mind the limited sources of capital available to small firms. They also need to adjust estimates of market data from larger companies to reflect the size, the risk and the illiquidity of small companies (Heaton, 1998). A difference between large and small companies is that large companies have more references and small firms are more unique. Large companies also have less risk, because they have more body. Small companies are on the other hand easier to analyze.

### *Equity (E) and Debt (D)*

A balance sheet has two sides. On the left are the assets and on the right side are the forms of financing: the liabilities and (stockholder) equity. The assets are items of economic value owned by a company. These items can be converted to cash (fixed- and current assets). The liabilities are the items on a balance sheet that the company owes. Liabilities are debts and are associated with nominally fixed cash burdens. The value of debt or bonds is called debt. The value of the stock of a firm is called equity. Equity is the value of an owner in an asset or group of assets. Equity is normally defined as the value of the assets contributed by the owners. The formula for equity is:  $\text{equity} = \text{total assets} - \text{total liabilities}$  (Ross, Westerfield, Jaffe and Jordan, 2007).

### *Cost of equity ( $K_e$ )*

An element of the discount rate is the cost of equity. The cost of equity is the rate of return that investors require to make an equity investment in a firm (Damodaran, 2002). It is difficult to estimate the cost of equity for small illiquid companies. Normally these companies have a cost of equity in the range of 20-50% (Heaton, 1998).

There are two ways for estimating the cost of equity, the build-up approach and the Capital Asset Pricing Model (CAPM). The build-up approach is more often used in the valuation of small and privately held companies and the CAPM approach more often in large and publicly traded companies (Sim and Wilhelm, 2010). One major reason for this is that CAPM requires a factor, beta, but this beta is not available for small private firms. Small firms have risks that are not reflected by beta, but are related to size (lack of liquidity, higher risk, lack of information, lack of bargaining strengths, lack of resources, less control and more) (Sim and Wilhelm, 2010). In general, smaller firms will have a relatively lower value than larger firms, because SMEs have a higher risk profile and the shares are less liquid.

The formula for the CAPM is:  $\text{Required return} = R_f + \beta(R_m - R_f)$ . Where,  $R_f$  = Risk-free rate,  $\beta$  = beta and  $R_m$  = market expected return.

The build-up approach is the sum of risks associated with various assets. The cost of equity according to the build-up approach is estimated using professional judgment or experience. This approach is more subjective than the CAPM. The build-up approach is the sum of the risk-free rate (the rate of return on intermediate-term or long-term government bonds), the equity risk premium ( $R_m - R_f$ ) and the small firm premium. The equity risk premium is the premium above the risk-free rate (the interest rate on long-term government bonds), because investors would like an additional return over and above this risk-free rate.

The equity risk premium in the build-up approach is not modified by a beta, because a beta is difficult to find and to calculate for a small business. Shareholders in small companies want an additional return for their equity. This small firm effect is an additional premium to the cost of equity. In a company various risk factors have to be identified and determined to get the appropriate additional return to bear this risk. The Small Firm Premium has in 95 percent of the cases a range between 2% and 11% (BDO, 2006).

The literature describes several risk factors that could influence the increased required return of non-listed companies. These nine risk factors are:

- *Illiquidity* (To sell unlisted companies it often takes more time and money)
- *Dependency management* (The continuity of the company often depends on one or a few individuals and the performance depends on these people)
- *Dependency customers* (If one customer will leave the company then it has more consequences for a company with a small amount of customers than for a company with a large amount of customers)
- *Dependency suppliers* (The same as for the customers applies to the suppliers)
- *Proof of financial performance / ambition* (The trends of future cash flows (forecasts) should be reflected in historical cash flows; the track-record)
- *Reputation* (a good reputation leads to less risks for a company)
- *Distribution of activities* (SMEs normally only focus on one activity and that is why the company-specific risks for these companies will be higher)
- *Entry barriers to the market* (a low entry barrier for companies in a specific industry can be a risk factor for an enterprise)
- *Flexibility* (The recent economic crises has shown that many companies lack flexibility to change market conditions. Flexible companies are able to cut production in bad times and these are able to increase the production in an improving market fast. They are also able to respond rapidly to new trends and innovations) (BDO, 2006)

Remarkable is that the risk factors mentioned above are also very important value drivers that determine the valuation of SMEs. These value drivers were described in paragraph 2.2.1. The Small- and Medium Enterprises cannot influence their environment like large companies can do. Large companies do not need an additional risk premium, because they are more professional, have less risks, have a better management and can influence the environment better. Thanks to the Small Firm Premium the discount rate will increase and the value of the company will decrease.

#### *Cost of debt ( $K_d$ )*

Another element of the discount rate is the cost of debt. The cost of debt is the current market rate the company is paying on its debt, adjusted for the tax-deductibility of interest expenses. The cost of debt for companies consists out of a risk-free rate (treasury bill) and a risk component.

The long-run cost of debt for a small company can be estimated by using the bank borrowing rate plus a rate (1%) for risk and illiquidity of the debt and then adding the spread between long-run and short-run interest rates (Heaton, 1998). Small companies have more problems in getting debt financing than large companies, because they have such a small size. The cheapest form of debt for small firms is a bank loan. This loan will be restricted to a percentage of working capital that serves as a collateral for the loan.

### *Corporate tax rate (t)*

The corporate tax rate is also included in the formula of the cost of capital. Interest is tax deductible, this means the positive effect of tax on the interest of debt has to be taken into account. This is called the tax shield (Ribal, Blasco and Segura, 2010; Ross, Westerfield, Jaffe and Jordan, 2007).

### *Advantages and disadvantages*

The advantages of the DCF method are:

- The focus is on the future;
- Cash flows are used, these take into consideration the investment needs;
- It takes into account measures that could improve the returns;
- It takes into account the time value of money;
- Accounting rules are circumvented by using cash flows instead of earnings.

The disadvantages of the DCF method are:

- The forecast period is long and it is difficult to forecast several years ahead;
- The terminal value is often disproportionate, because it is not possible to predict too far ahead;
- The assumptions and principles in DCF are subjective and based on the current expectations of economic conditions;
- The investment policy of a company has a strong impact on the final value.

In summary, the best method for the valuation of Small- and Medium companies according to the theory is the DCF method. Methods regularly used in SMEs are the DCF method, earnings capitalization and the multiples method (Koller, Goedhart and Wessels, 2005; Chiu and Siegel, 1989; Lippit and Mastracchio, 1993; Nunnally, 2006; Fernandez, 2001; Fernandez, 2002; Heaton, 1998). The question is, if the best method is also the most used method in SMEs? Or do SMEs focus more on feeling and easy methods and are they still old fashioned? The DCF method is a difficult method for SMEs, an effect is that the earnings capitalization method or the multiples method are used to measure or to compare the value of a company (Lippit and Mastracchio, 1993; Imam, Barker and Clubb, 2008; Staalbankiers and Jonker Advies, 2010). The fourth chapter answers all these questions.

## **2.3 Pricing**

At the end of the acquisition process, a price has to be paid for a company. But how do buyers and sellers determine such a price and what is the right price for a company? This paragraph answers these questions.

The transaction price of an acquisition is the result of the bargaining between the buyer and the seller about the company (Damodaran, 2001; KvK, 2010). If the price of a company is too high, then it will reduce unnecessarily the return on investment for buyers. On the other side, if the price that buyers want to pay is too low, then it can result in a failed offer and the loss of a good investment opportunity (Walking and Edmister, 1985; Fernandez, 2002).

Focusing on the start of the framework (at the left), also the motives the buyers and sellers have, influence and lead to the pricing of a company. The valuation together with the price drivers explain the transaction price and the acquisition premium, but all this will be discussed further on in this paragraph. The different motives result in different expectations for the buyers and sellers about the transaction price. Looking at the motives for buyers that were discussed the most in the theory (synergy, agency and managerial hubris), then all these influence the level of the acquisition premium and the transaction price (Hayward and Hambrick, 1997; Berkovitch and Narayanan, 1993; Martynova and Renneboog, 2006; Gondhalekar, Sant, Ferris, 2004).

And who are the decision makers in the pricing process? The (top)management together with their advisers are the decision makers about the final price. Final pricing of major acquisitions need approval from the board of directors or the owners (Hayward and Hambrick, 1997). The buyers need to know what their highest price is and they need to have the discipline to stick to it. This leads to two characteristics that are important for the buyers: analytical rigor and strict process discipline (Eccles, Lanes and Wilson, 1999).

### **2.3.1 The transaction price**

After successful negotiations between the buyer and the seller, the both parties have to agree about the transaction price. The price of a company in an acquisition is called the transaction or the acquisition price (Damodaran, 2001). The buyer wants to pay a price that is as low as possible and the seller wants to receive a price that is as high as possible (Eccles, Lanes and Wilson, 1999). In a perfect world, the transaction price will be somewhere in the middle of these two extremes. For the sellers the price will be lower than their valuation of the company and for the buyers the the price will be higher than their valuation of the company. In the figure below the break down of the acquisition price will be showed.

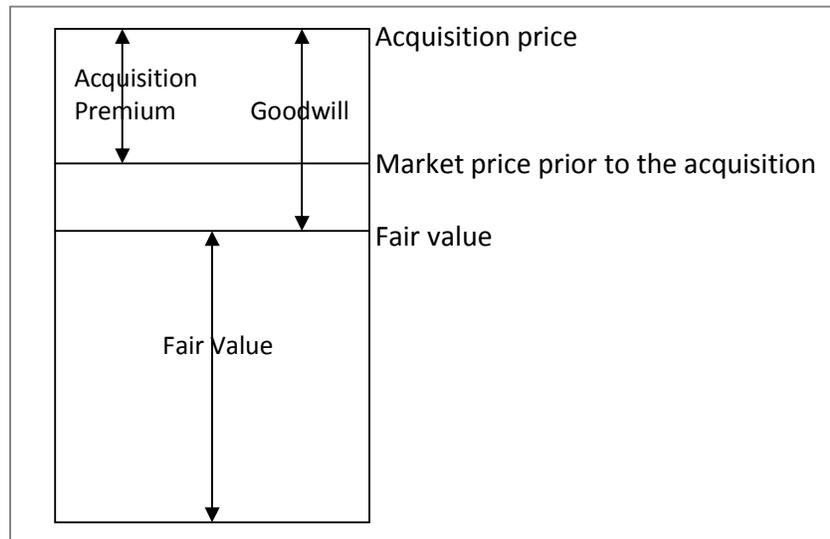


Figure 5: The acquisition price (Damodaran, 2002)

The transaction (or acquisition) price can be broken down into the Fair Value and the market price prior to the acquisition of the company. The difference between the acquisition price and the market price prior to the acquisition is called the acquisition premium (Damodaran, 2001). It is the amount of money above the market price of a company prior to the acquisition. It is the amount that is paid too much. The difference between the Fair value and the acquisition price is called the goodwill. The Fair value is the price that an interested but not desperate buyer would be willing to pay and an interested but not interested seller would be willing to receive on the open market assuming a period of time before an agreement arises (Ross, Westerfield and Jaffe, 2008).

Goodwill, the surplus value or profit of an enterprise, is very important in determining the acquisition premium and the acquisition price. There are two kinds of goodwill: business goodwill and personal goodwill. The goodwill of a business could be a patent (a special recipe), a good organisation in a company or a good location of a company. Personal goodwill is the goodwill from the entrepreneur himself/herself, some specialties. Goodwill depends on different factors, some examples are: the industry, the owners, the location, market developments and forecasts (Ross, Westerfield and Jaffe, 2008). The next paragraph will look more extensively at the acquisition premium and the characteristics of companies which pay high premiums.

A phenomenon called the “winner’s curse” occurs in competitive situations when a successful buyer thinks that he or she has paid too much for a purchase of uncertain value. Two of the possible reasons for overpaying can be the lack of information about the other company and the number of competing bidders (Bazerman and Samuelson, 1983).

### **2.3.2 The acquisition premium**

The acquisition premium depends on several characteristics and determinants of companies. The acquisition premium is the difference between the estimated value of a company and the price the buyer pays to buy it. It is an overpayment that consumes the expected synergies over the performance that would need to be achieved in order even to sustain the market value of a seller (Laamanen, 2007). This paragraph distinguishes characteristics of companies that will influence acquisition premiums.

Looking at the characteristics of companies, then buyers that are over-invested approach acquisitions more aggressively. They do it by paying higher premia than their under-invested competitors. This means buyers with high free cash flows and low market-to-book ratios will be more aggressively in the acquisition process and are likely to pay higher premiums (Gondhalekar, Sant and Ferris, 2004; Office, 2007).

Also buyers will pay higher premia for small firms, because their small size makes them more easy to integrate into their business. For companies that are for sale and have a strong growth in earnings or are technology-based firms, buyers will also pay more. Growing and innovative companies will increase the price, because these are active in an interesting industry (Gondhalekar, Sant and Ferris, 2004).

Companies with declining amounts of leverage (less debt used to finance the assets of a firm) and companies with low valuations (or valuation errors) enforce higher acquisition premiums (Sudarsanam, Sorwar, 2010). The percentage of shares controlled by the seller is important too, because when this percentage is low the bidder can takeover total control and is willing to pay a higher premium (Gondhalekar, Sant and Ferris, 2004; Walking and Edminster, 1985).

The size of the acquisition premium is for each acquisition unique. In Small and Medium Enterprises the difference between the acquisition price and the market price (prior to the acquisition) is around the 10-20 percent. For the technologybased firms the acquirers continue to pay premia of 20-30 percent of their total acquisition spending (Laamanen, 2007). The article, the price of corporate acquisition: determinants of cash takeover premia (Gondhalekar, Sant and Ferris, 2004) did research in cash-only acquisitions of Nasdaq targets. Nasdaq targets are small targets with high growth opportunities and in that article was found that the mean percentage premia is declining a lot and that it was 47% in the 1990s.

