

A Review of the Business Valuation Process - in theoretical and practical proceeding

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Abstract

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Background and problem discussion: Business valuation is no precise science. There is no universal legal framework which dictates how the valuation should be performed and therefore, it is no right way to estimate a company's value. However, there is a lot of literature within the business valuation area which could help facilitate the valuation procedure and minimize the risk of failure. It is thus interesting to study and review the business valuation process in theory and in practise to see how it should be performed and how it is in reality.

Aim of the study: The purpose of this paper is to provide an overview of the business valuation process according to the theory and to map out the assumptions that underlie this process. Additionally it aims to compare the appraisers' valuation process, with the compiled theoretical framework in order to identify the differences and likenesses and then to interpret them. Furthermore the purpose is to review the valuation procedure between different appraisers and to be able to make a conclusion if there is a specific framework that is used in general.

Delimitations: This paper focuses on the general use of the business valuation process and therefore no specific attention to a certain industry or phase of the business valuation process will be examined. Only the three most well-recognized valuation models among many existing, asset-based, income-based, and market-based approaches are presented. Moreover the paper studies only a company's value as a result of the valuation process and not the value given through negotiation.

Method: In order to answer the issues of this thesis the studying of the relevant literature on the subject and qualitative interview-investigation were conducted. The interviews were performed with three professional appraisers and one interview with a theorist. Furthermore, collected information was analysed and conclusions have been made on the basis of the analysis.

Analysis and conclusion: According to the result of this study, there is no unique framework for the business valuation process that exists in practice. The appraisers' valuation procedure is based on the primary valuation idea presented in the theory however the particular appraiser has developed their own framework which is derived from their experience and knowledge. In the authors' opinion it is impossible to obtain a framework which could cover all aspects that may have influence on business valuation and eliminate the subjectivity caused by the personal character of the appraiser.

Abbreviations

CAPM Capital Asset Pricing Model
CEO Chief Executive Officer
DCF Discounted Cash Flow

EBIT Earnings Before Interest and Taxes

EBITDA Earnings Before Interest, Taxes, Depreciation and Amortization

EV Enterprise Value

EVA Estimated Value Added

FIFO First In First Out

GNP Gross National Product
IPO Initial Public Offering
LIFO Last In First Out

PE Price-to-Earnings ratio PwC PricewaterhouseCoopers

SWOT Strengths, Weakness, Opportunities and Threats

WACC Weight Asset Capital of Cost

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1 Introduction

This chapter introduces the business valuation process and its difficulties in order to acquaint the reader with the subject. The discussion of problem leads up to the aim and scope of this paper and the three investigated questions. In the end of the chapter the delimitations are presented.

1.1 Background

"Valuation is not an objective exercise, and any preconceptions and biases that an analyst brings to the process will find their way into value". Damodaran (2002, p.9)

The last decade demand for valuation services has grown dramatically. Globalization and thus capital and trade border relaxations have favoured business growth. Business introduction on the stock exchange occurs not only on local stock markets but also internationally. Consequently trading of stock volume has increased markedly (Ekström, 2000). Business acquisitions and mergers have become a common phenomenon. Continued business growth requires new investment capital. The foregoing listings are not meant to represent the totality of valuation situations, where the meaning of valuation result greatly increases as there is a lot at stake and those involved may be at risk to incur damage.

Business valuation is not a precise science, the value of a company determines subjectively, i.e. value depends on what purpose the valuating is done for and who does it (Lundén, 2007, p.7). There is no right way to estimate the value since there are many factors that influence it. The value is in the eye of the beholder, any price can be justified if there are others who are willing to pay that price (Damodaran, 2002, p.1).

The best standard of value is the market value. "Fair market value is the price at which the property would change hands between a willing buyer and a willing seller, neither being under any compulsion to buy or sell and both having reasonable knowledge of the relevant facts" (Boger and Link, 1999, p.18). However, applying of "fair value" requires a perfect market without external and internal disturbance which is impossible to achieve in reality.

Prerequisites vary for each particular case in regard to access to information, purpose and time available for valuation. Complete business valuation requires knowledge about many economic theories and understanding of the particular company's operation. Thus, it requires comprehension of national economics, marketing, management, accounting and others, since the company's value is determined by many factors. The value depends on above all the possibility to generate future income, in the form of cash flow and the availability of the assets it possesses. Other factors that influence the value are, for instance, level of competition, difference and maturity of the company's products, how long the company has existed, environment opinion and so on. As well as other things value depends on supply and demand i.e. how many businesses there are for sale at the valuation date. Some businesses are more in demand than others (Petersen, 1990).

The financial reports like balance, income, and cash flow statements are the starting point for business valuation. The reigning accounting legal framework which is the basis for the creation of financial reports, should be taken into consideration. Audit review is a good

security making sure that they are reliable. Unfortunately it occurs that companies manipulate their financial reports if there are incitements for it. The appraiser must be critical when reading the financial reports and understand how they are created and the possibilities of company's management to influence them (Soffer and Soffer, 2003, p.4).

In light of all factors that have influences on company's value an exhaustive valuation becomes harder to accomplish.

1.2 Discussion of problem

It is impossible to estimate the object value of a company only by counting, since the numbers are not the only factor to consider. Valuation of a company is associated with a lot of difficulties and insecurities. To facilitate the business valuation process there are a number of helpful models presented in the literature. According to theory the business valuation procedure should consist of several phases to provide a reliable value. These phases are business analysis, accounting and financial analysis, forecasting and valuation itself (Soffer and Soffer, 2003, p.14). Forecasting is the most precarious part of the valuation process since it is based on assumptions and discretion about a company's future economic performance. The insecurity connected with forecasting can be reduced to a certain extent by accurate analysing of external and internal factors, which may affect the company's future development (Damodaran, 2002, p.3). The value of the company varies depending on which valuation model that has been applied and how input variables have been estimated.

The valuation models commonly described in theory are asset-based, income-based, and market-based approaches. Each particular model has its advantages and disadvantages and is applied depending on the circumstances that exist at a specific time of valuation. To value a non-listed company the asset-based approach is the most commonly used (Lundén, 2007, p.58) while the income-based and market-based approach are usually applied for valuation of listed companies according to Öhrlings PriceWaterhouseCoopers questionnaire study (referral in Nilsson et al., 2002, p.68).

In theory there is a clear view of the valuation process and how it should be performed. However, problems arise since it is hard to cover every parameter of every particular company. At the same time there exists a paradox as some theorists consider that even by accomplishing everything that is described in literature, analyses can be time-consuming and to some extent redundant. The choice of analysing variables should be determined by the prerequisites (Frykman and Tolleryd, 2003, p.102). Another problem with applying the theory in practice is that all valuation models result in different value even if the same model is used by two different appraisers (Nilsson et al., 2002 p.25). This can differ because of the appraiser's personal character; every appraiser has a different idea about the input values which make the basis of the valuation models.

Input values and consequently the final value can be affected by the availability of information. The internal information about the company can be limited because of rivalry on the market. In financial reports which are communicated to external parties the company wants to put across its best side and avoid, if possible, showing any negative aspects about it. In the valuation process, the problem is that business management has more knowledge about the company than the surroundings thus it is hard to know the reliability of financial reports and if they give a correct view (Soffer and Soffer, 2003, p.7).

Even though there is a lot of literature within the business valuation subject area and the theories represent guidance on how a company should be valuated there is no clear legal framework which dictates how the company's valuation will be performed. The knowledge about how the appraiser accomplishes the business valuation is limited. It concerns the valuation procedure itself; how the appraiser is collecting and working the information to assess the final value. This depends on that the description of the valuation procedure is rarely released; this information is kept by the involved parties (Hult, 1998, p.12).

In this paper the authors attempt to review the appraisers' valuation procedure from the theory framework, to take into consideration the appraisal difficulties that are not often connected with the theory itself rather than the application of it. This paper is particular interesting for students in search for an introduction to the subject business valuation and its issues.

1.3 Formulation of problem

In the light of the discussion above, the questions are as follows:

- How should appraiser's valuation procedure look?
- How does appraiser's valuation process deviate from the one represented in theory?
- How the result of business valuation can be evaluated?

1.4 Aim and scope of the study

The purpose of this paper is to provide an overview of the business valuation process according to the theory and to map out the assumptions that underlie this process. Additionally it aims to compare the appraisers' valuation process, with the compiled theoretical framework in order to identify the differences and likenesses and then to interpret them. Furthermore the purpose is to review the valuation procedure between different appraisers and to be able to make a conclusion if there is a specific framework that is used in general.

1.5 Delimitation

The authors of this paper will focus more on the assumptions that underlie valuation methods than on calculation. The paper aims to study business valuation process in general and not focus on a particular phase in the valuation process. Furthermore this study is not applied on specific industry or particular purpose of valuation. There are many valuation models that exist but the three most commonly used were chosen to be described in the frame of reference. They are asset-based, income-based and market-based approaches. Furthermore the interviews with appraisers are limited to those who make valuations regularly. The subject of this paper is limited to study the business value as a result of the valuation process. The authors have not taken into account the value given through negotiation.

2 Method

This chapter describes and gives cause for the choice of subject, research method and case study object. It also explains how the interviews were implemented and how the literature was obtained. The chapter is concluded with a discussion on credibility.

2.1 Choice of subject

The choice to write about business valuation process was based on a founded interest during a course in financial reporting and analysis. Business valuation is a current subject and the demand for business valuation services has increased dramatically because of the many economical changes such as company mergers, acquisitions and the public growing interest for company stocks. It also has a broad economic application since many economical assignments have a fragment of the business valuation process in it, which creates a never ending usefulness about the subject.

2.2 Research method

For the possibility to solve the problem and reach the aim and scope of this study a descriptive method was implemented meaning a description of the business valuation process both in theory and reality. The method enables the best possible way to map out the business valuation process and its underlying assumptions. Another reason for the choice of a descriptive approach is that the paper explains an already existing process and its application.

According to Andersen (1998, p.31) there are two principal forms of method, qualitative and quantitative, in the social science. This paper's intention was to do a qualitative study that examines the aim and scope in depth. Typical for a qualitative study is that it consists of more words than numbers thus creating a deeper understanding about the examined problem and its connection as a whole.

Furthermore, Denscombe (2000, p.43) considers it appropriate with a case study as research strategy when the purpose is to in depth examine a business valuation process in its natural surroundings. Therefore, a number of personal interviews with appraisers' were carried out with the purpose to develop the understanding about their business valuation process. The interviews' also create an up-to-date opinion about the reality.

2.3 Choice of object

The assignment was to interview people working at companies that use business valuation in their daily work. The goal was also to visit companies that use business valuation for different reasons as it creates a broader picture of the practice usage of valuation. The choice was an accounting company, a bank, and a fund company.

The companies and the people interviewed were all a choice of coincidence. Every company was typical for the chosen industry and it can be assumed that remaining companies in the industry have similar methods and opinions. Visiting the companies' web pages made it possible to find out if they had any business valuation service. Thereafter the companies were

contacted through the contact information found on their web pages. All the companies are active in Gothenburg to facilitate the accomplishment of the interviews.

For the possibility to clear the picture and interact with the theory, a theorist with a lot of experience and knowledge about the chosen subject was interviewed. The choice fell on Thomas Poleise a professor working at the University of Gothenburg. The purpose about the interview was to obtain his opinion about the business valuation process and what he believes is the best way to make a valuation.

2.3.1 How the interviews were realized

The chosen three companies were contacted the first time by telephone to set up a personal meeting at their office for the convenience of the respondents'. Thereafter an e-mail with questions was sent beforehand so that the respondents' could prepare themselves about what the meeting would be all about and what was expected of them.

The question formula (Appendix 1) for the companies was created as a helping hand and as a direction for the interview. The beforehand questions look the same and had the same order for every company visited but during each interview complementing questions were asked, in the case of something needed to be clarified or evolved. The interview was structured but the respondent answered freely on all the questions. The interviews lasted from thirty minutes to one hour but all questions were answered during this time.

The interview answers were recorded, if it was approved by the respondent on a portable media device, and no one rejected to that opportunity. Except recording, notes were taken during the interview making sure nothing would be missed. As soon as possible a summary of the interview was written and then e-mailed to the respondents' so that they could check their statements. All respondents' clarified to print the company's and their name, except the fund company's representative who on behalf of the company's management wished to be anonymous.

The interview with professor Thomas Polesie was realized a different way, no time was set up and no questions were e-mailed beforehand making it a more of a non standardized interview. As it was an un-booked meeting only notes were taken. Questions (Appendix 2), specially prepared for this interview were used as guidance but the professor talked freely about the business valuation process.

2.4 Collecting of information

There are a lot of ways to collect information; library search engines and Internet were used creating a deeper literature study and an understanding of this paper's problem.

2.4.1 Library search engines

In the search database GUNDA at the library a search for literature and articles was carried out. The reason for using GUNDA was the broad access to information and to facilitate the search. The most frequent search words were business valuation, company valuation, business analysis process, valuation issues but also the Swedish words "företagsvärdering" and "företagsanalys". The search resulted in many books and essays about the chosen subject. Articles were found using economic data bases like Business Source Review and "FAR

komplett". Most used words in the search for articles were business valuation and "företagsvärdering".

2.4.2 Internet

The Internet search engine Google was used for the search of complemented information about the business valuation process and most used search words were business valuation and "företagsvärdering".

2.5 Discussion on credibility

This paper has achieved certain measures to secure reliability and validity. Reliability means that the result must be trustworthy that is the same result should be achieved by two different studies with the same purpose and methods (Andersen, 1998, p.85). The validity is what should be measured is being measured (Esaiasson et al., 2007, p.63). Below mentioned measures has played their role in protecting this paper from being inaccurate.

2.5.1 Reliability

To enhance the reliability of the review the interviews were recorded on a portable media player. Another factor that could have affected the reliability is that two people were attending the interview. One had the main responsibility to ask the questions while the other one asked complementing questions, both took notes during the interview. Another fact that increases the reliability is that the interviews were performed face to face.

2.5.2 Validity

For the purpose of increasing this paper's validity the conclusion of the interviews was sent to the respondents for a fact control. The possibility to ask complementing questions after the interviews may also have increased the validity. The interviews were implemented not to influence the respondent. Although there is no guarantee they were not because of the questions, questioners' character and that they were recorded. Also as the questions were open the answers could be irrelevant, but this could be minimised by leading the respondents on the right track again. Furthermore as the interviews were in Swedish the answers real meaning could have been lost in translation.

2.5.3 Criticism of sources

It is important to be as particular and unaffected by others as possible. But it is also important to keep in mind that it is impossible to guarantee that this has not happened since the human error plays a role and may affect the formation.

There is also a possibility that the founded theoretical information in this paper could be incorrect that is incomplete, partial, or consciously biased (Lundahl and Skärvad, 1999, p.134). Because of this a critical position was tried by reading as much different literature as possible, both books and articles in English and Swedish about the chosen subject. Web pages were also read with a critical aspect and their truth-value was taken into consideration.

3 Frame of references

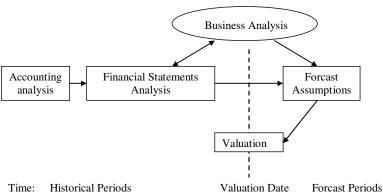
This chapter presents the frame of references that deals with and discusses the business valuation different phases. It includes business, accounting and financial analyses, forecast and finally a valuation using one or several different models.

3.1 Business valuation process

Business valuation aims to determine an intrinsic value, on the basis of existing information about a business and its environment. To achieve a reliable valuation, the appraiser should accomplish an accurate business analysis before determining the final value. The quantitative method that is always used to obtain the company's value, should be complemented by qualitative method, i.e. the appraiser should analyse the company, its industry, competitors, products, research, human resources, marketing etc. to understand how all these aspects come together to create the value for the business. Well done analysis reduces the risk for failures in the final value (Hult, 1998).

The quality of a company valuation according to Soffer and Soffer (2003, p.14) can be achieved by the accurate following of all links of the business valuation process. In comprehensive valuation process five phases can be distinguished, they are business, accounting, financial analyses, forecasting, and valuation. By the figure below the relationship between these phases is shown;

Figure 1 Business valuation process:



Source: Soffer and Soffer, 2003, p.14

There are different opinions about the business valuation process. Some theorists consider that such valuation processes will include a great number of variables which make the analysis very complicated to work with and use. Looking through all these variables can be time-consuming and to some extent redundant. The abnormal number of analysed variables can even cause bias in the final result. Therefore, many appraisers choose a defined number of variables to focus on which are determined by the type of business (Frykman and Tolleryd, 2003, p.102) In this paper all five phases will be described in brief with special focus on the last link in the valuation process i.e. valuation models, since this phase can never be disregarded in the valuation process.

3.2 Business analysis

The first phase in the valuation process is business analysis that aims to identify company's value drivers and understand how they are affecting the company. Furthermore the risk factors should be distinguished. The business analysis can be divided into two parts, internal and external analyses (Soffer and Soffer, 2003, p.42).

3.2.1 External analysis

It is necessary to look at factors outside the company that are not within the company's control and may have a large affect on its future development. For valuation purpose the analysis of industry and macroeconomic environment may be crucial.

3.2.1.1 Economic structure of the industry

Porter's systematic approach to analyse five competitive forces which affect industry returns can be used to analyse the economic structure of industry. At the centre of Porter's five forces framework there is an existing competitive rivalry. Other forces are potential entrants, substitute products, buyers and suppliers bargaining positions (Porter, 2004). According to Porter, every business' profitability is determined by the extent of rivalry within an industry. In most cases greater rivalry leads to lower profitability. Because there are many options of the same product and/or services, it is natural for human beings to choose cheaper alternatives. Companies are forced to make price discounts, expensive promotions and have a huge advertising budget to survive. Therefore, the appraiser must consider how the intensity of competition will affect the future of the business.

Whether the company can keep its potential profits is determined by bargaining power between the companies within the industry, their buyers and suppliers. When the products and services that customers purchase are not too differentiated and there are many suppliers the customers have a strong bargaining position. They can affect companies' return by demanding price reduction and quality improvement. Vice versa suppliers have a strong bargaining power to raise the prices or reduce the quality of their products if there are a few of them and there are not many substitutes for their products. In both above described cases the business profits and cash flows will be reduced.

Porter's five forces framework helps to understand the industry profitability and structure. It has to be mentioned that it is not always easy to accomplish the business analysis, since in certain situations it is difficult to determine the industry for valuated company. Nowadays there are a few companies which have one kind of activity. It is problematical because the wrong determination of industry leads to uncompleted business analysis and consequently to the wrong forecasting (Nilsson et al., 2002, p.86).

3.2.1.2 Macroeconomic environment

Company's future development may be significantly affected by the environment where the company has its activity. To understand the environmental influence on the company the STEP model can be applied. According to this model the company's macroenvironment can be divided into four aspects which are socio-cultural, technological, economical and political (Nilsson et al., 2002, p.92).

Socio-cultural influences on company's activity as principles, primary valuations, preferences, and behaviour vary from country to country. In the valuation process it has to be observed. In this context the appraiser should take into consideration the following questions (Nilsson et al., 2002, p.92):

- which districts dominate in the region?
- which attitude are there to companies products?
- how does the population structure look?

New technology results that new products and new market opportunities emerges. The appraiser should analyse how the target company follows the technological development. Is there any risk that the company's products become out of date? If so how the company's future profit will be affected (Kotler et al., 2005, p.107).

The economical factors as fluctuation of interest, inflation level and GNP growth can affect the company's profitability vitally, since the above mentioned phenomenon has direct influence on purchasing power and customer behaviour. The requirements in form of return on investment alter as well (Nilsson et al., 2002, p.93). Therefore, the economic conditions in the region have to be analysed and preferably both long and short-term.

The company's future market potential, to a large extent, depends on the political situation in the country. It is common that national political environment puts limits on company's activities by legislation about free competition, pollution of environment, marketing, price-setting and others. Vice versa can legislation benefit the company's development and create new business opportunities. When the appraiser analyses the political factors he/she should try to find the answer for the following questions (Nilsson et al., 2002, p.93):

- how steady is the political environment?
- how does the economic politics look?
- how will the leading politics affect the legislation that regulate and impose a tax on the company?

3.2.2 Internal analysis

Except for looking at external factors that could affect the company it is just as important to study the internal factors that affect the condition of the company. Examining the company's strengths and weaknesses help to understand its competitive advantages.

3.2.2.1 Value chain

An internal audit inspects all aspects of the company such as goals and strategies, products and services, product life cycle, pricing and differentiation, marketing, selling, supply chain, human recourses, and finance (Soffer and Soffer, 2003, p.54).

The appraiser should begin by understanding the company's strategy that has been chosen creating a good starting point to recognize the company as a whole. The strategy is the way the company wants to go for the possibility to compete successfully. Through the range of products and/or services the company can reach their goals. The appraiser should recognize them and find their future possibilities. There are several ways to examine the products and/or services of a company. One way is to analyse the product life cycle of each of the products

finding if they all are sustainable and will create future value and cash flow for the company (Soffer and Soffer, 2003, p.55).