After having discussed the characteristics of companies that influence the acquisition premium, the next paragraph focuses on the determinants of the acquisition premium, the so called price drivers.

### 2.3.3 Price drivers

This part of the paragraph mentions the determinants of acquisition premia. These determinants are called price drivers, because these influence the acquisition premium and in that way also the transaction price.

If there are multiple bidder involved in an acquisition, then the acquisition premium will be higher, because the competition about the company is stronger. Therefore an opposing bid at the time of an offer also determines the acquisition premium (Gondhalekar, Sant and Ferris, 2004; Walking and Edminster, 1985; Laamanen, 2007). A certain competitor will pay a strategic premium or will pay more, because he does not want competitors to get the control over a company. The influence of multiple bidders is that the bid premium averages 30 percentage points higher than the sample mean in the article, Determinants of tender offer premiums (Walking and Edminster, 1985). Therefore the price driver competition influences the price.

Another determinant for the acquisition premium is the motive for acquisitions. Motives are also the starting point in the framework and have a great influence on the pricing of a company. When pricing the company, it is important to look at the other party (buyer or seller) and their motives. The seller will ask a higher price from the strategic buyer or the competitor than from the management or business successors (son/daughter), because the seller will give well-known people a better/lower price. In these cases the price of the company is not so important, the continuation is more important for family businesses then.

According to Gondhalekar et al. (2004) the motive agency influences the level of acquisition premium rather than synergy or managerial hubris. This demonstrates the presence of managerial self-interest in premia. Agency considerations influence the activity of acquisitions, especially the valuation of buyers. According to Sudarsanam et al. (2010) and Laamanen (2007) overpayment by buyers is caused by managerial hubris as argued by Roll (1986) (Sudarsanam and Sorwar, 2010; Laamanen, 2007). In the case of managerial hubris, the target company that sells the business was not analyzed good enough and was bought even if there was no or not so much synergy. According to them this is the reason for high acquisition premiums. According to the literature above, the motives of an acquisition have much influence on the premium and the transaction price.

Expected acquisition related benefits or expected synergy also influences the price of a company (Walking and Edminster, 1985; Black, 1989; Laamanen, 2007). Synergy is a motive for acquisitions, but is also a free-standing price driver that has a big influence on the pricing. Possibilities of synergy for the buyer will increase the price, because the higher the expected synergy, the higher the acquisition premium and the transaction price will be (Sudarsanam and Sorwar, 2010). Causes of increased acquisition gains are underpricing and undermanagement in the company of the seller (Varaiya, 1987).

The bargaining strength also determines the price of a company and is a price driver. The better the tactics and skills of the bargainers, the stronger the power of the bargainers. Especially the power of the buyer is important in the size of the acquisition premium (Walking and Edminster, 1985). The following bid characteristics: number of shares controlled, target firm resistance (Laamanen, 2007) and the existence of a competitive buyer determine the bargaining strength of the buyer (Walking and Edminster, 1985). During the negotiations, the expectations of the buyers and sellers are different and this discrepancy needs to be solved. Causes of the enhancement of the bargaining strength of the seller are an increase in competition in the acquisition market and the inclusion of anti-takeover amendments (Varaiya, 1987).

The results of the research of Varaiya (1987) on determinants of premiums in acquisitions provide strong support for the bargaining strength and mixed support for the magnitude of the estimate of acquisition gains for the buying firm (Varaiya, 1987).

The financing of acquisitions or the method of payment is also a factor that influences the transaction price for a seller (KvK, 2010). The methods of payment in acquisitions can be: cash, debt or stock (Faccio and Masulis, 2005; Martynova and Renneboog, 2006). This means that bidders could finance acquisitions with equity or debt (Faccio and Masulis, 2005; Martynova and Renneboog, 2009). Buyers that have limited cash and liquid assets in SMEs, require debt financing for the acquisition.

Several characteristics of the deal (relative size of the selling company, the mode of an acquisition, public- or private status of the seller) and characteristics of the sellers (cash flows, debt capacity, corporate governance regulation or growth/investment opportunities) affect the choice for the method of payment (Faccio and Masulis, 2005; Martin, 1996). These characteristics could lead to a preference of cash-, debt- or stock financing. Acquisitions in SMEs are more likely to be financed with equity than with debt. The pecking order for financing SMEs nowadays is cash, then stock and then debt. The probability that a firm pays with stock decreases when the size of firms grow (Weitzel and McCarthy, 2009). When buyers pay by cash immediately, they will pay a lower amount of money, because in this way sellers immediately get the money and do not have the risk that they will get less money or no money at all (Martynova and Renneboog, 2006). The text above shows that the way of financing an acquisition and the method of payment will influence the transaction price of a company, because specific ways of financing will give advantages to seller and buyer.

Corporate finance advisers, investment advisers and interlock partners are also related to the acquisition premium, because advisers are an added value in an acquisition of SMEs. SMEs almost cannot do acquisitions without the support of advisers. Their advices, practices and experience could be used or imitated and could result in higher transaction price for the seller and a lower transaction price for the buyer (Laamanen, 2007).

Several characteristics and determinants that were discussed above are important in the premium determination and influence in that way the transaction price of a company (Walking and Edminster, 1985).

After the clarification of the pricing, the breakdown of the transaction price and the clarification of the price drivers, the framework can be extended with the price drivers in the pricing process. The valuation is the guideline in an acquisition and the price drivers determine the transaction price of a company. The next figure shows this.

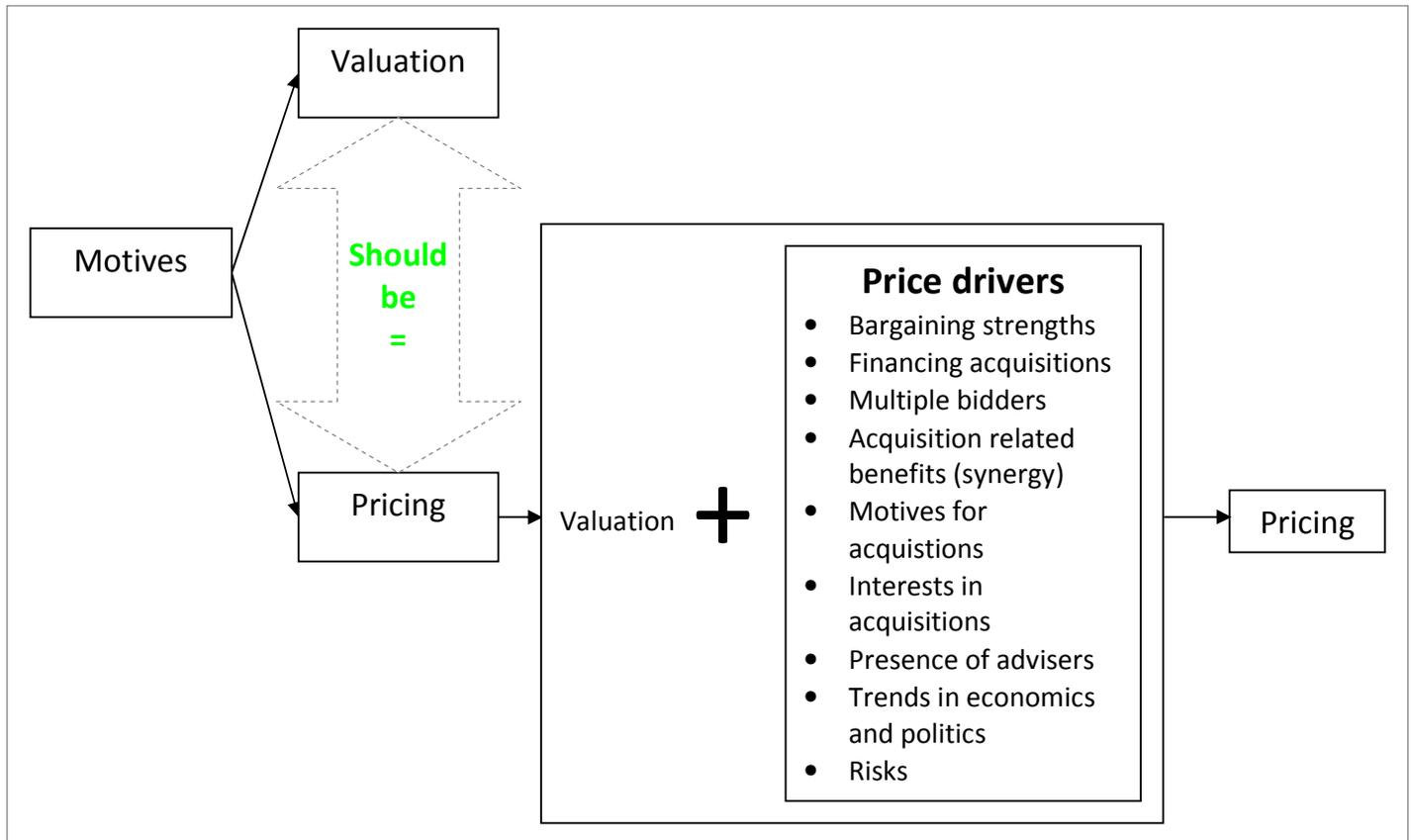


Figure 6: The valuation should be the same as the pricing in theory, but in practice the price drivers (with as a guideline the valuation) determine the pricing in an acquisition (Walking and Edminster, 1985).

### 2.3.4 Private- versus Public companies

The acquisition premium depends on several price drivers and characteristics of companies, but is there also a difference in premium between private- and public acquirers? Target shareholders earn 35% higher premiums if a public firm is the buyer rather than a private firm. Sellers earn 63% higher premiums with public buyers rather than with private equity buyers (Stulz and Zutter, 2008).

There are at least two reasons for the differences. The first reason is that the failure of an offer has more consequences for managers in public firms than for managers in private firms, because public firms have to reveal more information about their strategy in the process of making an offer and this could help competitors. The second reason is that agency problems might be more serious in many public firms than in private firms (Bargeron, Schlingemann, Stulz and Zutter, 2008). The next paragraph will show the complete theoretical framework and the discrepancy between valuation and pricing in acquisitions.

## 2.4 Valuation versus Pricing

Discussed in the previous paragraphs were: the motives for acquisitions, the valuation and the pricing. Next to that, also a framework was developed that contains the three topics in this research. All the small parts of the framework that were discussed before are now combined to a total framework in this chapter. The total framework will be explained and could be found below.

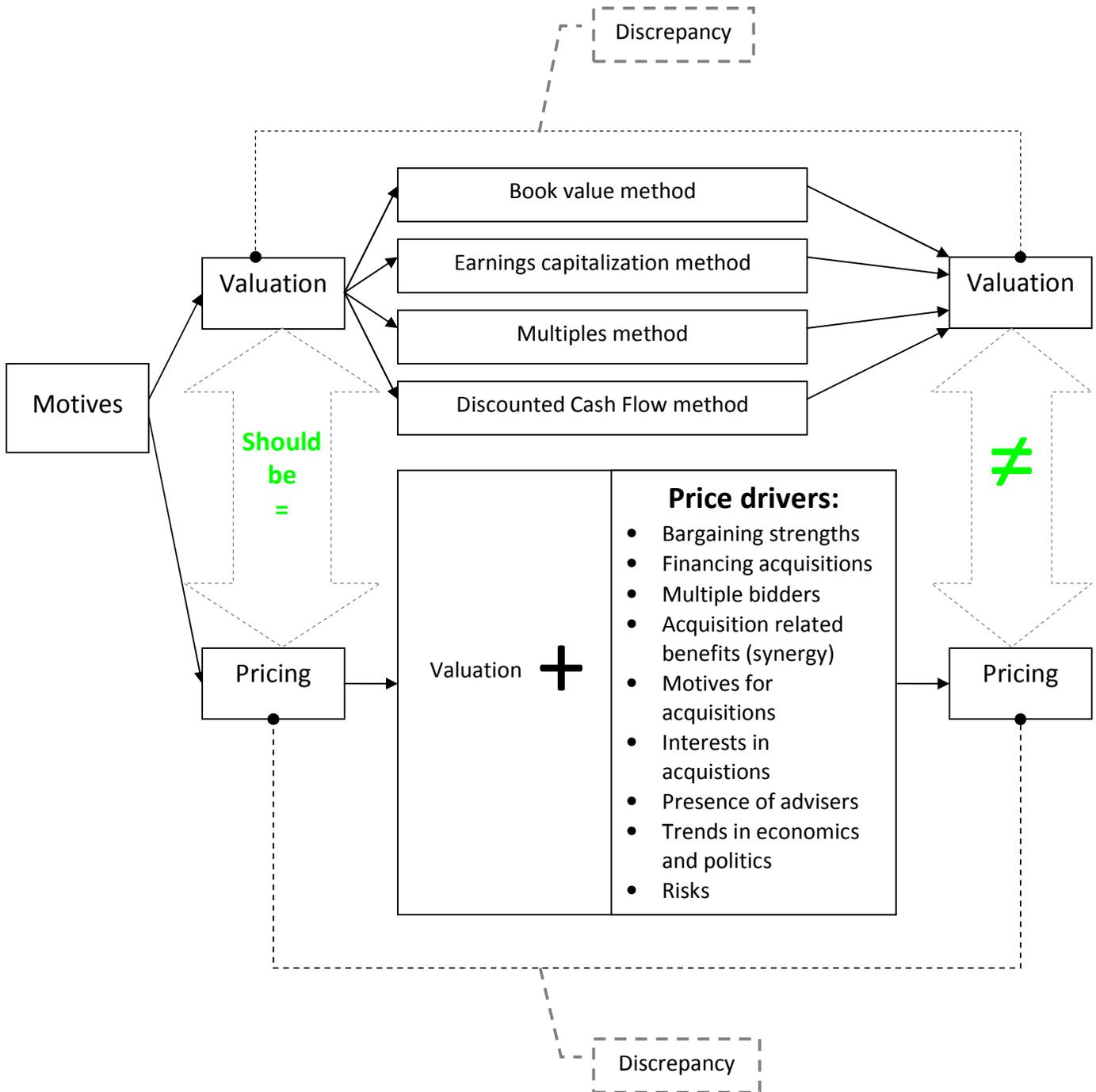


Figure 7: The complete theoretical framework

Looking at the upperside of the framework, the motives for buyers and sellers are displayed on the left side. A valuation arises out of these motives and a valuation can be calculated by four different valuation methods in SMEs. After the valuation, the buyer and the seller know what the company is worth. The valuation from the buyer and the seller should be the same in theory, but are not the same in practice. Reasons could be that they both analyze the company in different ways (choice of valuation methods), some valuation errors occur, they have a different view about the value drivers in a company and their interests could be different.

Looking at the bottom of the framework also the price of a company arises out of the motives for buyers and sellers. The negotiations about the price between the seller and the buyer are based on both the valuations. The transaction price arises from those valuations and the price drivers. These price drivers determine the price.

The beginning of the framework shows a “perfect” world, in which the valuation should be the same as the pricing of a company. In reality the valuation and pricing are not the same. The middle of the framework shows some elements in acquisitions and shows how the valuation and the pricing are realized. In that process, in the middle of the framework, have been found and identified explanations for the difference between valuation and pricing. These explanations cause a difference between valuation and pricing in a “normal” world. This difference could be found in the framework at the right side. This research identifies and rates these explanations on scale from 1 to 5. The explanations could be found in the valuation methods, the valuation drivers and the price drivers. Valuation estimations in value drivers & valuation methods and the price drivers could influence the difference.

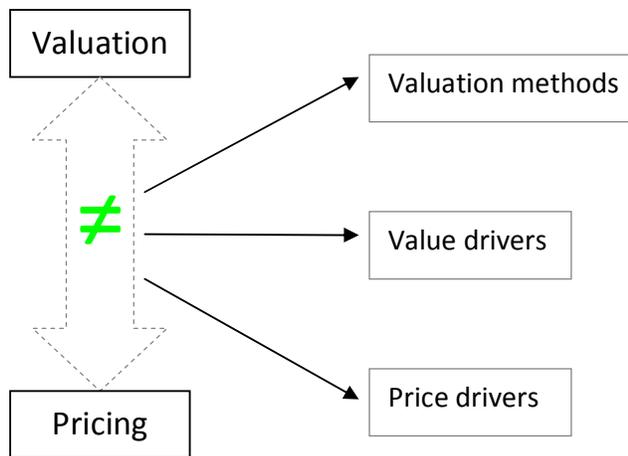


Figure 8: The difference between valuation and pricing

The difference between value and price in a “normal” world causes a discrepancy between the theory and the practice. According to the theory, the valuations are the foundation for the acquisition process and these should be very close to the final price. In practice, certain explanations explain the discrepancy.

In summary, valuation is not the same as pricing and the theory is not the same as practice. The next paragraph shows the explanations for the difference.

### 2.4.1 Explanations

The possible explanations from the literature for the difference between value and price are given below. These explanations can arise from the valuation or the pricing and can apply to the buyer, the seller or both of them. The first two explanations are caused in the valuation process, the last two (trends in economics and politics & risks) and the acquisition related benefits are caused in the valuation and the pricing process and the other explanations are caused in the pricing process. Most of the explanations apply to both the buyers and the sellers. Only the explanations financing acquisition, acquisition related benefits (synergy) and risk apply more to the buyers than the sellers. The explanations for the difference between the valuation and the pricing are:

- *Choice of valuation method.* Different valuations by buyers and sellers lead to differences between valuations. As a result, these gaps also increase the difference between valuation and pricing, because valuations are the foundation for the transaction price (Pricer and Johnson, 1997).
- *Valuation errors.* Errors in valuations could be caused by using wrong results & forecasts, using a wrong rate of return, using the wrong multiplier, estimating a wrong risk, bad appraising of value drivers and more. Valuation errors cause bad valuations and these increase the difference (Pricer and Johnson, 1997).
- *Bargaining strengths.* If a buyer or seller is very strong in the bargaining process, then their strengths could respectively decrease or increase the transaction price. A result is a difference between valuation and pricing (Walking and Edminster, 1985; (Varaiya, 1987).
- *Financing acquisitions.* The method of payment or special agreements for buyers and sellers (advantages for both) for financing an acquisition could cause a difference between value and price (Gondhakelar, Sant and Ferris, 2004; Martynova and Renneboog, 2006; Office, 2007). This explanation applies more to buyers than sellers.
- *Multiple bidders.* More competition for a company involved in an acquisition could increase the transaction price and could cause a difference between the two most-discussed topics in this research (Walking and Edminster, 1985; Gondhalekar, Sant and Ferris, 2004; Laamanen, 2007).
- *Acquisition related benefits (synergy).* Acquisition related benefits that were not taken into consideration in the valuation have to be taken into consideration in the pricing process. This synergy could lead to an overpayment and to an increase of the difference (Walking and Edminster, 1985; Varaiya, 1987; Black, 1989; Laamanen, 2007; Sudarsanam and Sorwar, 2010). This explanation applies more to the buyers than to the sellers.
- *Motives for acquisitions.* Important motives for buyers in acquisitions could be a stimulus to pay a higher acquisition premium and therefore pay a higher transaction price. Motives for sellers could be a stimulus to accept a lower transaction price. As a result the motives for the acquisition cause a gap between valuation and pricing (Gondhakelar, Sant and Ferris, 2004; Sudarsanam and Sorwar, 2010; Laamanen, 2007).

- *Interests in acquisitions.* In paragraph 2.1.1 three different buyers were mentioned and these buyers all have different interests. The same applies to the different sellers. These interests influence the transaction price and therefore automatically explain the difference (Staalbankiers and Jonker Advies, 2010; Blok, Derksen, Diagos, Lomeijer, Notenboom, Post, Sluis, Smeets and Wijs, 2002).
- *Presence of advisers.* Advisers with knowledge and experience about acquisitions will be an added value for independent buyers and sellers. Advisers could be decisive in the valuation and pricing of acquisitions and therefore explain the difference (Laamanen, 2007).
- *Trends in economics and politics.* The trends regulate the market of acquisitions. The trends explain the value and the price of a company and explain the difference between the both. An example is the recent economic crises.
- *Risks.* Risk should be taken into consideration in the valuation. The DCF method is doing it extensively with the build-up approach, but other methods are doing it less. These other methods should take into consideration the risk in the pricing process. In this way the risk could cause a difference between value and price (BDO, 2006). This explanation applies more to buyers than to sellers.

The fourth chapter gives more information about the explanations for the difference between valuation and pricing according to the sample of SMEs in the Netherlands. These explanations were also rated by the sample.

## **3 Data & Methodology**

This chapter explains the methodological approach and the techniques that were used in this research. It shows the fundamental base of why and how the research was conducted and it justifies all the choices and methods.

### **3.1 Data**

#### **3.1.1 Secondary data**

The research used primary data as well as secondary data. Secondary data is data collected by someone other than the user. Scientific books and articles were used as secondary data. Next to that also the knowledge from the corporate finance advisers from Brouwers and Croon&Magendans were used. Other and missing information was collected during the primary data collection process. The literature was described by a theoretical framework.

#### **3.1.2 Primary data**

Primary data is new data collected by the researcher and primary data was especially used in the chapter results, where the findings are mentioned about the topics. This primary data was collected by semi-structured face-to-face interviews with owners or financial directors of SMEs that were active in acquisitions in the last three years. A time horizon of three years was used, because that is a selection of actual acquisitions and it was agreed with Brouwers. Often the responsible owners and financial directors still work in the company after three years. If there is no financial director in the company, then the highest representative in the acquisition process was interviewed (owner, Chief Executive Officer, financial director, project manager). Also Capron (1999), in his research about the long-term performance of acquisitions, chose for on-site interviews with CEOs or executives that were in charge of the acquisition program. The interviewees gave information, answered the questions and they gave and rated explanations for the differences between value and price. In this way the research question could be answered.

### **3.2 Methodology**

#### **3.2.1 Purpose research**

If we look at the purpose of a research, it could be exploratory, descriptive or explanatory. Explanatory studies establish causal relationships between variables. A situation or problem is studied in order to explain the relationships between variables. This research is an explanatory study, because it explains the relationship between valuation and pricing in a sample of SMEs in the Netherlands (Saunders, Lewis and Thornhill, 2007). It also uses a framework to explain the situation.

#### **3.2.2 Research method**

Different research methods could be used in scientific research. The possible research methods for a research are: an experiment, a survey, a case study, an action research, a grounded theory, an ethnography and an archival research (Saunders, Lewis and Thornhill, 2007; Cooper and Schindler, 2006). This research fits best with a survey research in a small sample, because with interviews a range of participants could be reached and data could be collected from different people in different cases.

This research does not use a large sample, because face-to-face interviews were used and these limit the sample to a small sample of SMEs.

Surveys can be classified into two broad categories: the questionnaire and the interview (Saunders, Lewis and Thornhill, 2007). An individual depth interview is an interaction between an individual interviewer and a single participant. The participants are chosen because their experiences and attitudes will reflect the full scope of the issue under study (Cooper and Schindler, 2006).

The research was a qualitative research. It included “an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world” according to Cooper and Schindler (2006).

Almost the same research as this one is presented in the article, the accuracy of valuation methods in predicting the selling price of small firms (Pricer and Johnson, 1997). It is a field study that compares the predicted transaction price (valuation) with the final transaction price (pricing) in a sample of small businesses. The financial statements were used as an information source to predict the value of small firms. Twelve valuation techniques were proposed to calculate the value of companies. After that the value predictions were compared with the actual transaction price of the firms (Pricer and Johnson, 1997).

This report compared to the research from Pricer and Johnson (1997) also focuses at other reasons/explanations than the choice of valuation methods and can be seen as a sequel of their research.

### **3.2.3 Sampling**

The sampling techniques could be probability sampling or non-probability sampling. Probability sampling is used when the selection of the sample is purely based on chance. There is no control on the selection or non-selection of the persons for the sample. In non-probability sampling the sample is not based on chance, it is not random selected. The non-probability sampling techniques are: quota sampling, purposive sampling, snowball sampling, self-selection sampling and convenience sampling (Saunders, Lewis and Thornhill, 2007).

This research uses non-probability sampling, because in collaboration with Brouwers interesting organizations for this research were selected. The sample consists out of different Small- and Medium Enterprises in the Netherlands from different industries and from different sizes, as well on the buy-side as on the sell-side in acquisitions (Wilcox, Chang and Grover, 2001; Imam, Barker, Clubb, 2008). Non-probability sampling is cheaper in time and costs than probability sampling.

Purposive sampling is picking out respondents on the basis of specific characteristics, so the SMEs are sampled with a purpose (experience, knowledge) in mind. The advantages of this way of sampling are: it ensures a balance in group sizes when multiple groups need to be selected, people who do not fit in the requirements are eliminated, it saves time, it is less expensive and the sample is an accurate or near to accurate representation of the population. A disadvantage is that samples are not really representative, because of potential subjectivity of the researcher (Saunders, Lewis and Thornhill, 2007). Purposive sampling was used in this research, because the sample was selected by the company Brouwers and me subjectively. In this way a good analysis and overview of a small sample could be made, it is less time consuming and it eliminates respondents that are not needed or not interesting. This form of sampling is often used when working with very small samples (Saunders, Lewis and Thornhill, 2007).

The group of SMEs is very large (99% of all firms in the Netherlands) and it is rather difficult to give a good indication of the population when using a rather intensive way of obtaining primary data as face-to-face interviews. This ensures that creating a scientific value for this research is difficult, because only fifteen SMEs were analyzed. But with these cases still much could be said about the (main) topics in this research and the main question could be answered.

It was difficult to get the number of fifteen cases, because some of the companies were not appropriate for the interviews, did not have time for the interviews, did not want to share information or did not respond to the invitation. A sample of fifteen companies is not a very representative sample. These fifteen companies were obtained in two ways. The first way was that Brouwers offered a list of thirty companies that bought another company or sold their company in the last three years. All of these thirty companies have been contacted. Unfortunately, out of these thirty companies I could select 12 companies for the semi-structured interviews, based on purposive sampling and the difficulty of selection. The other companies (3) were obtained by myself (through newspaper, personal contacts and the internet). This means that the results were influenced by the selection of the sample.

### **3.3 The interviews**

Interviews are a primary data collection technique in qualitative methodologies. The advantages of interviews are: a high cooperation & low refusal rates, allow long & complex interviews, high response quality and the advantage of the presence of the interviewer. The disadvantages are: a costly mode of administration, long data collection period and the level of the interviewer could concern.

This research used semi-structured interviews. A semi-structured interview generally starts with a few specific questions and then follows the tangents of thought of the individual with interviewers probes. In this research an interview protocol was used as a guideline during the interviews. This allows side-lines and new things the interviewee said. The interviewer can let the interviewee explain, or build on their responses. That is important when interviewers want to understand the meanings that respondents ascribe to various phenomena (Saunders, Lewis and Thornhill, 2007).

Semi-structured interviews are flexible and will provide rich and complex insight into views of financial directors (Holland, 1998) and appear to be more reliable than questionnaires (Denzin, 1970; Taylor and Bogdan, 1998; Easterby-Smith et al., 2002). The interviews were recorded with an audio recording device to make good analyses of the interviews.

Questions that could be used in interviews are: open questions, probing questions, specific questions and closed questions. The major types of questions during the interviews were open- and closed questions. The reasons for using open questions in this research are: the researcher gives more information, it is more personal and open questions are more flexible. The disadvantages are: these questions require more time for the respondent, it is difficult to standardize interviews, the respondent may answer in unhelpful ways and the respondents may have trouble with expressing themselves accurately. Closed questions can be analyzed easier, can be more specific, can be compared, take less time and give more control to the interviewer.