Cost-effectiveness and/or differentiating of products are two ways in which the company can position its product. A successful strategy leads to less competition and consequently to increase returns (Porter, 2004). For valuation purpose understanding of company's positioning is important since it can affect company's future sales and costs that the appraiser has to forecast in his/her valuation process. Investment priorities and possibilities must also be evaluated thus making it more understandable in which direction the company could or wants to go.

Another factor important to the company's performance is marketing and selling strategies which are subject to a lot of the future sales and costs. Does the company have a large budget for commercial advertising or does it depend on the use of its customers to spread information about the company? Just as important is the supply chain which makes sure the company obtains everything it needs in production to distributing their finished products and/or services (Soffer and Soffer, 2003, p.57). Neither production works without its human resources which makes the company wheel go around. The appraiser must recognize the strengths and weaknesses of the workforce as they can affect a large part of the company, strong leadership is as important as faithful labour. The financial health is also a factor to audit and here the appraiser determines which capital the company has and has used and how effectively it uses them. The financial part will be examined in more detail in the text below.

The treatment of the above issues has been limited to highlighting the most important issues; there is a lot of literature that provides a more in-depth understanding of business analysis. SWOT analysis (company's strengths, weaknesses, opportunities and treats) is a common name for analysis which includes both the external and internal analyses described above (Kotler et al., 2005, p.58).

3.3 Accounting analysis

All valuation models are based on data from the business financial reports as income statements, balance sheets and cash flow statements. The first step before valuation for the appraiser is to inspect and study the company's financial data to better understand trends in business activities and any extraordinary activities that may have occurred in recent years concerning the economic environment of the business. The content of the financial report is influenced by the co-agency of regulators, managers of businesses preparing financial reports, and auditors controlling financial reports. The financial report describes the historical financial performance of a business. Therefore, it is important to analyse accounting to understand how the financial statements were prepared and how management's choices and estimates affected them. Thereafter, for valuation purposes, income statement, balance sheet and cash flow statement will need to be adjusted to create a better starting point for valuation. (Boger and Link, 1999, p.76)

3.3.1 Balance sheet

A balance sheet summarizes the financial position of a business at a point in time. It is the list of all the assets, liabilities and equity of the business as of a certain date (Boger and Link, 1999, p.76). The development of a balance sheet must follow certain accounting regulations and standards. The accounting standards include a recognition criteria or in other words rules

for which items on a balance sheet should be determined as assets and liabilities. Another important rule of accounting standard is valuation regulation that determines the amounts at which the assets and liabilities are to be reported (Soffer and Soffer, 2003, p.71). Managers have varying degrees of discretion in implementing accounting standards: recognition and valuation. There are three different accounting methods depending on what assets and/or liabilities they are applied to. They are selected, dictated and fact-dependent methods (Soffer and Soffer, 2003, p.71).

According to selected accounting method in certain situations the managers may apply different recognition criteria and/or select from two or more valuation methods. For instance, when it comes to the valuating of inventories there are some alternatives as LIFO, FIFO and weighted-average to choose from. Even depreciation on assets can be reported either as strait-line or accelerated method. Under these circumstances managers have a critical affect on the financial reports (Penman, 2003, p.559). There are situations when the managers have specific recognition criteria and a single valuation method to use in accounting. For instance, debt is accounted under the effective interest rate method. According to the dictated method managers' influence on reported results is limited. Fact-dependent method regards the situations where the selection of particular recognition criteria and valuation method depends on particular facts. For instance, there are three different accounting treatments for marketable securities, but a particular method is required for a particular set of facts. Theoretically, in such situations the managers have no choice since the facts dictate the accounting method. Thus, some discretion remains for instance in determining whether the criteria that require a definitive method are met.

Not all asset and liabilities which the company posses can be reported on the balance sheet. This is because they do not fulfil the recognition criteria according to accounting standards. The common assets that do not appear on a balance sheet are company's human resources and brand name which have a great value for company's future development. Example for liabilities of this type is employee stock option.

The appraiser must understand the accounting rules and how they were applied and also consider unrecognized assets and liabilities, both of which can have a significant value and thus affect the final value of the company.

3.3.2 Income statement

In the income statement the company presents the financial results of operations for a reporting period (Boger and Link, 1999, p.74). The income statement consists of five classes of items: revenues, expenses, gains, losses and special items. The information about these classes is helpful in forecasting, because it relates to whether the item is likely to recur.

Revenues and expenses include increase/decrease in net assets that result from selling/producing goods or services. They relate to the normal operations of a company and generally recur every year. Gains and loses, like revenues and expenses, include increase/decrease in net assets. However, they do not relate to the normal operations of a company and they are not expected to recur to the same extent every year. Special items include extraordinary items as for instance losses from natural disasters, changes in accounting principles, and discontinued operations. Special items are generally nonrecurring. Analysing of these classes the appraiser can receive better assessments of company's future profitability (Soffer and Soffer, 2003).

Defining earnings quality is a purpose of accounting analysis of an income statement. Earnings quality can be defined by an appraiser in different ways. Earnings quality can mean conservative methods, earnings that are not manipulated, and exclusion of nonrecurring items.

Conservative accounting methods aims to delay recognition of assets and accelerate recognition of liabilities or provide lower asset valuation and higher liability valuation. Applying a conservative accounting method leads to lower income in early years and increased income in later years. For instance, applying of accelerated depreciation increases the depreciation amount in the early years of an asset life but lowers them in later years. Consequently it causes a lower income early and a higher income in future periods as the depreciation charges are smaller (Penman, 2003, p.558).

The other factor that determines the good-quality earnings is non-manipulated estimations of earnings. However, it is difficult to verify for a particular company if the estimations, such as for the allowance for uncollectibles, are unbiased. At the same time, it is difficult for the appraiser to judge if one depreciation method is more manipulated than another. That is why the appraiser should try to redo any management manipulation before using historical data (Soffer and Soffer, 2003).

The quality earnings should include just items expected to recur since they are more useful for forecasting. The gains and losses can be classified as none recurred and the objects for exclusion. However, here the appraiser must be careful to consider each gain and loss since they can recur period after period and have a significant affect on a company's future performance.

3.3.3 Cash flow statement

The reasons for the changes in the company's cash flow from the beginning to the end of a period are described in the cash flow statement. Commonly in the cash flow statement the cash flow is divided into three classes: cash flow from operations, cash flow from investing, and cash flow from financing. Cash flow from operations includes the items which are associated with an operating activity as producing and selling of the company's products. In other words the cash flow from operations relates to the determination of net income. Cash flow from investing relates to activities in which the company acquires long time assets or investments securities. Cash flow from financing regards borrowing money from creditors and repaying debt (Stickney, 1999, p.43).

Quality issues for cash flow statement are less problematic comparing with income statement and balance sheet since cash flow is not influenced by accounting choices and estimations. The cash flow statement shows a reconciliation of differences between income and the change in cash. Therefore, the reconciling items on cash flow statement may be a useful instrument for identifying contingent earnings quality issues. As an example, working capital can be affected by large negative reconciling amounts which could indicate that earnings are being held up through accruals management, resulting in increases in the reported values of noncash assets or liabilities (Soffer and Soffer, 2003, p.78).

Since the financial statements are key input in business valuation, it is crucial to review the quality of the reported data. Accounting analysis aims to understand how accounting

regulation and managers may have influenced the financial statements and thereafter make appropriate adjustments for further valuation.

3.4 Financial statement analysis

Financial statement analysis is an important part of the valuation process. By studying a company's financial statement the appraiser can receive a host of information about the company. An appraiser's financial statement analysis is based on historical information provided by financial statements which is used to calculate ratios. These ratios help an appraiser to understand such things as the company's profitability, growth, resource needs, and relationship among different financial statements items. This information combined with the market outlook received from business analysis enables an appraiser to forecast a company's future economic performance and consequently to value the company. There are many ratios that are commonly used by an appraiser. They can be divided into three types: operating ratios, credit ratios, and investment ratios.

3.4.1 Operating ratios

Operating ratios are helpful in understanding the profitability and capital efficiency. Therefore, it will help forecast earnings and cash flow of the business operations. If the estimated ratios deviate significantly from the expected level, more precise analysis should be done to determine the source of problem. In Table 1 calculations of the most meaningful operating ratios are presented.

Table 1: Operating ratios

| Ratio | Definition | Unit |
|------------------------------|----------------------------------------------------|-------|
| Revenue growth rate | <u>Current year revenues – Prior year revenues</u> | % |
| | Prior year revenues | |
| Gross margin percentage | Gross margin, | % |
| | Revenues | |
| Operating margin percentage | Operating income | % |
| | Revenues | |
| Days receivables outstanding | Average accounts receivable balance | Days |
| | Revenues/365 | |
| Days payables outstanding | Average accounts payable balance | Dove |
| | Cost of sales/365 | Days |
| Inventory turnover | Cost of sales | Times |
| | Average inventory balance | |

Source: adjusted Soffer and Soffer, 2003, p.102

Revenue growth rate measures the expansion or contraction of the company. Gross margin percentage is a key measure for company's performance; it shows the amount per currency of revenues available to pay other costs after the sold product costs have been paid. Operating margin percentage measures operating profitability; this percentage shows the profit from operating before taxes and financing costs. In excess of preceding ratios which are based on the income statement items, an appraiser has to understand the company's working capital usage. This can be accomplished by studying the three main components of working capital. The three final ratios in the exhibit interpret these components. Days receivables outstanding ratio shows how well the company is collecting its receivables. Days payables outstanding is calculated in a similar way and shows how the company is using its available trade credit to its benefit. The inventory turnover measures a company's efficiency. This ratio varies greatly by industry (Soffer&Soffer, 2003, p102).

3.4.2 Credit Ratios

Credit ratios measure a company's ability to repay obligations on a timely basis. The analysing of these ratios is especially meaningful for valuating the company in the matter of extending credits to the company. Company's ability to repay its obligations depends on its general economic health, its cash-generating abilities, and its credit commitments. The first two mentioned are reviewed by operating ratios. The company's credit commitments are the subject of credit ratios. In Table 2 the common credit ratios are represented.

Table 2: Credit ratios

| Ratio | Definition | Unit |
|-------------------------|-----------------------------------------------------|--------|
| Current ratio | Current assets Current liabilities | Amount |
| Quick ratio | Cash and short-term investments Current liabilities | Amount |
| Debt to capital ratio | Debt Debt+ Minority interest+ Equity | % |
| Interest coverage ratio | Earnings before interest and taxes Interest expense | Times |

Source: adjusted Soffer and Soffer, 2003, p.103

The current ratio measures company's liquidity i.e. ability to pay short-term debts in a timely manner. However, if the current ratio is extremely high it can indicate an inefficient use of working capital. The quick ratio is like the current ratio; the difference is that the ratio numerator includes only cash, cash equivalents, and short-term investments. It measures the company's ability to pay its obligations quickly. The company's financial leverage, the proportion of capital obtained from debt financing is measured by the debt to capital ratio. The interest coverage ratio measures the number of times expense has been earned. If the interest coverage is less than one then it indicates that the company's earnings are not even enough to pay its interest requirements.

3.4.3 Investment ratios

Investment ratios measure a company's total performance and are used along with the operating ratios, to visualise potential investment. Many of the investment ratios combine information from the income statement and balance sheet. Table 3 presents the common investment ratios.

Table 3: Investment ratios

| Ratio | Definition | Unit |
|-------------------------|---------------------------------------------------------------|--------|
| Price-to-earnings ratio | Stock price Diluted earnings per share | Amount |
| Market-to-book ratio | Stock price Book value per share | Amount |
| Return on capital | Net income + aftertax interest expenses Average total capital | % |
| Return on common equity | Net income Average common equity | % |

Source: adjusted Soffer and Soffer, 2003, p.105

Price-to-earnings ratio (PE) explains how many times the yearly profit of the company is valued on the market or expressed in another way how much the market is ready to pay for

every penny in profit (Holmström, 1999, p.152). The main purpose for the PE ratio is to estimate how expensive a share or a whole company is on the market. However, the appraiser using this information should be aware that PE ratio depends on many things for instance expected earnings growth, capital structure, and accounting methods. The other investment ratio, market-to-book ratio represents the information about the value of the company relative to the recorded value of its net assets. A high ratio can depend on that many valuable assets are accounted at historical cost and many are not reported at all. Therefore, the market-to booked ratio depends to a great extent how much the balance sheet deviates from the market value of the company's assets. Both return on capital and return on common equity ratios measure return on investment. The first ratio is return given to all capital suppliers and the other ratio is given only to shareholders. For companies with little leverage, return on capital and return on equity ratios are usually close to one another.

Analysing ratio is the inextricable and important part of the valuation process. However, it requires the appraiser to consider the effects of accountings methods, estimates, nonrecurring items, business environment changes and so on. According to these aspects, sometimes the certain adjustments should be done before the estimating of ratios. Interpreting ratio meaning in the financial analysis the appraiser must take into consideration all these aspects.

3.5 Forecasting

In this phase of the valuation process the appraiser uses all the information collected about the company to predict the economic performance in the future making a so called proformamodel of the balance sheet and income statement. This supposes that the appraiser has done a comprehensive work about the company's background and possibilities. The items to be forecasted depend on the selected valuation method of income-based approach (Soffer and Soffer, 2003, p.16).

It is important that the proforma is logical and coherent to existing accounting praxis. For instance, items on the balance sheet must be balanced i.e. assets are equivalent to equity and liabilities. The proforma is often based on turnover and other items on income statement are a function of the turnover. For instance the costs are in proportion to estimated turnover (Nilsson et al, 2002, p.186). The appraiser must decide to use historical performance or estimated future performance as a starting-point for the forecast. The future performance should determine a company's return value while the historical performance is an appropriate base for the future forecast (Arkivator, 2000, p.45).

The forecast period which should be predicted varies with how easy it is to describe the company's future development and how available information about the company is. For some companies only a short time period is possible to forecast that is three to five years because of big uncertainty. For others, example stable companies, a longer time period could be determined. According to Hult (1998, p.35) the normal period to forecasting should represent a time period of seven years. Although the time period must be adjusted for which type of company that is being valuated and as longer the prediction is as more uncertain and harder the items are to estimate (Hult, 1998, p.35).

It is also important to make an analysis and try the possibilities on the evaluated forecasted values. They should be compared with the historical development on some points like growth rate, gross marginal, economic cycle, investments and depreciations and so on (Arkivator,

2000, p.41). Nowadays there are many techniques which facilitate estimation of the value, for instance calculation programs like Excel. However, the forecast can not be better than the assumptions it is build on (Nilsson et al, 2002, p.186).

3.6 Valuation

All of the above mentioned phases determine the input values for the calculation of a company's value. There are lots of models for estimating a business value and this paper will examine the three most common mentioned in literatures and most frequently used by appraisers; asset-based approach, income-based approach, and market-based approach (Lundén, 2007, p.23). The ones not mentioned are for instance economic value added (EVA) and other standardize models that have not reached a broad arena of usage.

3.6.1 Asset-based approach

The asset-based approach has many other common names such as the asset accumulation method, the net asset value method, the adjusted book value method and the asset build-up method. The purpose of the model is to study and revaluate the company's assets and liabilities obtaining the substance value which also is the equity. The substance value is thus estimated as assets minus liabilities (Nilsson et al., 2002, p.301). To be useful the substance value must be positive, if liabilities are bigger than assets there is no use of the method (Lundén, 2007, p.22).

The basic idea is that the company's value could be determined by looking at the balance sheet. Unfortunately, the values on the balance sheet can not be used because the book value seldom is the same as the real value, except for the case of liabilities that is often accounted in real value. The problem is when following the principles of accounting, assets often are depreciated over their life expectancy and when the asset-based approach is applied the real value for these assets must be determined. In this case the real value is equivalent to the fair market value that is value of the asset on a free market.

There are two general methods for estimation of the substance of assets, either collective revaluation (capitalized excess earnings method) or individual revaluation (asset accumulation method) (Pratt et al., 2000). This section of the paper will focus on the individual method where all the company's individual assets and liabilities book classes are analysed and valued separately. The appraiser must determine before valuating for which purpose the valuation is done, is the consideration as part of a going concern or is the company being liquidated. The most common purpose of valuation is as a going concern (Pratt et al., 2000, p.314).

3.6.1.1 Balance sheet adjustments

The asset-based approach thus proceeds from the balance sheet with its historical cost basis and the often applied precautionary principle. As mentioned the book value often is different from the market value or the liquidation value so the appraiser must make certain adjustments according to the purpose of valuation. Most common to adjust is the assets. If the liquidation value is estimated it is often lower than the book value but if a market value is applied it is often higher than the book value.

The items to valuate are those on the balance sheet; financial assets, tangible personal property, real estate, intangible real property, intangible personal property, current liabilities,

long-term liabilities, contingent liabilities and special obligations (Pratt et al., 2000, p.310). The appraiser should not forget off-balance sheet assets, business items which are not related to the core operations and tax-adjustments (Lundén, 2007, p.59). The practical application of the asset-based model can be as following (Pratt et al., 2000, p311)

- 1. Obtain or develop a cost-basis balance sheet.
- 2. Determine which assets and liabilities on the cost-basis balance sheet require a revaluation adjustment.
- 3. Identify off-balance sheet intangible assets or contingent assets that should be recognized and valued.
- 4. Identify off-balance sheet or contingent liabilities that should be recognized and valued.
- 5. Estimate the value of the various asset and liability accounts identified in steps 2 through 4.
- 6. Construct a value-basis balance sheet, based on the indicated values concluded during steps 1 through 5, and quantify the subject value.

There is a lot of literature on how the different assets and liabilities should be adjusted but this is not taken into consideration in this paper.

The model can be applied for valuing small private companies where the cash flow is difficult to forecast (Nilsson et al, 2002, p.301). It is also practical when assets are expected to be a big part of the company value, for instance, companies like real estate, forestry, and investment since market value of these companies' assets is often easy to estimate (Lundén, 2007, p.23). Vice versa the asset-based approach is not appropriate when the company assets consist mostly of intangible assets. Additionally the model can be applied when a company shows a negative result. Using the asset-based approach the appraiser could evaluate if the company has a value despite the loss (Lundén, 2007, p.23). Finally the value obtained by the model could be used as a comparing value with the value obtained by other models, not as a definite value.

3.6.1.2 Advantages of asset-based approach

The main advantage of the asset-based approach is that it is relatively simple to apply and does not to a large extent require guesswork and assumption (Lundén, 2007, p.23). Results of the model are presented in a traditional balance sheet format which should be familiar to anyone who has ever worked with basic financial statements. Doing this the model divides the value in different assets and liabilities showing exactly which assets contribute economic value to the company and by how much. Another advantage is the usefulness when negotiating the selling or purchase price since it is known exactly how much the assets and liabilities of the company are worth. The model requires the appraiser to understand the microeconomic dynamics of the subject company (Pratt et al., 2000, p.337). The asset-based approach is the only possible model to be applied when buying a company and thereafter planning to wind it up.

3.6.1.3 Disadvantages of asset-based approach

The asset-based approach has a number of disadvantages. Since the company's assets are used with different efficiency the main disadvantage of the model is that it does not consider this fact. The model does not consider the surplus value created with the assets in possession, in other words it does not observe the synergy effect and it does not consider the business idea

and possibilities (Lundén, 2007, p.23). Taken to the extreme it can be very expensive and time consuming, depending on the need of specialists in several asset valuation situations (Pratt et al., 2000, p.339). Applying the asset-based approach requires full access to all of the company's internal information (Holmström, 1999, p.138).

3.6.2 Income-based approach

In literature the income approach is commonly called Discounted Cash Flow (DCF) (Soffer and Soffer p.130). It is accepted as an appropriate method by business appraisers. This approach constitutes estimation of the business value by calculating the present value of all of the future benefit flows which the company are expected to generate. Mathematically it can be expressed as the following formula:

$$PV = \sum FV / (1 + i)^n$$

Where,

PV = present value

FV = future value

i = discount rate reflecting the risks of the estimated future value

n = raised to the nth power, where n is the number of compounding periods

Source: http://www.hogefenton.com/article_valuation.html

As formula shows, according to the income-based approach to determine a business value the appraiser must always make an estimation of the elements below (Nilsson et al.,2002, p.47):

- Estimation of business life expectancy.
- Estimation of future income flows that a business will generate during its life expectancy.
- Estimation of discount rate in order to calculate the present value of the estimated income flows.

There are several different models of income approach depending on which type of income flows that will be discounted. The common benefit flows that are usually used in the income-based approach are dividends, free cash flows and residual income. The dividends and cash flow are two measures which refer to direct payment flows from a company to shareholders and the residual income measure has focus on return which is derived from company's book value and based on accrual accounting. The differences among the models are in how the calculation is done and what factors about the company are highlighted in the process (Soffer and Soffer, 2003, p.134). Given identical assumptions all three forms should yield the same value since all three models are well-founded i.e. based on the same technique. The choice of a model will depend on the appraiser's confidence in projecting the future income flow, the purpose of the valuation and the type of company (West and Jones, 1999, p.276).

DCF presents the future profits and has focus on cash flows that the company will generate for its owners. DCF is often interpreted as a sum of cash flows that the company can give to its shareholders without refraining from investment, which is a guarantee for future growth. As a base to estimate the business value the free cash flow is often used in DCF model. Free cash flow is the cash flow which remains after fulfilling all financial liabilities including the interests and realizing all necessary investments (Nilsson et al., 2002, p.49). The starting point for calculation of free cash flow is the company's operating profit before depreciation but

after taxes. Thereafter the operating profit will be reduced by investment in operating working capital and fixed assets.