On the other hand closed questions are only useful when the possible answers are known, because poor questions can be misleading and frustrating. There are six types of closed questions and during the interviews the following types were used:

- List, the respondent is offered a list of items and single or multiple items could be selected;
- Category, only one response can be selected from a given set of categories
- Ranking, the respondent has to rank several variables
- Rating, a rating device is used to record responses (Saunders, Lewis and Thornhill, 2007)

The articles of Dukes et al. (1996), Larsson et al. (1999) and Capron (1999) are examples of how to formulate questions for a questionnaire. They used open- and closed questions in surveys and interviews and put the possible answer possibilities under it.

These answer possibilities could be given in the form of percentages, numbers, methods, purposes, variables, drivers, factors and more. All the questions had to be tested and that happened with a pre-test.

### **3.3.1 Pre-testing**

The interview protocol was controlled by the supervisors and some of the Corporate Finance advisers from Brouwers and Croon & Magendans. The interview questions were also pre-tested by the first two interviewees, to see if there were any complications. These complications were taken away and a final interview protocol was developed. In this way the protocol was optimized and questions were eliminated and adjusted. In the pre-test the focus is on the question wording and on the content of the questions. All the questions on the interview protocol were subjected to some of the following questions: Could the question be misunderstood? What assumptions does the question make? How personal/direct is the question wording? Is the question useful? Do respondents have the required information? Is the question specific enough? Is the question biased? Will the interviewee answer truthfully? (Social Research Methods, 2010). So the interviewer checked the questions for misunderstandings, incomplete concept coverage, inconsistent interpretations, satisfaction, context effects and vice versa (Collins, 2003; Bowden, Fox-Rusby, Nyandieke and Wanjau, 2002). The result was a clear interview protocol.

### 3.3.2 Analysis

This part of the paragraph is about the analysis of the obtained primary data. The closed questions and the quantitative data from the interviews were put down next to each other in a table. Tables and diagrams were used to understand the data (Saunders, Lewis and Thornhill, 2007).

All the answers on the closed questions from the different interviews were added up in a table. These tables show the total score on each question, these show how many respondents answered in the same way. Out of these tables was searched for comparisons, relationships, conjunctions, totals and interdependences (Saunders, Lewis and Thornhill, 2007). This was also the case in the research from van Gils and Zwart (2004). In that research also a distinction was made for specific industries.

The answer possibility with the highest score is the most common for the question. In this way findings and conclusions can be found for the questions in the categories and sub-categories described. Interviewees were also asked to rank and rate answer possibilities.

For the main question the interviewees were asked which of the given explanations explain the difference between valuation and pricing. Out of these explanations the interviewee had to list the factors that explained the difference in their acquisition. To get to know to what extent the explanations influenced the difference, the Likert-scale was used as a rating method. The interviewees were asked to rate the explanations on a 5-point-Likert scale. It is a (attitude) scale often used in social science research. Questions with a Likert-scale provide interviewees statements or questions and they have to respond to these questions in terms of an agreement or preference continuum. This continuum normally ranges between extremes, such as disagree and agree or dislike and like (Dukes, Bowlin and Ma, 1996; Larsson and Finkelstein, 1999; Capron, 1999).

Also in other scientific articles about the use of valuation methods, semi-structured interviews and the 5-point Likert scales were used (Demirakos, Strong and Walker, 2004; Imam, Barker and Clubb, 2008). The valuation models were rated by usage in these articles.

A well-known accountancy- and consultancy company, in the top five of consultancy companies in the Netherlands (BDO), did almost the same research in 2006 and 2010. The research by BDO accountants asked corporate finance advisers to rate to what extent the (risk)factors determine the additional firm premium on a 5-point Likert scale. Almost the same question was used in the main question of this research. Some of the (risk)factors in the research of BDO were also mentioned in this research as drivers that explain the valuation or the pricing (BDO, 2006).

The 5-point Likert scale in this research is uneven and has five answer possibilities. The answer possibilities are 5, 4, 3, 2 or 1. A rating of 5 means that the explanation explains the difference between the valuation and the pricing to a very large extent and a rating of 1 indicates that the explanation explains the difference to a very small extent. For each explanation the scores were summed up and in this way an analysis could be made.

Also the open questions had to be analyzed. The answers of the open questions were used as general comments or additions about matters relating this research. Analyzing the qualitative data had the following activities: categorisation, “unitising” data, recognising relationships & developing the categories and developing & testing theories to reach conclusions. Looking at these activities, data from the open questions need to be classified into meaningful categories. The next step is that data need to be attached to the appropriate categories/subjects. After that, relationships have to be recognized and categories have to be developed.

The last step is developing and testing theories and conclusions. Researchers will develop good conclusions if they test their propositions against the data, if they look for alternative explanations and if they try to explain why negative cases occur (Saunders, Lewis and Thornhill, 2007).

### **3.3.3 Limitations**

Restrictions and limitations have to be kept in mind during a research. A major limitation in this research is the small sample. The SME area is very large and broad area and to give a good representation of the population, a large sample and an easy and fast method for data collection is needed. This research used a small sample (15) of Small- and Medium Enterprises. Also the results could be influenced by the selection procedure of the SMEs. Since I chose to collect data using in-depth interviews, the ability to work with a large sample was limited. It is not possible to do in-depth interviews with a lot of interviewees, because it will take some time and you should need a very large sample to get validated results about the large population. That is why it should be ascertained that this research does not have a major scientific value. Nevertheless it gives a good analysis and overview of the sample, that needs to be generalized with caution to SMEs in the Netherlands.

There is also some overlap between certain factors in the main question. Synergy was mentioned in the acquisition related benefits and in the motives for acquisitions. Also the presence of advisers has something to do with the bargaining strengths. This should be taken into consideration.

Restrictions were that it was difficult to arrange the interviews for this research and it took much time. Possible restrictions were that persons did not want to participate in an interview, involved persons could have left the company and companies could have gone bankrupt.

The next chapter shows the results and answers the main question.

## 4 Results

The collected data during the semi-structured interviews were analyzed and the results, comparisons, relationships, conjunctions, totals and interdependences from the interviews and the literature review can be found in this chapter. The results in this chapter are grouped into four categories: motives for acquisitions; the valuation; the pricing and finally the answer on the main question.

The Small- and Medium Enterprises in this research are active in different industries (production, trading and services) and are located all over the Netherlands. Assumptions for industries could not be made, because the sample is a small one and has a variety of companies. The companies were active on the buy- and the sell side of the acquisition process in the last three years. The amount of employees of the interviewed companies and the turnover of these companies varied. In the table below, a description of the sample is given.

<b>Company</b>	<b>Industry</b>	<b>Buy- or sell side</b>	<b>Location</b>	<b># of employees</b>
Trading company in water transportation	Trading	Sell side	Veghel (Noord-Brabant)	200
Technical trading company	Trading	Buy- and sell side	Duiven (Gelderland)	30
Interim- and projectmanagement	Services	Sell side	Dalfsen (Overijssel)	20
Trading company in meat	Trading	Sell side	Enschede (Overijssel)	8
Hoisting crane company	Production	Buy side	Harderwijk (Gelderland)	20
Slaughterhouse	Production	Sell side	Groenlo (Gelderland)	135
Cleaning company	Services	Buy- and sell side	Zwolle (Overijssel)	250
Company in modifying automotives	Production	Buy side	Nieuw-Vennep (Noord-Holland)	120
Car dealer	Trading & services	Buy side	Tilburg (Noord-Brabant)	100
Company producing baking systems	Production	Buy side	Terborg (Gelderland)	250
Company producing fences and stairs	Production	Buy side	Lichtenvoorde (Gelderland)	50

Trading company in office products	Trading	Buy side	Varsseveld (Gelderland)	14
Notary	Services	Buy side	Groenlo (Gelderland)	10
Construction company	Production	Sell side	Groenlo (Gelderland)	100
Advisory company	Services	Buy- and sell side	Arnhem (Gelderland)	2

*Table 4: A short description of the sample.*

As mentioned before, the buyers could be families, competitors, management (MBO & MBI) or participation companies (Staalbankiers and Jonker Advies, 2010). The sellers are the owners of companies. Nine out of the fifteen acquisitions (60%) was between competitors. Six out of the fifteen SMEs (40%) was a Management-Buy-Out. In two out of these six MBOs (33%) the buyers were the management together with a participation company.

The fifteen companies did not have major problems in the acquisition process. They followed the process that was described in paragraph 2.1.1 of the literature review. The post-acquisition stage is very important for buyers, because in that phase the plans have to be implemented. In the appendix could be found an extended example of the steps involved in selling a company. In the process of MBOs, the buyers and the sellers know each other and the company, they tolerate each other more than competitors do in their acquisitions. The competitors will play a harder acquisition game to get what they want.

Fourteen acquisitions (93%) were completed within half a year or nine months. In three out of the total cases (20%) were found obstacles in the acquisition process. The obstacles were: the valuation, emotions, disagreements between shareholders, the financing of the acquisition, arrangements about dismissals after the acquisition and the death of one of the owners.

The obstacle about the valuation was a discussion between the buyer and the seller about marketable & unmarketable stocks in a MBO. In this MBO the owner calculated a higher value than the management, because the owner thought that more stock was marketable and the management did not think the same. A difference in the interpretation of stocks or other value drivers could lead to different stocks and different earnings. In this way the two factors or value drivers could influence the valuation, but also the final price.

#### **4.1 Motives for acquisitions**

Motives are the starting point in an acquisition and are also the starting point of the framework in this research. Buyers could have value-increasing or value-decreasing theories and motives for sellers are circumstances that relate to the owners. This paragraph examines the motives for acquisitions in the fifteen SMEs and compares the theory with the practice.

Each interviewee was asked what was the motive for their involvement in the acquisition. Focusing on the motives for buyers, synergy (3) and corporate control (4) are the most important motives for buyers in the sample. The management of four MBOs wanted to get control over the organisation and continue the business with them as the owners/entrepreneurs. Subsequently can be concluded that in MBOs the motive corporate control is very important and in acquisitions between competitors the motive synergy is very important. Three interviewed companies picked out the answer possibility a combination of motives. These companies were also active on the buy- and sell side of the acquisition and had motives like: synergy, dissatisfaction with the owners, corporate control and cash.

According to the results from the motives for buyers, the theory matches the practice. McCarthy and Weitzel (2009) made a ranking for the motives for buyers. This ranking matches the results from the interviews, because synergy and corporate control got a high and medium ranking and these motives are also important for the seven buyers in the sample. The three companies that were active on the buy- and sell side also mentioned synergy and corporate control in their combination of motives.

The value-decreasing theories for buyers in table 2 (agency, managerial hubris, managerial discretion) were not mentioned, because these are difficult to identify in a company by using interviews. Companies will not have the motive to decrease the value. In SMEs or family businesses these value-decreasing theories will also occur, but companies try to prevent these theories by the control in small firms, the small scale in SMEs and the small budget for SMEs. The three motives (synergy, agency and managerial hubris) that were discussed the most in the theory should also be taken into account in Small- and Medium Enterprises (Hayward and Hambrick, 1997; Berkovitch and Narayanan, 1993; Martynova and Renneboog, 2006). The motive market power was also not mentioned, a reason for this could be that market power is more important for large companies than for small companies.

Looking at the motives for the five sellers out of the fifteen SMEs, circumstances that relate to the owners are the motives to sell the company. The five sellers had the following motives: two times a good bid from the buyer, two times age and one time dissatisfaction within the company. These motives and also the other two (illness & financial need) were also mentioned in the interviews by the buyers as motives for the sellers to sell the company to them. For the circumstances that relate to the owners a ranking could not be made, because they could all play a role in an acquisition and the sample is too small.

Summarized, the most important motives for buyers are synergy and corporate control and the most important motives for sellers are the circumstances that relate to the owners. Also the theory about motives for acquisitions matches the practice to a large extent. The value-decreasing theories could not be tested through interviews.

## 4.2 Valuation

Valuation is a major step in the acquisition process. The valuation process starts with a comprehensive analysis. Two important questions in this analysis are: where in the market is the company located and what does the future look like? To get to know this, a scan of the company should be made, using the five forces model from Porter (bargaining power of suppliers, bargaining power of buyers, threat of substitute products or services, threat of new entrants and rivalry among existing competitors) (Porter, 2008) and the SWOT-analysis (Strengths, Weaknesses, Opportunities, Threats) (Houben, Lenie and Vanhoof, 1999). After the scan the buyers and sellers have to prepare a valuation.

The valuation method and the value drivers determine the valuation. Also valuation estimations and errors should be included. These explanations could determine the height of the valuation for both the buyer and the seller. That is why the focus of this subsection is on the value drivers and the valuation methods in SMEs. The valuation errors are hidden in the valuation.

### 4.2.1 Value drivers

Table three in the literature review (paragraph 2.2.1) showed the value drivers that could influence the value of a company. In general, all the value drivers could influence the value of a company, but not all of these value drivers were related to the companies. The interviewees were asked to make a top three of value drivers in their acquisition. Weightings were used for the rankings and in this way the total score for each value driver in the sample could be calculated.

The top five value drivers according to the fifteen SMEs consist out of: stability of earnings, financial status of the company, reputation, market position / unique location and degree of (in)dependency of owner/personnel. The figure below shows a pie chart of this top five.

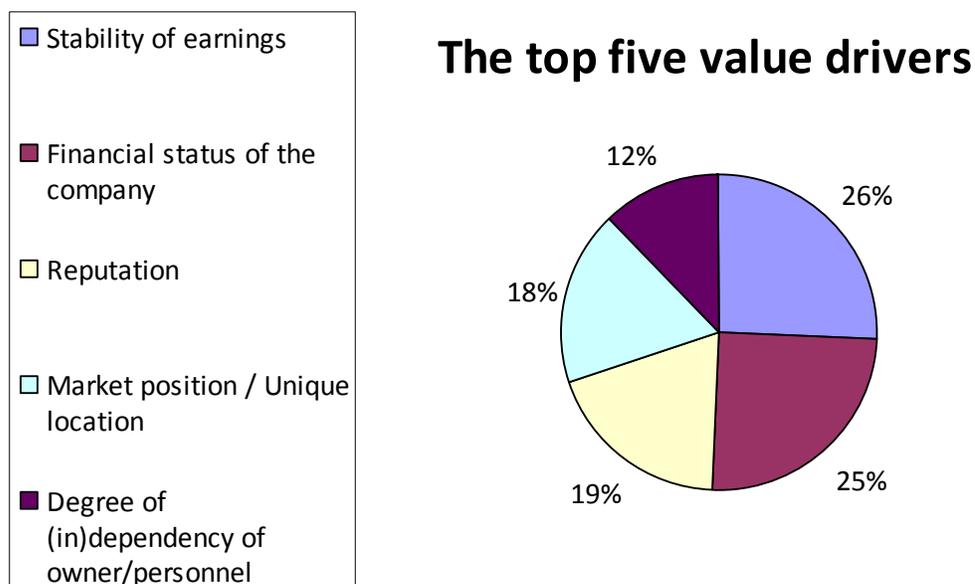


Figure 9: Top five value drivers that influence valuations in the sample

It can be concluded that the most important value drivers are the stability of earnings and the financial status of the company. These value drivers can be found in the balance sheet statement & the profit- and loss account. The factors had a total score of respectively 23 and 22. This means that the category financial factors is very important in the valuation of a company, because a financial healthy company is an attractive investment and increases the valuation. The factor stability of earnings had three number one rankings, was ranked two times number two and was two times ranked third. The factor financial status of the company had three number one rankings, was ranked two times number two and was one time ranked third.

Thirty-three percent of the interviewees (5) said that reputation was a value driver in their acquisition, because for regional operating SMEs the reputation in specific areas has to be good. Also a good marketposition and location in a specific regional area could raise the value of a company.

In small companies it depends largely on the the owner(s) or the management how good a company is doing. That is why the degree of (in)dependency of owner/personnel is important in SMEs. The managers or the owners have the know-how of the business and have good relations with customers and employees. If the situation changes after the acquisition and these important people disappear, then probably the company cannot realize the value anymore. The situation can also be the other way around, if the employees are more independent. This factor got one number one ranking, three number two rankings and was two times ranked third. All of the five value drivers were followed by takeover motives, opportunities for the company and the quality of the management.

All these value drivers could be acquisition related benefits for the buyers in acquisitions. These value drivers relate to synergy and it is important for especially buyers to estimate this synergy right in their valuations.

Above the most important value drivers were described in the fifteen SMEs. If buyers or sellers misjudge these value drivers in their valuation, it could cause valuation errors. These valuation estimations could explain the difference between the valuation of buyers and could cause a gap. This difference could be explained, because buyers and sellers use these wrong valuations as a handbook in the negotiations about the price.

After having described the value drivers of the companies, the next paragraph will describe the valuation methods in the sample of SMEs.

#### **4.2.2 Valuation methods**

The literature review shows different valuation methods for SMEs: book value, earnings capitalization, valuation using multiples and the DCF method (Koller, Goedhart and Wessels, 2005; Chiu and Siegel, 1989; Lippit and Mastracchio, 1993; Nunnally, 2006; Fernandez, 2001; Fernandez, 2002; Heaton, 1998). Each interviewee was asked which valuation method was used in their acquisition and why? To check the theory with the practice with respect to valuation methods, also a general question was asked about the most common valuation method in SMEs.

*Statement: "The preparation and the analysis are important in acquisitions, because in this way the buyers and sellers get to know all the details of the other company."*

The literature pays a lot of attention to the Discounted Cash Flow method. According to the theory it is the best valuation method, but do SMEs also use the DCF method? The results of the interviews show that twelve out of the fifteen SMEs (80%) used multiples to calculate the value of a company. The earnings were multiplied by a certain factor. These interviewees used earnings multiples: value of the company / Earnings Before Interest, Taxes, Depreciation and Amortization (EBITDA) or value of the company / Earnings Before Interest and Taxes (EBIT) (Ribal, Blasco and Segura, 2010). The DCF method, earnings capitalization and a combination of these three valuation methods were used in the other three companies. This means the income statement-based methods are preferred over the cash flow discounting-based methods in SMEs.

Just like in Spain, the two multiples above are used the most in SMEs in the Netherlands (Ribal, Blasco and Segura, 2010). EBITDA could be used better than net profit, because EBITDA are the earnings on the "highest level" and these will be less manipulated. For the input in the valuation method, the SMEs used historic earnings from a period of two to three years back and future earnings for a period of one or two years in the future. Looking further back or looking further in the future has no added value. The number that has to be multiplied by the EBITDA or the EBIT will be different in different industries and in different periods of time (economic crises).

Two out of the fifteen companies had a special way of valuation, because of the industry they are working in. These companies are the cleaning company and the notary. The cleaning company used an earnings multiple and next to that also a turnover multiple. In the industry of cleaning companies, the turnover is very important and that is why a valuation method is based on that number. In the industry of the notaries, the valuation of a notary will be compared with a fair compensation in the industry. The amount of value that the valuation is above the fair compensation will be multiplied by a goodwill factor and in this way the valuation is realized.

A question that remains is: why using multiples in SMEs while the DCF method is more accurate and more suitable for valuations according to the theory? This question shows that the theory does not match the practice. According to the theory, SMEs should use the DCF method but this method is not used by them. Owners and CFOs from Small- and Medium Enterprises prefer their "feeling" in valuations instead of using valuation methods. These people think they know the industry and the company and use an earnings multiple as an easy valuation method to control their "feeling". For SMEs the choice for a valuation method is not very important, because it is more important what kind of price the buyer or seller has in mind. Valuation methods should be important to SMEs. All this is also caused by the small scale of SMEs. Valuation based on earnings multiples is an easy, fast and clear valuation method for SMEs, but a subjective one. The method is easy to explain and it is an easy method to convince the owners or topmanagers to buy or sell a company. Also advisers play a role in the choice of a valuation method.

The buyers and sellers in SMEs underestimate the importance of a good valuation, while the valuation is the guidance during the acquisition process. Nevertheless, the Discounted Cash Flows are difficult to calculate. To make the DCF method more interesting, more attention should be paid by sellers and buyers to these more useful, more accurate and more future orientated valuation methods. If they realize the usefulness of these methods, then these methods will be used. It is obvious that the theory is a few years ahead of the practice and the SMEs have to catch up.

The choice of valuation methods could also be an explanation for the difference between valuation and pricing. Because of the choice of valuation methods and the application of valuation methods (discount rate, WACC, time horizon, risk, multiplier, value drivers), the valuations of the buyer and the seller could be different. This difference in valuations could lead to a difference between valuation and pricing for both the buyer and seller. Also valuation errors caused by the use of certain methods could explain the difference.

This subsection described the valuation and the next subsection will describe the results for the topic pricing.

### **4.3 Pricing**

The transaction price is determined during the bargaining process. The buyer and the seller discuss about the price of a company and there has to arise a consensus between the both. In a perfect world, the two parties accept a price that is almost in the middle of what the buyer wants and what the seller wants. In that perfect world the valuation is close to the price of the company.

In reality, the results from the interviews about the acquisition premium show that often the price for sellers is lower than the calculated value by them and the price for buyers is often higher than the calculated value by them. The reason for this is that the seller wants to receive a price that is as high as possible and the buyer wants to pay a price that is as low as possible (Eccles, Lanes and Wilson, 1999).

All the negotiations in the fifteen companies passed without major problems, but of course there were some obstacles. The negotiations in a MBO run better than the negotiations in an acquisition between competitors, because in a MBO there is usually a better relationship between the buyer and the seller and they have a better image of the company and will not be surprised somehow. If an organisation has transparency in their financial numbers, then a better overview of a company can be made and buyers would be willing to pay a higher price. An extensive analysis by the buyer or joint projects before the acquisition between buyer and seller could lead to a higher price.

By the insights from the interviews, it appears to be true what was stated in the literature review about the characteristics of companies that determine the acquisition premium. Companies that are over-invested, approach acquisitions more aggressively and pay higher premia. Companies with high free cash flows pay high premia, because these companies have money to spend (Gondhakelar, Sant and Ferris, 2004; Office, 2007). It is also true that companies with low valuations or wrong valuations (errors) enforce higher acquisition premiums, because the difference between value and price increases in these situations (Sudarsanam, Sorwar, 2010). For the acquisition and the premium it is also important how the company is structured, so how much shares the buyer needs to buy to get total control. If it is a small amount, then the premium will be high. The premium is also high for companies that have a strong growth in earnings and are active in a growing and innovative industry, because they are an attractive investment for buyers.

Two important factors in the pricing of SMEs are the emotions and the advisers. Problems in acquisitions of SMEs are the emotions from buyers and sellers and especially those of the sellers in family businesses. The owners have put their heart and soul into the company and now they have to sell their "baby". The emotions were also mentioned in the literature review (Astrachan, 2008). People who are involved in acquisitions have to manage their emotions, if necessary in cooperation with an adviser. Almost all the interviewees (93%) said that advisers have an added value in acquisitions and especially in acquisitions in SMEs. The management or owners of small companies do not have enough experience and/or knowledge about acquisitions and that is why advisers are an added value.

According to the interviewees, the advisers are an added value in the following affairs: knowledge concerning negotiations and valuations, a good preparation, experience in acquisitions, advisers are independent, the formalization process, advisers are a sounding board, the acquisition tactics, the structure of the acquisition, the completion of the acquisition and the defense of the principles/value drivers in the acquisition.

Some factors deserve special attention in the determination of the price. These factors are: the real estate (property), the equity and the rental price of the buildings. When the property will be sold in an acquisition, the buyer should look at how much hidden reserves will remain in the property. When a buyer does not buy the property, then the buyer will have to rent it. If the purchase price of the company is low, but the rental costs are very high, then the investment will not bring in much money. The amount of equity a company has is also important for the price. For a company that owns a lot of equity, a buyer will pay more than for a company that owns little equity. In this way a company that improves their solvency by not paying out or paying out less dividends need to be pierced. For the buyers it is important that they know what they buy. Often the seller will show the potential buyer a nice "image" or "picture" of the company.

The price drivers (bargaining strengths, financing acquisitions, multiple bidders, acquisition related benefits (synergy), motives for acquisitions, interests in acquisitions, presence of advisers, trends in economics and politics and risks) that also play a role in the explanation of the difference between valuation and pricing were discussed in paragraph 2.3.3, so more information about the price drivers will not be offered in this subsection. In the next subsection the main question will be answered and the explanations will be explained further.

#### **4.4 Valuation versus pricing**

The previous paragraphs gave an indication of the explanations that could explain the difference between valuation and pricing in the fifteen SMEs. The focus in this paragraph is on the middle of the framework that provides the explanations in the “normal” world. The explanations could be found in the value drivers, the valuation method and/or the price drivers.

*Statement: “Important in the valuation and the pricing of companies are: the common sense, the knowledge of the market and the own strengths during the bargaining.”*

This paragraph will answer the main question:

*What are the explanations for the difference between valuation and pricing in the acquisitions of Small- and Medium Enterprises in the Netherlands?*

Possible explanations from the literature review for the difference between value and transaction price could be: the choice of valuation methods, valuation errors, bargaining strengths, financing acquisitions, multiple bidders, acquisition related benefits (synergy), motives for acquisitions, interests in acquisitions, presence of advisers, trends in economics & politics and risks (Gondhalekar, Sant and Ferris, 2004; Walking, Edminster, 1985; Laamanen, 2007; Sudarsanam and Sorwar, 2010; Varaiya, 1987; Martynova and Renneboog, 2006; McCarthy and Weitzel, 2009). These explanations were rated by the interviewees and so was determined to what extent each explanation contributed to the difference between valuation and pricing.

*Statement: “Each acquisition is unique and there is no blueprint for acquisitions in SMEs. A large amount what the seller sells and the buyer buys is goodwill (customers, knowledge, good organisation). The price for that goodwill will be determined by the risk to takeover this goodwill.”*

*Statement: “The difference between the valuation and the transaction price of a company is knowing the business and do not want to be a “broker” in an acquisition. Important for entrepreneurs is the personal fit (a feeling) with the industry and the company. A good entrepreneur who put his heart and soul in the business knows to which party the company should be sold to get the highest price. KPMG and other Corporate Finance advisers only look at short- and longlist candidates and will be enthusiastic if the price will be a bit higher than the valuation, despite a much higher price could be realized if these advisers were no kind of “brokers”.”*

Actually all the factors mentioned above could explain the difference between value and price. In each acquisition certain factors will be more important than others. It was possible that some explanations were indicated and others were not indicated as explanation for the difference by the interviewees. A rating of five on a 5-point Likert scale indicates a very important explanation and a rating of one indicates a small contribution to the difference. The ratings of the fifteen interviews were added to get the total ratings of the explanations (BDO, 2006).