The forecasting of future free cash flow for certain year normally consists of following components (Sveriges Finansanalytikers Förening, 2000, p.31):

- Revenue
- x operating margin before depreciation
- = operating profit before depreciation, interest and taxes(EBITDA)
- - taxes (on operating profit after fiscal depreciation)
- = operating profit after taxes but before depreciation (NOPLAT)
- +/- change in operating working capital
- - net investment in current, intangible and tangible fixed assets including goodwill
- = free cash flow

If the company's income statement includes items not related and required for core operations the operating profit which is the base for business valuation should be adjusted (Boger and Link, 1999, p.17). For instance, the motor vehicle industry owns several real estates. All revenues and expenses which are related to the real estate should be excluded and appraised separately. For valuation purpose the other adjustments in the financial reports should be done if any items deviate from standard. The next step in valuation process is to determine the appropriate rate that forecasting future cash flows will be discounted at, to the present.

3.6.2.1 Discount rate

To determine the business value by estimating the present value of the expected future returns on business the appraisers use various discount rates depending on valuation model. The discount rate represents the requirements on return and consists of two elements. The first is the risk-free rate, which investors could receive from practical risk-free investment such as a government bond. The other element is the requirements in terms of a return on investment/equity as compensation for the relative level of risk with investment. The requirement on return can vary strongly depending on risk level connected with contingency of forecasting in valuation process. None, even managers can with certainty say what will be company's next year performance (Nilsson et al., 2002, p.225).

The risk which is connected with investment in business is of operating and financial nature. The operating risk is related to the risks that exist in business for instance the sensibility for fluctuation in business activity, the changes in market situation, the threat of new rivals and trend fluctuations. Small businesses are more exposed for such risks since they are not as diversified as large companies and furthermore they are often depending on one person usually the owner or a few managers (Damodaran, 2002, p.72).

The financial risk is related to debt ratio. A high debt ratio signifies the high risk for payment problems. Such problems can impede business growth and even lead to liquidation. The possibility to sell a business or a certain part of it promptly is important to include in the determining of a discount rate. These aspects lead to subjective assumptions about a company's risk. Consequently appraisers reduce the risk premium with one percent when the large mature company is valuated and on the contrary when the small businesses are valuated the risk premium increases considerably often with 3-5 percent (Sveriges Finansanalytikers Förening, 2000, p.15).

3.6.2.1.1 Capital Asset Pricing Model (CAPM)

CAPM is one method to determine requirements in terms of return on equity i.e business specific risk which is part of discount rate. The method depicts the risk as a relationship between the share price historical evolution and the stock market index. According to CAPM the risk premium on equity can be determined by the following formula (Brealy et al., 2007, p.304):

```
r_e = r_f + \beta(r_m - r_f)
```

Where,

 r_e = Expected return on equity

 $r_f = risk$ -free rate

r_m=expected return on market portfolio

 β = Beta of asset

(r_m-r_f) risk-premium for investment beyond the risk-free rate

Three inputs are needed to use the capital asset pricing model. These inputs can be estimated as follows (Damodaran, 2002, p.71):

- The risk-free investment is defined to be the investment for which the investors know the expected return with certainty for the period of analysis
- The risk premium is the premium demanded by investors for their investments instead of making a risk-free investment.
- The beta, defined as the covariance of the asset divided by the market portfolio, measures the risk added by an investment to the market portfolio.

There is a difficulty to estimate the cost of equity using CAPM when it comes to valuation of non-listed companies since there is no beta for these companies. The possibility to use the CAPM to estimate the requirement on equity for non-listed companies is to find an equivalent in all aspects company which is listed. The cost of equity obtained by CAPM is often used to estimate the weighted average cost of capital (WACC).

3.6.2.1.2 The Weight Average Cost of Capital (WACC)

WACC is commonly used as discount rate in DCF model. WACC is the weight average of the after-tax cost of the different components of financing used by company both equity and debt. Here should be noticed that the weightings will be based on fair values not book values of debt and equity. Mathematically it can be expressed as following (Frykman and Tolleryd, 2003, p.72):

WACC =
$$r_e (E/(E + D)) + c_d (1 - t)(D/(E + D))$$

Where,

 $r_e = cost of equity (calculation see CAPM)$

 $c_d = cost of debt and$

t = corporate tax rate

E= equity

(D/(E + D))= proportion of debt to total capital.

(E/(E + D))= proportion of equity to total capital

As formula shows the WACC is a way to infer the appropriate discount rate for the expected cash flows which relate to the business operation. The weights in the calculation give a sum of 100% and since the debt and equity together are the entire requirement on the business operation, the combined risk of the debt and equity equals the total risk of business operation (Soffer and Soffer, 2003, p.156).

3.6.2.2 Advantages of DCF model

A business valuation based on discounted cash flows has some advantages compared to the other business valuation models. DCF is the most used business valuation method since it can be applied to almost all companies irrespective of type of business. DCF is superior because it requires a good understanding of the underlying business, the value-creation opportunities and the key value drivers of the company. DCF estimation focus on the business current and future expected rather than historical profit. All owners/shareholders expect return on business regardless of size of assets (Lundén, 2007, p.25). The variables of the valuation model are flexible for changes in a business environment. According to this model one business does not review just like any other business in its industry. Another advantage of DCF is that it divides more effectively the operating and financial decisions of a company. Since DCF values the whole company's operation, irrespective of how it is financed, rather than focusing on the equity-financed portion, the companies with different capital structures can be easier compared with one another (Barker, 2001, p.197).

3.6.2.3 Disadvantages of DCF model

In spite of advantages the DCF has series of disadvantages. The main disadvantage is that the result calculated by DCF can be easily manipulated (Damodaran, 2002, p.4). Its result is very sensitive to small errors in key input variables. DCF is based on many variables which require assumptions about the company's future performance. It is not either easy to determine the reasonable discounted rate. Just few percentage point modification of the discounted rate causes great changes in the final value (Lundén, 2007, p.25). Particularly there are many difficulties to apply DCF in the context of valuing non-listed companies, small, ownermanaged, and/or not-well-established business. The forecasting of future income flows and the selection of a discount rate are often highly speculative and subjective. It is partly because the companies' future development is rather uncertain and there is no beta for non listed companies, which leads to difficulties in estimating the cost of equity which is one component in discounted rate (www.hogefenton.com).

Because of the mentioned disadvantages, DCF approach requires careful use. If the requirements of return spread is not constant over time then the WACC must vary also (Barker, 2001, p.197). It is inferred from this even the most detailed and proper DCF valuation cannot provide a precise estimate of value.

3.6.3 Market-based Approach

The market approach determines company value by comparing one or more aspects of the subject company to the similar aspects of other companies which have an established market value (www.hogefenton.com). There are two methods to compare companies either using publicly traded companies' information or merged and acquired companies' transaction

information, or both as guidelines for the valuation. The difference is that the first one, publicly traded companies, develops the value based on prices at which stocks of similar companies are traded in a public market. The second direction, merged and acquired companies, uses transfers of sold, often 100 percent ownership changes, of similar companies (Pratt et al., 2000).

The best comparable company is one with cash flows, growth potential, and risk similar to the company being valued (Damodaran, 2002, p.462). It is of course impossible to find exactly the same company. Selecting a company the appraiser has to decide; how many companies to use, which extent of time to be used, and which value measures to use and so on (Pratt et al., 2000, p.233). According to Pratt et al (2000, p.253) common errors are to find and search for a similar industry, failure to make appropriate financial statement adjustments, multiples that mismatch numerator and denominator, and simple reliance on average of guideline company multiples without comparative analysis.

3.6.3.1 Publicly traded companies

The most commonly used object for comparison is publicly traded companies (Nilsson et al., 2002, p.59). The reason is that information is easy to find and value as the companies are sold on a day-to-day basis. The value is determined by studying how the market prices similar companies. The valuating procedure from price multiples and the most common used multiples are the already mentioned price-to-earnings ratio and market-to-book ratio. The reasons for their popularity are that they are well-known and uncomplicated to use. But also price-to-sales ratio is a common used multiple that is; market value of equity/sales (Damodaran, 2002, p.455). This ratio shows how much each sales unit is valued on the market. The price to sales ratio varies widely across sectors as there are different profit margins in each because their sale varies. The ratio can not be influenced by accounting rules but negative is that it does not consider costs (Hansson et al, 2007, p.226). These three are the most widely used but there exists many others for instance price to cash flows, price to dividends and market value to replacement value (Damodaran, 2002, p.18).

3.6.3.2 Merged and acquired companies

When using merged and acquired companies the biggest problem appears to be obtaining the information. Often the price of the transfer is private and so harder to find. To solve this problem the appraiser could look at the trading company's balance sheet before and after the trade and this way see which assets have changed. Another solution is to pretend to be a potential buyer, getting the price, but using this method the appraiser will only obtain the starting price and not the ending price (Lundén, 2007, p.116).

Except for finding the price, the transfer must be useful and representative. There could be a lot of things separating the different objects for isntance means of payment, point of time, location of the business, financing possibilities, trade conditions, synergies, and the business form (Lundén, 2007, p.117). These make it impossible to use the information without adjustments (Pratt et al., 2000, p.260).

3.6.3.3 Advantages of market-based approach

Market-based approach is superior since no conjectures need to be done. The model captures the current mood of the market and it is often simpler to use than the asset-based and income-based valuation models (Lundén, 2007, p.26). The model also requires less information than the discount-models (Nilsson et al., 2002, p.62). Therefore, the approach is easier to understand and present to clients comparing to the DCF (Damodaran, 2002, p.453).

3.6.3.4 Disadvantages of market-based approach

The biggest disadvantage is to find adequate comparing objects. It can be hard to find any transactions to compare with and every trade has its own condition (Lundén, 2007, p.26). Furthermore, the comparing prognosis is often based on a short time basis looking at the present situation, resulting in losing long-term trends. Moreover it is difficult to reflect all the elements influencing the value, for instance risk and debt rate for the comparing objects. When using the market it can not be relied on that the company objects are correctly valued. They can be either over valued or under valued thus resulting in the subject company to be either over or under valued (Damodaran, 2002, p.454). It is problematic that most of the price multiples are based on accounting information making it vulnerable to manipulation (Damodaran, 2002, p.454) and presume a profound accounting analysis (Nilsson et al., 2002, p.61).

4 Empirical findings

The empirical findings are based on four interviews, three with professional appraisers and another with a professor active in the studied subject. This chapter presents their view on the business valuation process.

4.1 Valuation process at accounting bureau

PricewaterhouseCoopers (PwC) is one of the largest accounting bureaus in the world. In Sweden their representative is called Öhrlings PricewaterhouseCoopers. PwC provides industry-focused services, such as business valuations, for public and private clients. For this study a representative of PwC's corporate finance section was interviewed. He has four years experience working with business valuation. A short period of time before beginning at PwC he worked with auditing which he finds was valuable knowledge to have when working with valuation. Working assignments of corporate finances section consist of business valuation, financial due diligence, advisory, business sales, and analysis for all kinds of business, big and small, and not only limited companies. There are many purposes for business valuation at PwC, for instance buying or selling, introduction on stock exchange and transfer of property to the younger generation. Although the valuation process overall looks the same for every purpose according to the interviewed person.

The valuation process at PwC begins with a start-up meeting at the company being valuated where information about the purpose and general information about the company is exchanged. The next step is to collect all existing information and knowledge about the company for the possibility to make an analysis about it. To make the analysis PwC studies and estimates external factors like market, competitors, trends but also internal factors like the company's organisation and personnel. The analysis also includes answering certain key questions such as what the company is good at, what makes the company successful. Strategic analysis is the umbrella term for these movements and identifies the value created by the company.

Except for strategic analysis PwC performs a financial review looking at the company's financial history, budget, forecasts, and investment needs. This also includes making statement adjustments, for instance non recurring items as insurance compensation and disposal of assets and activities not related to core operations.

For every specific company PwC carries out a risk assessment using the risk-free interest of ten year maturity government bonds as a starting-point then adding a risk premium of the company's liquidity risk and market risk. Liquidity risk is associated with the company's character; if it is listed or not. When it comes to the size of markets, risk is determined, for instance, by the extent of rivalry on the market the company operates, legal disputes, using material harmful to the environment, and dependence of a key figure in the company as owner or CEO.

When all necessary information about the company and its environment is collected and all the risks are identified it is time for the valuation. For this matter PwC uses Profil, a valuation-analysis-program where simulations can be made. Usually PwC makes a simulation five years forward in time with data based on history five years back in time. Using the historical data PwC is able to confirm if there is a meaning with the company's own

forecasting, which their valuation is based on. However, the interviewed person emphasises that they are critical to what the company's management believes about their future development.

PwC uses income approach valuating but reinforces this with the market approach. The value received by income approach is compared to value obtained by asset approach to visualize the contingent differences. Usually the balance sheet does not reflect the company's value from operations. Using the market approach PwC compares transactions of similar companies if these have been made but they also compare the market value of similar companies. If there is sufficient difference between the market value and the estimated value they try to find the explanation for it.

Free cash flow is used as a base for the income approach because, according to the interviewed person, it provides a fair picture of the company. The discount interest is determined by the required rate of return on equity and debt. The rate of return on equity for non-listed companies is hard to determine. PwC uses the beta-value of listed companies which is adjusted and thereafter weighed according to the prerequisites. High insecurity requires higher rate of return. Another significant thing is to have knowledge about the framework of regulation that influences the accounting of the business. However, it does not affect the cash flow estimation much but it is important to be critical when receiving the financial reports trying to valuate the company to a market value though it can be hard to identify such a value.

The biggest hurdle in the valuation process is, according to the interviewed person, the valuation being based on forecasts and that is why there is always a risk that forecasts differ from the reality. Valuation is not an exact science. The best way to minimize risks of defects is by using historical data which makes the forecasts well supported. However, forecasts still require assumptions about growth and profitability. A usual assumption is that of working capital binding which is important as it is the basis of the cash flow estimates. PwC has the benefit of being a world company that possesses competence and experience making it easier to find an answer to any special question and thus making it easier to jump over the hurdle.

PwC evaluates its valuation outcome in different ways depending on the assignment. Since PwC often has the mission to sell they could use this way to balance the appraised value with the final market price. If there is a variation, for instance because of demand or many speculators where bidding determines, the final price in most cases is more than the appraised value. It because the appraised value was obtained by a going concern approach without consideration about possible synergy or bargain power which could affect the market price.

During the interview PwC's valuation guide book "Företagsvärdering – översikt av området baserat på erfarenhet" was received. The respondent referred to this as an additional source for information about the business valuation process at PwC.

4.2 Valuation process at fund company

Collecting further information and a different point of view about valuation a fund company was visited. The visited company wanted to be anonymous and therefore, it will simply be called fund company. Two employees were interviewed simultaneous, they have 4,5 and 3,5 years of valuation experience respectively. Their work assignments consist of the company's transactions and strategic advisory including business valuation in the initial public offering (IPO) process. The valuated companies vary in size and degree of maturity.

There are different levels of difficulty when valuating a company. Companies with a few years on the market are hard to forecast because there is little historical data about the companies performance. The research industry for instance medtec-companies are the most difficult to valuate because they are producing new products that have no resembling products on the market and they usually do not generate positive cash flow during the development period. That is why it is difficult to find an appropriate method.

The valuation process at fund company begins requesting forecasts from the management and company owners thereafter the numbers are used in a cash flow analysis. Fund company emphasizes the importance of consideration of the company's forecasts with "a pinch of salt" because it is in the client's interest to be high valuated. The high value quest originates from the desire to keep as much of the stocks as possible and avoid being diluted. The forecasts are in other words arbitrary and it is significant to secure these with as much detailed information as possible. The company's action plan is evaluated, environment and presumption for company's development are studied furthermore there is discussion with the management to motivate their value. Fund company's clients want as mentioned a high value but fund company tries to achieve a lower value because they want the company to evolve positively after being introduced on the stock exchange. After discussions with the client a fixed price is decided in the IPO.

For most of the time they use two valuation methods in combination, income and market based approaches, because according to fund company they are the well-recognized methods. The income approach has a more central role while the market approach is used as an aiming symbol but if these two approaches estimate two different values the market approach is prioritized if a company similar to the clients can be found to compare with.

Using the income approach fund company calculates the discount interest to use in the cash flow model. The start-point is the risk free interests of the ten year maturity government bonds which are 5 percent pursuant the interviewed persons. Thereafter they add market risk premium determined by fund company of 4,9 percent which in the present situation is considerably high. The usual used beta value is 1 but depending on the company, it may vary, for instance, beta of 2-2,5 is used for smaller companies. The income-based approach and its discounted cash flow model are built on own assumptions and judgments which could affect the value markedly with only small marginal differences. The model gives opportunities to affect the value by gearing it towards a wished value.

Using the market approach several multiples are used to compare values for valuated company, for instance they are the enterprise value which they use in relation to different income statement items like EBIT, EBITDA and turnover. The advantage of this approach is the possibility to directly find and look at similar companies' transactions. However, when the conjuncture fluctuates the approach could be fallacious and in these situations the cash flow model provides a better result. Another disadvantage is that the model is only useful if a similar company could be found. There is an advantage to use both valuating methods because it creates a better foundation for the final value. The final result is compared with similar listed companies in the same industry using EV/EBIT, EV/Sales and PE.

When it comes to the control if the value has been set at the right level they have the opportunity, in case the company becomes listed, to follow the quotation development but at

the same time they must regard all factors that might have affected the quotation development. Business valuation is a subjective process.

4.3 Valuation process at bank company

To obtain information about the valuation process from the perspective of a bank Handelsbanken was visited, where there was a chance to meet a person who has been active in the business for almost 9 years. At the moment he is working as a project manager with the Handelsbanken section which deals with consulting services to companies. The section handles smaller and medium sized companies, non-listed and mostly family owned companies with revenue from 30 million to a few 100 million SEK. There is no focusing on special industries but it is preferable to avoid the companies which are difficult to valuate such as biotech and medical.

The valuation process at Handelsbanken can be described as follows by the interviewed person. In order to give corporate management/owners a comprehensive view of what the company can be sold for they always value the company before receiving assignment. Business valuation is a non exact science since it requires considerations about input values. The business valuation is achieved early in the process and afterwards it is not dealt with much more. The valuation result serves as theoretical base for further discussion with the client.

The valuation process starts with the collection of information about the company. After it they write a document where the description of the company and its parts and how they work can be found. There requires quite a bit of work with analysis about company's strength and weaknesses and other aspects which can affect company's final value. It requires a lot of work to inspect the company's financial statements and query why it looks the way it does.

Handelsbanken's analysis is based on both internal and external information. They have access to all internal information and have a lot of discussions with the owner and management of the company. And of course they search for information about the company from other sources such as the internet search engine Google. They even make use of the sector analysts' help which work for Handelsbanken and have knowledge about listed companies and their industries. This information is used to compare the target company with equivalent listed companies.

The collected information/variables act as the starting point. Using given revenue growth rate and operating margin percentages Handelsbanken is able to make, with the help of its own excel models, a forecast for the valued company's future performance. When the profit and revenue growth rate are estimated it is possible to view how the working capital and investment requirement will develop, and after that the cash flow is calculated.

There are two difficulties in making a forecast. The forecast is always positive; "I have never seen a sales forecast that reverses". The other difficulty is to estimate the development of sales, when it comes to the estimation of margin on sales Handelsbanken usually reduces it, if the company's management has it at an extremely high level. There is a lot of mathematics involved in the valuation process; they check how inventories look, how the production capacity is and what the sales opportunities are. They even check the company's historical development.

There is also an issue about intangible assets and goodwill. There is a wish to determine the value for them but intangible assets are conditional that the company works and they contribute to the cash flow when the appraiser includes in his estimation. Many try to calculate doubly in some way. For instance "I am sceptical to the value of Coca Cola". The accounting framework does not affect the value of inventories too much. However, the book value of a real estate causes difficulties. Therefore, they try to separate the value of real estate from the core operations of the company.

The next step in the valuation process is to discount the estimated cash flow to the present value. Here is an issue of what the discounted rate should be used for, or more correctly what the WACC should be? It is crucial which beta will be used in the calculation. Depending on what beta measure is, the final value can have a tremendous effect. Modification of beta with just 0,1 can have a large affect on the final value. It describes how the valuation is fragile when it is subjected to change. No one can prove that you use a wrong value for beta. The beta and WACC values that Handelsbanken use in their calculations are based on Handelsbanken's team's accumulated experiences. Surely there is instinct and knowledge about a companies' selling price, therefore there is a possibility to check historical data and determine empirical beta value. Using their "gut feeling" they can make an instinctive assumption of what the company's value is, and "turn up or down" the WACC a little bit if they have not achieved the expected value.

It is easier to determine beta for listed companies. Non-listed companies are associated with vagueness and therefore the beta is higher and consequently non-listed companies are cheaper than the listed ones. It depends also on that non-listed companies have a higher liquidation risk. There are many other factors which make non-listed companies cheaper. Should the calculation be done based on the beta for listed companies and thereafter make a discount for smaller companies or should the existing beta be adjusted? This is always an issue to consider.