The results of analyzing the main question could be find in the figure below:

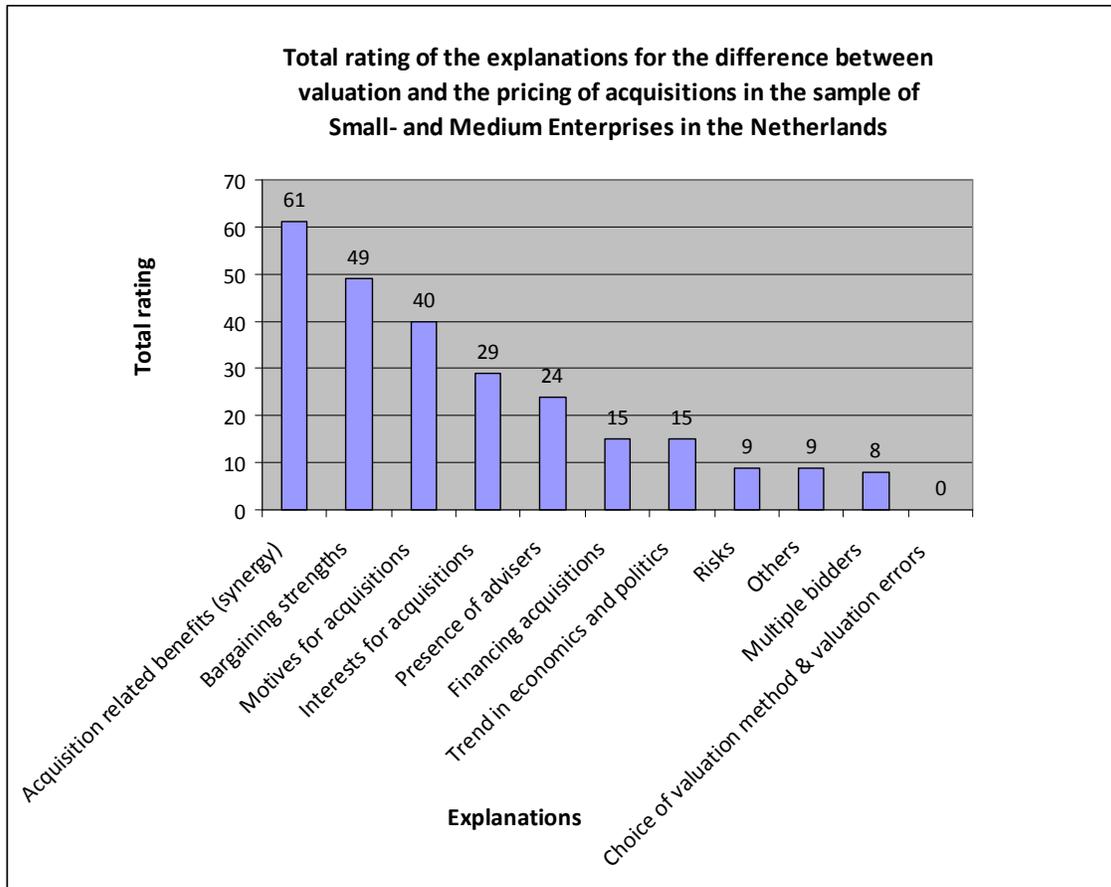


Figure 10: The total rating of the explanations for the difference between valuation and pricing in the sample

It is possible to conclude from the semi-structured interviews and figure 10 that the acquisition related benefits (synergy) are the most important explanations for the difference between valuation and pricing. The second and third explanation are respectively the bargaining process and the motives for the acquisition.

#### 4.4.1 The explanations for the difference between valuation and pricing

There is a discrepancy between the “perfect” and the “normal” world. The explanations will be discussed (in order of rating) in the sequel of this subsection.

- *Acquisition related benefits (synergy)*

The explanation acquisition related benefits (synergy) was rated by the fifteen interviewees and has a total rating of 61. It is a value- and a price driver and it applies more to the buyer than to the seller.

A buyer is willing to pay more than the value of the company if the seller has unique characteristics and if the seller could transfer the acquisition related benefits (synergy) to the buyer. This is often the case in acquisitions between competitors. The gap between the valuation and pricing will increase when the buyer makes an overpayment (Walking and Edminster, 1985; Varaiya, 1987; Black, 1989; Laamanen, 2007; Sudarsanam and Sorwar, 2010). The selling company could be an addition to the buying company and that could be a reason for the overpayment. The acquisition related benefits are value- and price drivers and these apply more to the buyers than the sellers, because the buyers obtain the benefits. The synergy can be operative or financial and the next sum can be applied:  $1 + 1 = 3$ .

The extensive valuation methods (DCF method) will take into consideration the subjective acquisition related benefits, but the less extensive and easy valuation methods (multiples method) will not do that to the same extent. A result of not taking these benefits into consideration in the valuation process is that these benefits have to be taken into consideration in the pricing process. This could lead to an overpayment and to an increase of the difference between value and price. Also the DCF method will take more into account the risk and the trends in economics and politics. For the multiples method all this will be more difficult, because they can only change their multiplier and not different elements in their valuation.

According to the interviewees some examples of acquisition related benefits are: the earnings, the market position, the management (and their knowledge), brands or reputation, the location, the facilities of a company, the customers, the quality of the employees, the goodwill, the innovativeness, the independency from the owner, a good work ethic under employees and more. These benefits show that operating synergy was very important for the interviewees. Also a lot of value drivers (paragraph 4.2.1) were mentioned in the list of benefits and these are important for buyers. The feeling of entrepreneurs and the multiples method are popular in SMEs. That is why the valuation will not be precise and as a result buyers could be convinced to pay more than their valuation and go for this unique opportunity. This explanation could reduce the difference, if it is taken into account into the valuation.

An example of a very important acquisition related benefit for notaries is the independency. It is very difficult to start a new office, because a notary office needs to be appointed by the queen of the Netherlands. That is why a buyer is willing to pay a higher price, because in this way the entrepreneur becomes the owner of a notary office. Also threats from companies with very low prices for products and services can have a negative influence on the price.

- *Bargaining strengths*

The bargaining strengths had a total rating of 49. This explanation is a price driver, affects both the buyer and the seller and appeared in the acquisitions between competitors and in MBOs.

A strong bargaining process could result in an increase of the price for the sellers and could result in a price reduction for the buyers. A strong bargaining process contains bargaining strengths for the buyer or for the seller. It results in a difference between valuation and pricing. The bargaining is mainly about the valuation and with clearly identifiable statements the price could deviate from that. This result is supported by the research of Varaiya (1987) that provides strong support for the bargaining strength as a determinant for the acquisition premium.

The results from the interviews correspond with the literature, because the better the tactics and the skills of the bargainers, the stronger the strengths of the bargainers (Walking and Edminster, 1985). It influences the acquisition premium. The number of shares controlled, the valuation (value drivers and value reducers), strength of the opposition, the preparation of the both parties, the level of the advisers and the existence of competitive bidders are characteristics that affect the bargaining strengths of companies. If buyers and sellers in SMEs optimize the preparation and their bargaining strengths (the right advisers), then two parties with the same strengths can negotiate about the right price and the difference will be reduced.

- *Motives for acquisitions*

The motives for acquisitions are also an explanation for the difference between valuation and pricing. From the fifteen interviews it received a total rating of 40. This explanation affects both the buyer and the seller and it appeared in the acquisitions between competitors and in the MBOs.

Strong motives for buyers lead to an increase in price. Results from the interviews show that synergy and corporate control are the most important motives for buyers (McCarthy and Weitzel, 2009). Motives determine the willingness to pay a higher transaction price. It could not be verified by the interviews if managerial hubris, managerial discretion or agency were motives or explanations (Berkovitch and Narayanan, 1993).

Circumstances that relate to the owner are the motives for sellers to accept a certain transaction price. Motives for buyers and sellers are an important subjective price driver that explains the difference between valuation and pricing. The motives cannot be influenced easily.

It should be taken into account that an overlap between the explanations exists. Synergy was mentioned in the acquisition related benefits and in the motives for acquisitions. Also the presence of advisers affects the bargaining strengths.

The top three of explanations was discussed above. Further in this paragraph the other explanations will be discussed.

- *Interests in acquisitions*

This explanation is also a price driver and it applies to both the buyer and the seller. It has a total ranking of 29. The buyers and sellers in acquisitions all have different interests. It is important to know what kind of company the buyer is and what kind of company the seller is, because this could explain the transaction price.

A competitor, a participation company or the management (in the case of a MBI) will pay a higher transaction price than if the buyers are family (successor) or the management (in the case of a MBO). Family businesses and MBOs tolerate each other, will not have difficult negotiations and want to end the deal with a good feeling. In acquisitions between competitors, in participation companies and for MBIs is a lot of cash available to buy a company and these parties will not consider to stop bargaining because of a small difference in transaction price. Also a buyer from another industry will pay a higher price, because they do not know the industry and the company good enough. All of the above shows that the interests in acquisitions for buyers and sellers determine the height of the transaction price and these interests explain the difference between valuation and pricing (Staalbankiers and Jonker Advies, 2010; Blok, Derksen, Diagos, Lomeijer, Notenboom, Post, Sluis, Smeets and Wijs, 2002). Just like the motives before, the interests also cannot be influenced easily. The best method to create a small difference is to find a company with almost the same interests to negotiate with.

The culture and the succession of the opposition are also important for the buyers. The culture of the employees has to match with the current culture in the buying company. Also the quality of the management that replaces the previous management has to be high. As a result the company will not lose too many customers and could perform in the same way. In this way the buyer will earn back the investment in a few years.

- *Presence of advisers*

This explanation has a total ranking of 24. It is also a price driver and affects both parties. The presence of advisers in acquisitions between competitors had more influence on the difference than the MBOs had. The differences in situation and negotiations clarify that.

As reflected in paragraph 4.3, advisers and accountants are an added value in acquisitions. Fourteen interviewees (93%) said that advisers were an added value in their acquisition and eleven out of fifteen interviewees (73%) said that the difference between value and price could be explained by advisers in Mergers and Acquisitions. The accompaniment of advisers in acquisitions could provide a lower price for buyers and a higher price for sellers (Laamanen, 2007). Knowledge and experience about acquisitions and the possibility to determine the transaction price are reasons to use advisers. They are able to come up with solutions to complete difficult acquisitions. Of course there is a difference in the quality and the price of the advisers between small and large companies.

Advisers could be decisive in the valuation and pricing of acquisitions in SMEs and therefore they explain the difference between valuation and pricing to an average extent (Laamanen, 2007). Two companies also did not need an adviser, because they did their acquisition by their own. According to them advisers are expensive and the advantages of advisers are not an added value in their deals.

- *Financing acquisitions*

The financing of acquisitions is a price driver and applies more to buyers than to sellers. The method of payment or the way of financing determines the transaction price. This will be explained below. The explanation has a total ranking of 15.

The questions for the interviewees about the financing of acquisitions had the following results: in all of the fifteen acquisitions was cash or debt involved. Six out of the fifteen (40%) acquisitions used a combination of cash and debt to finance their acquisition. In the other nine cases, six (40%) were only financed with cash and three cases (20%) were only financed with debt. Buyers that have limited cash and liquid assets in SMEs, require debt financing for the acquisition. The debt could come from bank loans, loans from the former owner (so called vendor loans) or from external financiers.

A vendor loan is a loan from the previous owner to the buyer and it shows trust from the previous owner to the buyer. A vendor loan provides advantages for buyers and sellers, because buyers can borrow cheap and the previous owner gets more interest than when he would put his money on a savings account of a bank. Vendor loans were often used in MBOs, because the previous owners trust the management and because of the advantages. Also in two acquisitions a distribution of the profit was agreed between the previous owner and the new owner. In these ways the sellers agreed with a lower transaction price, if the sellers would get an amount of profit when a certain amount of profit would be achieved in future years.

When banks finance acquisitions, the banks will look at the tendency of the financing. Normally banks look at the Debt to EBITDA ratio and will lend for example four or five times the EBITDA to the buyer. Before the economic crises the banks were heavy and aggressive financiers. In the beginning of 2011 banks do not finance so heavy and aggressive anymore.

Nothing was mentioned about stock financing in all of the fifteen interviews. It is not common to finance acquisitions with shares out of the own company in SMEs.

Several characteristics of the deal and characteristics of the sellers affect the choice for the method of payment (Faccio and Masulis, 2005; Martin, 1996). These characteristics could lead to a preference of cash-, debt- or stock financing. According to the literature and the interviews the pecking order for financing acquisitions in SMEs is: cash, followed by debt and stocks (Myers and Mailuf, 1984; Faccio and Masulis, 2005; Martynova and Renneboog, 2006). This does not match with the pecking order theory from Weitzel and McCarthy (2009) (cash, stock and then debt).

The way of financing acquisitions has advantages and disadvantages. The buyer will use that method of payment that provides the most benefits. Paying by cash immediately and therefore pay a low price or low interest rates or a specific financing structure could be reasons for certain preferences. Of course the cost of equity, the cost of debt and the rate of return have to be taken into account by buyers in the financing of acquisitions.

*Statement: "Cash is king"*

If a buyer is able to spend much money on acquisitions, then they are able to pay high acquisition premiums. In this way the gap between valuation and pricing increases (Gondhakelar, Sant and Ferris, 2004; Office, 2007). If a buyer is not able to spend a lot of money, because they have a little bit of cash and a small bank loan, then they will not explain the difference between value and price to a large extent.

All the above explains that financing of acquisitions explains the difference between valuation and pricing to an average extent.

- *Trends in economics and politics*

The explanation trends in economics is a value- and also a price driver. The valuation should take into consideration the trend and the transaction price could be influenced by the trend. Trends in economics and politics apply both to the buyer and the seller, because the price experiences advantages and disadvantages from this explanation. The explanation trends in economics and politics has the same total rating as the explanation financing acquisitions (15).

Trends should be taken into consideration in the valuation methods, but easy valuation methods could do that in the wrong way or do not take the trends into consideration enough. It is difficult to take into account the forecasts. This explanation creates pressure on the price. As a result of the trends, the transaction price will decrease in bad economic & political times and will increase in good economic & political times.

An evidence is the recent economic crisis. In bad times, companies will also focus on alternatives for an acquisition. Also in bad economic times the participation companies want to separate the chaff from the wheat (pick out the best companies out of the demand and supply on the acquisition market), because the participation companies want to earn much. It can be concluded that the moment of an acquisition is important, because it depends on what time an offer/bid is made and with what kind of speed.