Additionally we complete the calculation according to DCF by looking partly at equivalent listed company's p-ratios and try to find adequate purchase transactions for equivalent companies and see possibilities to find out the price that was paid. That is to say we use two additional comparative models. The main disadvantage of DCF is that it's based on forecasted values which are difficult to estimate.

When it comes to other valuation models the asset-based calculation is never used by us. It is commonly used by auditors and lawyers. Regardless of the valuation models and how calculations are made, the final result will be the same. I think that there are many difficulties with the asset-based approach in how the value should be used for total depreciated asset that are still in usage. So we have to go back to DCF since the value of target asset is the future value/cash flow the asset will generate. Thereafter the cash flow valuation should be done for all assets that the company has and they can be as many as possible.

We never make any actual cost calculations since our valuation results are used as groundwork for consultations. However, I consider that the actual cost calculation should be done to see how correctly we have valuated.

To summarize, value and price are two different conceptions. The value of the company depends on different things. It is important to have this discussion with clients who are selling. The price of the company is to a large extent influenced by the synergy effects that the

buyer sees with purchase. The price that suits both sides should be found. Sellers are interested in what has been done already, while buyers are interested in what they can obtain in the future. As long as both sides are happy it does not matter how exactly the calculation has been done. Finally the interviewed person does not think that the valuation approach differs much amongst appraisers.

4.4 Valuation process according to Professor Thomas Polesie

The interview with professor Thomas Polesie had the purpose to obtain a different point of view on business valuation and its process. He has been focusing on and doing research in the subject for over 37 years and beyond the schoolwork he is active in businesses acquisition processes.

According to professor Polesie valuating is the hardest thing there is and stepping to close it becomes very subjective. It is not the actual valuation that is the problem but rather the conduct and intention that determines the result. "It is all about consideration". Professor Polesie believes that valuation consist of two parts, judgement about what price the buyer or seller wants and calculating the numbers. These have to fit like hand in glove but there are always some chafed feet.

When professor Polesie explains the valuation process he starts from a buy and sell situation because that what he is accustomed to. The most important thing in the process is experience which makes it possible to create a better idea of how the process goes and which steps to take. It is important not to be alone at a negotiation. Professor Polesie works with many people all with different skills for instance he has one good negotiator, one "talker", one fact checker, and one counter. It is important to be well prepared and that the homework is done. There are no difficulties according to professor Polesie but there is always an uncertainty about what you want at a negotiation and that you do not know where the other part stands. Also there is no general formula, the case decides.

Professor Polesie uses all the methods available in valuation creating a document with different values as a base for the negotiation that is; he calls. He uses the valuated company's balance sheet whether it is right or not, deleting items with no value or adding items like excellent staff creating two values which are both the substance and the future. Considering the forecasts he believes that time determines and finalises the calculation. He also states that the fair value is the real value and that he has giving up the connection between market value and book value, stocks are too free floating.

The income and market approach is the most common used because they are the easiest to count according to professor Polesie. It is important to practice the methods, using trial and error and after a few times you will have learned the method. After a while you will find your way. Young people complicates things, old people have experience and are able to simplify.

5 Analysis and conclusions

In this chapter the comparison between empirical and the frame of references is presented, it will also look into the connection they have together. The most important and relevant sections from empirical findings were chosen in proportion to the aim and scope of this study. Furthermore conclusions have been made from the analysis.

5.1 Business valuation process

The statement, represented in the frame of references, that business valuation is not an exact science became confirmed in the practical studies. The result of business valuation is subjective and influenced by many factors. These factors are both business related and associated with personal character of the appraiser. Here the uncertainty associated with forecasting has to be mentioned as well. Through the study of the theoretical sources it has been noticed that there is no established uniform proceeding to estimate the value of a business. The theory says that the proceeding should be determined depending on the circumstances. All interviewed persons agreed that business valuation as a subject is complicated and multifaceted.

However, when it comes to the business valuation process in practice, particular appraisal entity has worked out its own appropriate procedure, where certain phases in the valuation process are more emphasized than others. According to the theory, to increase the quality of valuation the appraiser should go through the following phases: business, accounting, and financial analysis, forecasting, and valuation. Furthermore in this paper, the theoretical recommendation for the realization of each particular phase and its application will be described as each separate phase.

5.2 Business analysis

Business analysis is an important part of the business valuation process. It aims to determine the external and internal factors which may affect the valuated company's future performance. Understanding of factors as industry, macroenvironment, the capacity of the company will help the appraiser further in estimating the input values which are used in the valuation models. Professor Polesie's opinion about the necessity of business analysis does not deviate from the one represented in the literature. He considers that all factors have to be examined and nothing should be ignored in order to achieve a god quality of valuation.

In practise this phase of the valuation process is emphasised to a varied extent as it is deduced from interviews. According to PwC's respondent the business analysis is the critical part of the valuation process. They make a comprehensive analysis of the market where the company operates and identify its competitors and contingent trends on the market and how these can affect the valued company. Analysing of a company's organisation and employees' strengths enables to answer the key questions what the company is good at and what makes the company successful. According to PwC, distinguishing of company's value drivers helps to determine the final value.

In empirical findings it was indicated that the other two respondents, from fund and bank companies do not use the business analysis in their processes to the same extent as PwC. The

analysed factors are more of an internal nature that are related to the company in question and not its surroundings. However, Handelsbanken has an advantage that the appraiser has the possibility to receive help from industry-specialists who operate at the bank, and have reliable knowledge. The compiled information is used to confirm the material which was received from the company's management.

Conclusion: When the appraiser values a company the business analysis is absolutely necessary to take into consideration since a company's value is determined by its circumstances within and outside the company. At the entities where the interviews were performed the time spent on business analysis was of different lengths. PwC does more extensive analysis compared with other companies; however it does not set aside much time and effort comparing the other phases of business valuation process. From the authors' point of view, this is a failure in the light of the described facts of importance in this phase. However, business analysis includes many variables which make this phase time-consuming and complex. Consequently the particular appraiser chooses to constrain the number of factors to be analysed from the time available to them and his/her experience about which variables are the most important and that should be prioritised.

5.3 Accounting analysis

The company's financial reports are the primary information source which is used in the valuation process. The financial reports consist of a balance sheet, income and cash flow statements, which severally represent the company from different views. These three parts of financial reports are requested to a different extent depending on valuation purpose and circumstances. Unfortunately, these reports can rarely be applied in their original form. The financial reports are a result of the co-agency of regulators, managers of businesses preparing financial reports, and auditors controlling them. To make the financial information applicable requires an accurate analysis and understanding of how the reports were prepared and how management's choices and estimates affected them. Analysing the company's balance sheet, its assets and liabilities have to be reviewed considering the accounting standards: recognition criteria and valuation. Implementing of the accounting standards causes the bias balance sheet total; that book values of items on balances sheet deviate a lot from their market value and/or some of company's valuable assets may be not reported at all since they do not fulfil recognition criteria. When it comes to income statement, the classes of items depending on their relation to the core business operations have to be distinguished and thereafter analyse how often these classes recur and what effect they have on the company's economic performance. The quality of cash flow statement is not as problematic as the other reports since cash flow is not affected by accounting choices and estimations. The cash flow statement shows a reconciliation of differences between income and the change in cash. The company's investing requirement, which is important information for valuation, can be deduced from cash flow statement. Against this background the accounting analysis aims to understand the crucial items on the company's reports and how the managers and accounting regulation have affected them in order to create an applicable basis for further valuation.

Professor Polesie, as a representative for the theoretical world, confirms the importance of accounting analysis. The professor's valuation process leads to the estimation of several values since the company is valuated from all possible perspectives. These values are derived from the company's particular reports. The first step is to review the balance sheet and eliminate items of no value and contingently add the non reported items which have meaning

for the valuation. According to the professor, analysing the financial report adds to the determination of a fair value of the company already done and future performance.

The implementation of accounting analysis in practice occurs to a certain degree at the entities. PwC's respondent points out that it is important to be critical to the financial reports and the appraiser should have knowledge about regulation which has influenced the company's accounting. Handelsbanken's appraiser states that they do a lot of work to inspect the company's statement and query why it looks the way it does. At the fund company the accounting analysis was not highlighted at all.

Both of the interviewed persons, who exercise the accounting analysis, mentioned the items on balance sheets, as inventories, intangible assets, and goodwill which should be analysed, since there are a flexibility of estimating the value and difficulties to determine the market value for these items. Furthermore, the items on income statements, which are not related to the company's core operations, were accented. In accounting analysis they identify these items and treat them individually depending on what type of items they are and how they may affect the company's economic performance. Additionally they have confirmed the statement which was presented in the theory that the accounting regulation does not influence company's cash flow.

Conclusion: The frame of reference and the empirical findings show that financial reports presented by the company are the starting point for the valuation. According to the theory the accounting analysis has to be done properly to insure the quality of reported information. In practice the accounting analysis is performed to a certain extent. In the authors' opinion, the implementing of accounting analysis is associated more to motivate the company's management beliefs about future development, if they do not look realistic, and not distinguished as separate phase in the valuation process. It can be explained as a common factor for all interviewed entities as the applying of the DCF model as a main model, which is based on estimating the company's future cash flow. And consequently, it is not affected by accounting regulation.

5.4 Financial statement analysis

Studying the company's historical data, financial analysis aims to calculate the ratios which can help to understand how the items in financial statements are related to each other. There are many ratios, which describe the company from different perspectives. These ratios are divided into operating, credit and investment ratios. Analysing the respective categories the comprehension about a company's profitability, growth, and resource needs can be received. Against this background and combined with information received from business analysis better forecasting can be done and consequently, a more fair value of the company can be achieved. As it was mentioned before Tomas Polesie's opinion does coincide with the theory recommendation. According to the professor, the appraiser has to do his home work, i.e. all preparatory work has to be done which increases the valuation quality.

Empirical studies indicate that at PwC the appraiser does their home work. PwC's respondent states that except strategic analysis PwC performs a financial review of the company's historical performance. The financial analysis covers usually about a five year period and is based on the information presented on the company's balance sheet, income and cash flow statements. This information is used to calculate different ratios which help make a prediction about the company's future. More information about financial analysis and the ratios,

calculated by PwC, are represented in their valuation guide book that PwC's respondent refers to. The number of ratios calculated by PwC considerably exceeds the number presented in frame of reference. Except for the commonly used ratios as operating, credit and investment, PwC calculates the industry related ratios as revenues per employee, manufacturing margin and others. In the guidance, the situations when the items on financial reports should be adjusted before calculation of ratios can be found. The adjustments should be done to increase the relevance for forecasting of the calculated data. However, the above described financial analysis at PwC should be queried, since the description is based on information presented in their guidance which is the framework of how the valuation should be done or not how it is in reality.