Summarized, the trends in economics and politics explain as a value- and a price driver the difference between valuation and pricing to an average extent. These trends could not be influenced by the seller or the buyer, but buying or selling in a specific chosen period (in the future), could increase or reduce the difference.

- *Risks*

Risks were mentioned by some interviewees (3) as an explanation for the difference between valuation and pricing. The explanation has a total ranking of 9. It is a value- and a price driver and it applies more to buyers than to sellers.

Risks affect valuation as well as pricing. The extensive and more useful valuation methods take into consideration the risks in their valuations. Risk was also mentioned in the table with the value drivers in paragraph 2.2.1. Focusing on the DCF method, the risk is included in the Weighted Average Cost of Capital (WACC) that consist out of the cost of equity, the after tax cost of debt and the optimal capital structure of the company (Ribal, Blasco and Segura, 2010; Sim and Wilhelm, 2010; Heaton, 1998; Ross, Westerfield, Jaffe and Jordan, 2007).

The cost of equity in the DCF method is calculated for SMEs with the risk factors of the build-up approach (BDO, 2006). In this way risks are included in the valuation. Other valuation methods that are less extensive and less accurate (methods using multiples) do not include risks in valuations in such a way.

Risk is a major element for people to pay more or less. When there is certainty and little risk, buyers are willing to pay more to the sellers and will increase the difference. If companies buy companies in their own industry, they know the industry and they know where it is all about. This will lower the risk and increase the price, because the overview of the company is good. In MBOs (management from inside takes over the company) or when extensive analyses are made, people know what they will buy and the risk will be lower.

If risks are taken into consideration in valuation methods, then these would not explain the difference. If risks are not taken into consideration enough, then these would affect the pricing and explain the difference between value and price. That is why the risks explain the difference between valuation and pricing to a small extent.

- *Multiple bidders*

In only one of the fifteen companies were multiple bidders active, in the other companies were no multiple bidders active. The explanation has a total rating of eight and it applies to buyers and sellers. It is a price driver and it is most common in acquisitions between competitors, because in MBOs the acquisition is between the owner and his management. A certain competitor will pay a strategic premium or pay more, because the buyer does not want competitors to buy the company.

The more bidders, the more competition and the more they will raise the price. A higher transaction price ensures an increase in the acquisition premium (Gondhalekar, Sant and Ferris, 2004; Walking, Edminster, 1985; Laamanen, 2007). In this way multiple bidders explain the difference between the two most-discussed topics.

When selling a company an Information Memorandum will be provided to potential buyers. These potential buyers will make indicative bids and the seller will choose one of the parties to negotiate with. The seller chooses one of the companies that fits the best with the ideas of the owner in terms of price, plans, strategy and more. The seller will sign a letter of intent with a potential buyer and will try to complete the deal. Due to multiple bidders or several indicative bids, the seller could pick out the company that is willing to pay a high price for the company. This means that multiple bidders explain the difference, but in this research there was only one company with multiple bidders and some companies had indicative bids. That is why this explanation has a low score.

- *Choice of valuation method & valuation errors*

None of the interviewees mentioned the choice of valuation method & valuation errors as an explanation for the difference between valuation and pricing. It has a total rating of zero. The explanation is a value driver and affects the buyers and the sellers.

According to the interviewees, the outcomes of the valuation methods should be the same. This does not occur in the “normal” world. The interviewees used their feeling and a valuation method method as a method to control their feeling. This is a subjective method and to get more objective valuations, the valuations should take more aspects into account. An example of a more objective method is the DCF method. It is important to calculate representative valuations, because these are the guideline in acquisitions. If the buyers and sellers do not use useful and accurate valuation methods, then they do not know the importance of the valuation methods. The rating of zero shows that the choice of valuation methods & valuation errors are not important for owners, CFOs and advisers in SMEs. All the above shows that the choice of a valuation method could cause a difference between the valuation of buyers and sellers. This difference between the two valuations does not explain the difference between the value and the price of a company according to the interviewees. In reality the choice of valuation methods can cause a gap between the both valuations and could explain the difference between valuation and price. That is why attention should be paid to valuation methods in SMEs.

Also bad valuation estimations cause bad valuations and these increase the difference between valuations and that results in a difference between valuation and pricing (Pricer and Johnson, 1997).

The result of this paragraph is that the most important explanations for the difference are the acquisition related benefits (synergy). This explanation is followed by the bargaining strengths and the motives for acquisitions, these explain the difference to a large extent. The other explanations explain the difference to a small extent according to the interviewees. It can be concluded that explanations in the pricing process are more important than explanations in the valuation in the explanation for the difference.

If buyers and seller in SMEs want to reduce the difference between valuation and pricing, they have to use better valuation methods, they have to pay more attention to the valuation and the importance of these valuation has to be recognized by them. The right value drivers also have to be identified and have to be implemented in the valuation method, otherwise valuation errors could occur. Also the SMEs have to take into account the price drivers, because these could deviate the transaction price from the valuations. Some price drivers (example advisers) could be influenced by the buyers and sellers and some could not (example interests in acquisitions). The explanations which affected the valuation process and the pricing process (acquisition related benefits, trends in economics & politics and risks), should be implemented better in the valuations, so that a smaller gap arises. A difference between the valuation and the transaction price of companies will always remain, because the valuation and pricing are partially objective and partially subjective. Also the difference between buyers and sellers (motives, interests and more) will always remain and the price drivers cannot be easily influenced. Emotions are also important in acquisitions in SMEs, these could influence the price. The buyers and owners should try to switch off their emotions and be more objective. Owners, CFOs and advisers have to accomplish the above to give a good estimation of the price and to limit the emotions of buyers and sellers when there are major differences in value and price. All this is a major goal for the future.

The next chapter provides conclusions and shows the limitations of the research.

## 5 Conclusions

This chapter provides the conclusion and the discussion of the research. The chapter answers the main question and it discusses the limitations and restrictions of this research. The main question of this research is:

*What are the explanations for the difference between valuation and pricing in the acquisitions of Small- and Medium Enterprises in the Netherlands?*

The motives and the acquisition strategy are the starting point in an acquisition. The valuation and the pricing arise out of the motives for buyers and sellers. Major motives for the buyers in the fifteen companies were synergy and corporate control. For the sellers the circumstances that relate to the owner were the motives to sell the company (age, health, financial need, dissatisfaction between owners, a good bid from a buyer).

The interviewees were also asked what were the value drivers in their acquisitions? The top five of value drivers were respectively: stability of earnings, financial status of a company, reputation, market position / unique location, degree of (in)dependency of owner/personnel.

In SMEs the importance of valuation methods is underestimated. The interviewees preferred their feeling and a multiples valuation method instead of the more theoretical DCF method. This means theory does not match practice. Finally in the future I expect a switch-over in SMEs from the multiples method to the DCF method. In that case the valuation comes closer to the transaction price. Synergy is a major value- and price driver (see figure 11) and has a major influence on the difference between value and price. Using the DCF method that takes into account the future and the synergy, the DCF method restricts the influence of synergy on the difference between valuation and pricing. Especially for the buyer, because the buyer knows who the seller is. It is more difficult for the seller, because the buyer is unknown.

In a “perfect” world the valuation should be the same as the pricing, but this is not the case in reality. There are some explanations in the valuation and pricing that cause this discrepancy. The price drivers, the valuation methods and the value drivers are the explanations for the difference between valuation and pricing. Also valuation estimations in value drivers and valuation methods have influence on the difference. These explanations will be discussed below.

The research was structured by the framework that was developed in this research. The answer on the main question is that the acquisition related benefits (synergy) are the most important explanations for the difference between valuation and pricing in the sample. These explanations are followed by the bargaining strengths and the motives for acquisitions. These explanations explain the difference to a large extent. The other factors mentioned in this research (interests for acquisitions, presence of advisers, financing acquisitions, trends in economics and politics, risks, others, multiple bidders and choice of valuation methods & valuation errors) explain the difference to a small extent, according to the results from the fifteen interviews.

For the difference it can be concluded that explanations in the pricing process are more important than explanations in the valuation process. These explanations should be taken into consideration in acquisitions of SMEs, so that the gap between valuation and transaction price will be reduced and buyers and sellers will not be surprised any longer.

If buyers and seller in SMEs want to reduce the difference between valuation and pricing, they have to use better valuation methods, they have to pay more attention to the valuation and the importance of these valuation has to be recognized by them. The right value drivers also have to be identified and have to be implemented in the valuation method, otherwise valuation errors could occur. Also the SMEs have to take into account the price drivers, because these could deviate the transaction price from the valuations. Some price drivers (example advisers) could be influenced by the buyers and sellers and some could not (example interests in acquisitions). The explanations which affected the valuation process and the pricing process (acquisition related benefits, trends in economics & politics and risks), should be implemented better in the valuations, so that a smaller gap arises. A difference between the valuation and the transaction price of companies will always remain, because the valuation and pricing are partially objective and partially subjective. Also the difference between buyers and sellers (motives, interests and more) will always remain and the price drivers cannot be easily influenced. Emotions are also important in acquisitions in SMEs, these could influence the price. The buyers and owners should try to switch off their emotions and be more objective. Owners, CFOs and advisers have to accomplish the above to give a good estimation of the price and to limit the emotions of buyers and sellers when there are major differences in value and price. All this is a major goal for the future.

This thesis contributed to the literature about valuation and pricing of acquisitions Small- and Medium Enterprises. There was not much research about acquisitions in SMEs and most studies were based on publicly traded companies. This research adds some interesting insights in the SME area about acquisitions, valuation and pricing.

Proposed future research is to do the same research over five years and show if the results are the same or if they are changed. The future research could be done with surveys and a much bigger sample to give a better, more valid and more representative view of acquisitions, valuation and pricing in Small- and Medium Enterprises in the Netherlands. Another idea of future research could be the importance of valuation methods in SMEs. Is it increased, is the gap between value and price in SMEs decreased?

### **5.1 Limitations of the research**

This paragraph discusses the restrictions and limitations of this research. A major limitation in this research is the small sample. The SME area is a very broad and large area and to give a good representation of the population, a large sample and an easy and fast method for data collection is needed. This research used a small sample (15) of Small- and Medium Enterprises. Also the results could be influenced by the selection procedure of the SMEs. Because in-depth interviews were chosen to collect the data, the ability to work with a large sample was limited. It is not possible to do in-depth interviews with a lot of interviewees, because it will take some time and you should need a very large sample to get validated results about the population. That is why it should be ascertained that this research does not have a major scientific value. Nevertheless it gives a good analysis and overview of a small group of companies, that can be generalized to SMEs in the Netherlands with caution.

There is also some overlap between certain factors in the main question. Synergy was mentioned in the acquisition related benefits and in the motives for acquisitions. Also the presence of advisers has something to do with the bargaining strengths. This should be taken into consideration.

A solution for all these limitations could be a larger sample with a different research method. For example surveys could be used instead of interviews. Also the research could be better defined and have a smaller focus. For example: it could focus on only buyers instead of buyers and sellers, it could focus on a specific industry and/or it could focus on Micro- and Small-Enterprises instead of SME's. If the research is better defined and has a smaller focus more can be generalized.

At last, it is an interesting research about the battle between value and price in SMEs.

## References

- Antoniou, A., Arbour, P., Zhao, H., 2008, How much is too much: are merger premiums too high?, *European Financial Management*, 14, 2, 268-287.
- Astrachan, J.H., 2008, Emotional returns and emotional costs in privately held family businesses: advancing traditional business valuation, *Family Business Review*, 21, 2, 139-149.
- Bargeron, L.L., Schlingemann, F.P., Stulz, R.M., Zutter, C.J., 2008, Why do private acquirers pay so little compared to public acquirers?, *Journal of Financial Economics*, 89, 3, 375-390.
- Bazerman, M.H., Samuelson, W.F., 1983, I won the auction but don't want the prize, *The Journal of Conflict Resolution*, 27, 4, 618-634.
- BDO Corporate Finance, 2006, Extra rendementseis bij de waardering van middelgrote ondernemingen, *Research by BDO*, 1-13.
- Berkovitch, E., & Narayanan, M., 1993, Motives for takeovers: an empirical investigation. *Journal of Financial and Quantitative Analysis*, 28, 2, 347-362.
- Black, B.S., 1989, Bidder overpayment in takeovers, *Stanford Law Review*, 41, 3, 597-660.
- De Blok, P., Derksen, T., Diagos, W., Lomeijer, B., Notenboom, Post, W, van Sluis, D., Smeets, W., de Wijs, J., *Fusies & Overnames: een SRA-handboek met praktische informatie*, Samenwerkende Registeraccountants & Accountants-administratieconsulenten, Elsevier, Amsterdam, 2002.
- Bowden, A., Fox-Rusby, J.A., Nyandieka, L., Wanjau, J., 2002, Methods for pre-testing and piloting survey questions: illustrations from the KENQOL survey of health-related quality of life, *Health Policy and Planning*, 17, 3, 322-330.
- Capron, L., 1999, The long-term performance of horizontal acquisitions, *Strategic Management Journal*, 20, 11, 987-1018.
- Chiu, P., Siegel, J.G., 1989, Valuation of a company, *Journal of Corporate Accounting & Finance*, 1, 175-185.
- Collins, D., 2003, Pretesting survey instruments: an overview of cognitive methods, *Quality of Life Research*, 12, 3, 229-238.
- Damodaran, A., *Corporate finance: theory and practice*, chapter 26: acquisitions and takeovers, Wiley & Sons, 2001, 2th edition, page 834-880.
- Damodaran, A., 1999, The dark side of valuation: firms with no earnings, no history and no comparables, *NYU Working paper no. FIN-99-022*.
- Damodaran, A., *Investment valuation: tools and techniques for determining the value of any asset*, chapter 24: valuing private firms, Wiley & Sons, 2002, 2th edition, page 662-689.

- De Maeseneire, W., 2005, Essays on firm valuation and value appropriation, chapter 1: The Valuation of IPOs by Underwriting Investment Banks and the Stock Market, Erasmus Research Institute of Management Ph.D. Series Research in Management, page 26-49.
- Demirakos, E.G., Strong, N.C., Walker, M., 2004, What valuation models do analysts use?, *Journal of Accounting Horizons*, 18, 4, 221-240.
- Desmond, G.M., Amster, A.D., Handbook of small business valuation formulas and rules of thumb, Valuation Press (LA), 1994, 3<sup>rd</sup> edition.
- Dukes, W.P., Bowlin, O.D., Ma, C.K., 1996, Valuation of closely-held firms: a survey, *Journal of Business Finance & Accounting*, 23, 3, 419-438.
- Eccles, R.G., Lanes, K.L., Wilson, T.C., 1999, Are you paying too much for that acquisition, *Harvard Business Review*, 77, 4, 136-146.
- Faccio, M., Masulis, R.W., 2005, The choice of payment method in European mergers and acquisitions, *The Journal of Finance*, 60, 3, 1345-1388.
- Fernandez, P., 2001, Valuation using multiples. How do analysts reach their conclusions?, *IESE Business School Research Paper*, University of Navarra.
- Fernandez, P., *Valuation methods and shareholder value creation*, Academic Press, an Elsevier science Imprint (USA), 2002.
- Gondhalekar, V.B., Sant, R.R.S., Ferris, S.P., 2004, The price of corporate acquisition: determinants of cash takeover premia, *Applied Economics Letters*, 11, 12, 735-740.
- Hayward, M.L.A., Hambrick, D.C., 1997, Explaining the premiums paid for large acquisitions: evidence of CEO hubris, *Administrative Science Quarterly*, 42, 103-127.
- Heaton, H.B., 1998, Valuing small businesses: the cost of capital, *The Appraisal Journal*, 56, 1, 11-16.
- Imam, S., Barker, R., Clubb, C., 2008, The use of valuation models by UK investment analysts, *European Accounting Review*, 17, 3, 503-535.
- Johnson, G., Scholes, K., & Whittington, R., *Exploring Corporate Strategy*. Harlow, England: Prentice Hall financial times, 2007.
- Kaplan, S. N., Ruback, R. S., 1996, The market pricing of cash flow forecasts: discounted cash flow vs. the method of comparables, *Journal of Applied Corporate Finance*, 8, pp. 45-60.
- Koller, T., Goedhart, M., Wessels, D., *Valuation: measuring and managing the value of companies*, Wiley & Sons, 2005, 4<sup>th</sup> edition.

- Laamanen, T., 2007, On the role of acquisition premium in acquisition research, *Strategic Management Journal*, 28, 13, 1359-1369.
- Lippit, J.W., Mastracchio, N.J., 1993, Valuing small businesses: discounted cash flows, earnings capitalization, and the cost of replacing capital assets, *Journal of Small Business Management*, 31, 52-61.
- Luehrman, T.A., 1997, What's it worth? A general manager's guide to valuation, *Harvard Business Review*, 75, 3, 132-142.
- Martin, K.J., 1996, The method of payment in corporate acquisitions, investment opportunities, and management ownership, *The Journal of Finance*, 51, 4, 1227-1246.
- Martynova, M., Renneboog, L., 2006, Mergers and Acquisitions in Europe, *Finance Working Paper no. 114*
- Martynova, M., Renneboog, L., 2008, A century of corporate takeovers: What have we learned and where do we stand?, *Journal of Banking & Finance*, 32, 10, 2148-2177.
- Martynova, M., Renneboog, L., 2009, What determines the financing decision in corporate takeovers: cost of capital, agency problems, or the means of payment?, *Journal of Corporate Finance*, 15, 3, 290-315.
- McCarthy, K.J., Weitzel, U., 2009, Theory and evidence on mergers and acquisitions by small and medium enterprises, Tjalling C. Koopmans Research Institute Discussion Paper Series 09-21.
- Nunnally, B.H., 2006, Valuation of the small, closely held company, *Journal of Financial Education*, forthcoming.
- Office, M.S., 2007, The price of corporate liquidity: acquisition discounts for unlisted targets, *Journal of Financial Economics*, 83, 3, 571-598.
- Pricer, R.W., Johnson, A.C., 1997, The accuracy of valuation methods in predicting the selling price of small firms, *Journal of Small Business Management*, 35, 4, 24-35.
- Ribal, J., Blasco, A., Segura, B., 2010, Estimation of valuation multiples of Spanish unlisted food companies, *Spanish Journal of Agricultural Research*, 8, 3, 547-558.
- Roll, R., 1986, The hubris hypothesis of corporate takeovers, *The Journal of Business*, 59, 2, 197-216.
- Ross, S., Westerfield, R., Jaffe, J., & Jordan, B., *Modern Financial Management*, New York: McGraw-Hill/Irwin, 2008.
- Saunders, M., Lewis, P., Thornhill, A., *Research Methods for Business Students*, FT/Prentice Hall, 2007, 4<sup>th</sup> edition.

Sim, L., Wilhelm, K., 2010, Business valuation – What is it worth?, *CA Magazine*, 143, 3, 39-42.

Sliwoski, L.J., Jorgenson, M., 1996, Acquiring a small business: how much can your client afford?, *The National Public Accountant*, 41, 10, 16-20.

Staalbankiers and Jonker Advies, 2010, Economic crisis, a chance to create value, research by Staalbankiers and Jonker Advies in 2010.

Sudarsanam, S., Sorwar, G., 2010, Determinants of takeover premium in cash offers: an option pricing approach, *Journal of Business Finance & Accounting*, 37, 5-6, 687-714.

Tobler, C., 2006, New evidence on valuation-based acquisition theory, *Finance Ph.D.*, University of Arkansas, 1-31.

Varaiya, N.P., 1987, Determinants of premiums in acquisition, *Managerial and Decision Economics*, 8, 3, 175-184.

Walking, R.A., Edmister, R.D., 1985, Determinants of tender offer premiums, *Financial Analysts Journal*, 41, 1, 27-37.

Wilcox, H.D., Chang, K.C., Grover, V., 2001, Valuation of mergers and acquisitions in the telecommunications industry: a study on diversification and firm size, *Journal of Information and Management*, 38, 7, 459-471.

**Internet sources:**

European Commission, 2009, *Small and Medium-sized Enterprises (SMEs) – SME definition*, European Commission Enterprise and Industry, consulted on 2 November 2010, [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index\\_en.htm](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm)

KvK, 2010, *Overdracht en Overname*, KvK, consulted on 12 August 2010, [http://www.kvk.nl/overdracht\\_en\\_overname/](http://www.kvk.nl/overdracht_en_overname/).

MKB servicedesk, 2010, *Informatie over het MKB in Nederland*, MKB, consulted on 2 November 2010, <http://www.mkbservicedesk.nl/569/informatie-over-mkb-nederland.htm>.

## Annexes

### 1) The extended steps in selling a company (in Dutch)

Het proces van de overname voor de verkoper kent in totaal 3 fases.

#### Fase 1.

1. Identificatie van de te verkopen entiteit (wezenlijk bestaan)
2. Samenstelling van het informatiememorandum (ondernemersactiviteiten, marktpositie, de organisatie, de financiële status, de strategie en de toekomstverwachtingen.
3. Opstelling waardebeoordeling t.b.v. de onderhandelingen met derden
4. Identificatie van potentiële kopers. In overleg werd aan de hand van een long list een short list gemaakt. De kandidaten werden benaderd met een anoniem profiel van de onderneming.

#### Fase 2.

1. De activiteiten van de potentiële koper
2. De acquisitie strategie van de potentiële koper
3. Het acquisitieprofiel van de potentiële koper
4. de financiële capaciteit van de potentiële koper
5. de plannen die de potentiële koper heeft met de onderneming
6. de eisen en randvoorwaarden van de potentiële koper

#### Fase 3.

Afwikkeling en overdracht. Het is gebruikelijk dat na ondertekening van de intentieverklaring de koper de gelegenheid krijgt de verstrekte informatie te onderzoeken op juistheid en volledigheid in een due diligence onderzoek (neemt lange tijd in beslag). Aansluitend zouden in samenwerking met gespecialiseerde juristen (Ernst & Young Corporate Finance, JPR advocaten) onderhandelingen over de uiteindelijke koopovereenkomst worden gevoerd.

## 2) The interview questions

### General questions

Name?

Company?

Function and tasks?

### Introduction

- 1a- What kind of company is this? (*Production/Trading/Services, number of employees*)
- 1b- In what way were you involved in the acquisition (*tasks, buy/sell side*)?
- 2- What kind of company/party is the other party (*Production/Trading/Services, number of employees*)?  
 *Family*  
 *Competitor*  
 *MBO*  
 *MBI*  
 *Participation company*  
 *Other, .....*
- 3- What was the motive for the acquisition? Please explain.  
 *Synergy*  
 *Market power*  
 *Corporate control*  
 *The owner/owners (age, health, disagreement)*  
 *Other, .....*
- 4- What were the special characteristics of this/than company to specifically acquire this/than company? Why no other company in the same market? (*Performance, quality, location, market position, patents, sales etc.*)
- 5- How did the process of the acquisition look like (*Please explain about time, steps, obstacles*)?
- 6- How was the acquisition financed? Please explain.  
 *Cash*  
 *Debt*  
 *Stocks*  
 *Combination of more financing methods (cross them)*
- 7- Why this particular method of financing? (*advantages and disadvantages*)

**Valuation**

8- What were the factors that influenced the value of the company in the acquisition?  
Please circle them and explain the influencing factors.

<b>FACTORS</b>				
<u>Intern</u>	<u>Extern</u>	<u>Financial</u>	<u>Strategic</u>	<u>Operational</u>
Degree of risk	Industry	Sales trend	Unique location and/or marketposition	Degree of (in)dependency of owner/personnel
History of the business	Ease or difficulty of entry	Stability of earnings	Takeover motives	Investment level / innovativeness
Construction Workforce	Economic and political trends	Financial status of the company	Secured brands and patents	Quality of management
Construction of customer base	Competition			Marketing factors
Reputation				Product quality
Other, .....	Other, .....	Other, .....	Other, .....	Other, .....

9- What were the three factors that were most important in determining the value? And why?

- 1) .....
- 2) .....
- 3) .....

10- In which category could be classified the valuation method used in this acquisition? Please explain.

- Balance sheet-based methods*
- Income statement-based methods*
- Cash flow discounting-based methods*
- Other, .....*

11- What for valuation method is most often used in SME's to determine the value of a company? Could you explain the method briefly?

- Discounted Cash Flow method*
- Using multiples/comparables, rules of thumb*
- Book value*
- Goodwill-based methods*
- Liquidation value*
- Earnings capitalization*
- Combination of more valuation methods (cross them)*
- Other, .....*

- 12- What specific valuation method was used to determine the value of the company in this acquisition? Could you explain the method briefly?
- Discounted Cash Flow method*
  - Using multiples/comparables, rules of thumb*
  - Book value*
  - Goodwill-based methods*
  - Liquidation value*
  - Earnings capitalization*
  - Combination of more valuation methods (cross them)*
  - Other, .....*
- 13- Why was this valuation method used in this acquisition? Why no other valuation method? What is the difference with the valuation methods used in large listed companies do you think?
- 14- Was the estimated value of the company the same as you expected it to be? How was that possible?
- Yes, because .....*
  - No, higher, because .....*
  - No, lower, because .....*
- 15- What are important/specific elements in the valuation of SMEs? (*difference with large companies*)

### **Pricing**

- 16- How was the process of pricing going? (*Please elaborate on the the bargaining, the emotions of the involved parties, the role of advisors, the results*)
- 17- What were the factors that influenced the actual price paid for the company?
- Multiple bidders*
  - Motives for acquisition*
  - Acquisition related benefits*
  - Bargaining strength*
  - Method of payment*
  - Presence of investment advisors/partners*
  - Other, .....*
- 18- What are the three most important factors that influenced the price of the company? And why?
- 1) .....
  - 2) .....
  - 3) .....
- 19- Does the time needed for completion of the acquisition also determine the price of a company? To what extent? (*Likert-scale, answer possibilities: not at all, to some extent and to a very large extent*)

- 20- How big is the acquisition premium (difference between final price and the estimated value) in this acquisition? Why this size?

**Main question**

*What are the explanations for the difference between valuation and pricing of a few acquisitions in Small- and Medium Enterprises in the Netherlands?*

- 21- *Main question:* What were the explanations for the differences between valuation and pricing in this acquisition? Please explain each explanation.

Valuation

- [ ] *Choice of valuation method (errors in valuation)*

Pricing

- [ ] *Bargaining process (strenghts)*  
[ ] *Financing of the acquisition*  
[ ] *Multiple bidders*  
[ ] *Acquisition related benefits (synergy)*  
[ ] *Motives for the acquisition*  
[ ] *The interest of the other party (family, competitor, MBO, MBI, participation company)*

Other

- [ ] *Presence of advisors*  
[ ] *Trends in economics and politics*  
[ ] *Risk*  
[ ] *Other, .....*

- 22- To what extent each explanation (mentioned in question 21) explains the difference between valuation and pricing? *(5-point Likert scale answer possibilities: 1, 2, 3, 4 & 5. A rating of 5 means that the factor influences the difference between the valuation and the pricing very much and a rating of 1 indicates that the factor explains the difference a little bit. So a rating can be used several times.)*

- 23- Can these explanations be influenced by advisers of Mergers and Acquisitions?

- [ ] *Yes, because .....*  
[ ] *Maybe, but then in the following way .....*  
[ ] *No, because .....*  
[ ] *Other, .....*

- 24- Are advisers an added value for an acquisition? And in which area's?

- [ ] *Yes, because .....*  
[ ] *Maybe, because .....*  
[ ] *No, because .....*

- 25- Does the interviewee has some comments/questions about the interview/research?

- THE END -