The financial analysis is the important phase of valuation process at Handelsbanken as well. The estimated operating ratios which are based on historical information, as revenue growth rate and operating margin percentage, are prerequisites to predict the working capital development and investment requirement. Thereafter the cash flow can be calculated. However, the credit ratios were not mentioned during the interview. During the interview with Fund Company the operating ratios were mentioned in connection with descriptions of the market-based approach application only.

Conclusion: The financial analysis intends to review the company's historical financial performance in order to make a prediction of the company's future. It may be achieved by the calculating of different ratios which help to understand the company's financial health and future capital requirement. Empirical finding shows that all companies calculate certain ratios; however the number and the purpose of application of the ratios vary among the companies. This variation can be explained by the authors as there is different demand and relevance of estimated ratios for each company's valuation process.

5.5 Forecasting

Forecasting is the practical part of the valuation process. It aims to predict the company's future performance on the basis of collected information and accomplished analyses. The forecasting phase is associated with a great insecurity. No one can with a 100 percent certainty guarantee what will happen in the future. Consequently, the reliability of the forecast to a great extent depends on the quality of the preparatory work to obtain input values for forecasting. Accurately completed analyses minimise the risk for failure. Long-term forecasting leads to a higher insecurity grade. Commonly the period of 5-10 years is used for forecasting. The forecasting period is determined to a greater extent by the company's conjuncture, investment and product cycle. For valuation purpose, the residual value after the forecasting period should be estimated as well. Professor Polesie's valuation process aims to determine the value that the company has achieved before the valuating moment and the value the company will generate in the future. Forecasting is an inextricable action to estimate the business value according to the professor.

At the companies where the interviews were done the forecasting phase is included in the valuation process. All respondents admit that this phase is the most difficult in the whole valuation procedure. The interviewed appraisers mentioned that ordinarily they receive the forecasting figures from company's management which they use as starting point for valuation. However, they pointed out that they always are critical to the figures since there is usually some kind of incitement from the managerial side. For instance, the management has always a positive view about their company's future development.

To confirm if there is a meaning with company's own forecasting PwC always does their own prediction of the future. PwC's respondent observes that there is often a risk that the forecasting values deviate from reality. To minimise this risk PwC bases their forecasting on historical data during the past five years and chooses a short forecasting period (5 years). However, he remarks that at the whole, the risk of failure which regards the assumptions about company's growth and profitability can not be avoided. PwC's respondent considers that the most difficult thing is to predict the amount of working capital which is a base for estimation of the cash flow.

Handelsbanken's respondent describes the forecasting phase as an elaborate mathematical process. In which the determining of certain variables enable to estimate others which are required to obtain the business value. For this purpose they have at hand their own excel models where the different simulations about company's capacity and opportunities are possible. The difficulty associated with forecasting according to the Handelsbanken's appraiser is its subjectivity. For instance, forecasting is always positive. He observed, from his experience, that he has never seen any forecasting figures of sales to reverse. Analysing the company's historical data and reviewing book items on the financial reports Handelsbanken can judge the reliability of the company's own forecasting and make necessary adjustments to insure the quality of valuation.

At the fund company the appraisers accent the difficulties with forecasting which depend on the type of the company. It is difficult to make a prediction for companies which are new on the market, since there is a limited historical data to work on supposition. The other companies, which are developing new unique products, are complicated to forecast since they are rare on the market and the cash flow they generate is usually negative at the first period of development. At the fund company, they agreed that the forecasting is arbitrary, which can be minimised with as much detailed information as possible.

Conclusion: The statement that was presented in the frame of reference that the forecasting is the most difficult and complicated phase in valuation process, was confirmed in the empirical findings. These difficulties are associated with the discretions and assumptions that forecasting requires. To minimise the risk of failure, when doing the prediction about the company's future performance, a comprehensive preparatory work should be done. In practice, the appraisers try to minimise the risk and consequently increase the reliability of forecasting in different ways; by choosing a shorter forecasting period, by collecting as much information as possible and by analysing company's historical performance. In the authors' opinion the prediction period should be additional minimized to increase the credibility of forecasting data. Nowadays technological development facilitates the forecasting work, many software applications such as Excel enables in a short period of time to make simulation i.e. different scenarios of the valued company's future performance.

5.6 Valuation

The valuation is the final phase of business valuation process. The models that were chosen to be analysed are the most well-recognized. They are asset-based, income-based and market-based approaches. However, it has been noted in the frame of references and empirical findings that the income-based and market-based approaches are the two used most of the time and are used either separately or in combination with each other. As they all are performed in different ways they will be analysed separately.

5.6.1 Asset-based approach

Asset-based approach company valuation has its starting-point in the balance sheet. The value is determined through the appraisal of assets and liabilities of the company to the real value that is fair market value. In the case of assets the book value is seldom the same as the real value, since the company follows the principles of accounting. There are two things to classify before revaluating; collectively or individually estimating the items and if the company is to be considered as a going concern or to be liquidated. Depending on the purpose it will give different values in most of the cases. The approach usually is applied for companies where cash flow can be difficult to forecast, where assets are an important part of the company's operation, and if the company shows a negative result. The method is relatively simple to apply since no assumption about the company's future performance has to be made. Although, it does not consider the synergy effects of possessing certain assets or future achievments. Also since each item on the balance sheet needs a thorough workout, it can be time consuming. However, professor Polesie considers this approach to be necessary since it aims to estimate what the value company has actualized until the valuation moment and consequently a meaningful instrument at the negotiation.

Collected empirical findings show that PwC uses the approach as a comparable value for the income-based approach with the purpose to illustrate differences since the value of business is not often reflected on the balance sheet. Handelsbanken does not use this approach, there is no reason, but the respondent believes it is mostly used by auditors and lawyers. The fund company does not use this approach since they use the most recognized models in the industry. And they are according to the interviewed persons, income-based and market-based approach.

Conclusion; The asset-based approach can best be applied to a company that possess tangible assets and that it is harder to settle a value for intangible asset based companies such as the service industry which creates value through its people and services. The authors believe it could be wrong to establish a value based on the present situation and not focusing forward on what value it could create with the assets, if the company is to be considered from a going concern point of view. As seen in practice the approach is seldom used and if it is used it is more for comparable value than a final one. The authors assume that the reason for the little application of the asset-based approach is time limitation since every valuated company's assets and liabilities require a special valuation. However, it does not say anything about the future and the company's possibilities.

5.6.2 Income-based approach.

Income-based approach is the most discussed model in the literature, and often called by the term DCF. In theory several different models of income approach are distinguished depending on which type of income flows that will be discounted. The common income flows that are usually used in DCF are dividends, free cash flows and residual income. The differences among the models are what factors about the company are highlighted in the process. Income-based approach aims to determine the business value by forecasting the future cash flow and thereafter to discount it to the present value applying the appropriate discount rate which reflects the cost of capital. This approach is associated with a high degree of contingency since the result obtained is sensitive for assumptions in connection with forecasting and estimation of the discount rate. Consequently, the preparatory analyses are of great importance. Since the starting point for forecasting is the company's income statement the distinct understanding of book items is required. Cash flow should not be influenced by cash

payments from the assets which are not related to the corn operation. Furthermore the business and financial analyses enable to predict how the company's future cash flow can be affected.

Professor Polesie does not agree that the DCF should be highlighted and used as the main model. It should be applied adequate to other valuation models. The professor accents that the estimation of the company's future value is equally important as the estimation of the company's substance value which is already actualized.

Analysing the empirical finding the superior application in practice of income-approach can be proved and confirmed. All interviewed persons, except the professor, state that the DCF is the main valuation model which is used by them. At the fund company it is considered to provide the fair picture of the company, since the cash flow is the base for the DCF, which is difficult to manipulate. However, at the same time forecasting is an unavoidable part in income approach which requires to a great extent assumptions and discretions. In this way there is a possibility to affect the final value gearing it towards a wished value.

In a situation, when the conjuncture fluctuates vigorously, applying the DCF comparing with other models as market approach provides a more reliable result, according to the fund company's respondents. At Handelsbanken, the DCF superiority was illustrated by comparing it with the asset approach. The company's assets, the value of which is difficult to estimate because of certain reasons as total depreciation, no equivalent on the market or no demands from the external parties, usually can be determined by estimating the cash flow the assets will generate. In this manner Handelsbanken's respondent queries the need of the asset-based approach.

Besides all the DCF advantages all the respondents agree that there are some difficulties connected with the applying of it. First of all it is the determination of the discount rate that the forecasted cash flow should be discounted to the present value.

5.6.2.1 Discount rate

The discount rate reflects the cost of capital i.e. the requirement in term of return on investments. The size of discounted rate is depended on the risk which exists with investment. The discount rate consists of two elements; risk-free rate for instance of government bonds and return requirements on invested capital as a compensation for the risk connected with it. The risk can be both of operating and financial nature. To estimate the size of the risk requires a preparatory analysis. For instance the business analysis enables to understand the risks connected with business operations which can be affected by such factors as changes in market situation, conjunction fluctuation and others. The financial analysis helps to interpret the company's financial health, i.e. debt ratio, which signifies the company's ability to repay its obligations and further growth.

Since the future free cash flow used in the DCF, will be shared between suppliers of capital and shareholders, the weighted average cost of capital (WACC) is commonly used as the discount rate. WACC consists of the decided appropriate debt-equity ratio for operating, requirement of return on equity and cost of debt. One of the methods of estimation of the requirements of return on equity is capital asset pricing model (CAPM) which gives the expressions for the risk as a relation between the share price historical evolution and the stock market index. If all the variables in WACC are given it is quite easy to obtain the appropriate

discount rate. However, there are situations when the determination of variables requires assumptions and considerations. The beta value is representative for these variables. It is given only for listed companies. Therefore, the company's value calculated by the DCF is very sensitive to the small changes in input variables. Since the direct question about the determination of discount rate was not asked, professor Polesie chose not to mention this issue.

Analysis of the empirical studies indicates that the practical estimation of discount rate does not differ from the one described in the theory. Furthermore the procedure is alike for all three entities. The interviewed appraisers state that WACC is used to estimate the discount rate. The risk-free rate which is used to obtain appropriate discount rate is based on interest of ten years maturity government bonds. Thereafter the appraisers estimate the risk premium for the particular company's liquidity and market risk. According to the fund company's respondent the market risk is high nowadays, which can be explained by conjuncture instability, the extent of rivalry and so on.

The respondents admit that estimation of discount rate for valuation of non-listed companies is more complicated comparing with listed companies since there is no beta value given for these companies. PwC uses the beta value for similar listed companies which are adjusted according to the prerequisites. The respondent mentioned that a higher rate on return is used for the valuation of the company with higher risk. At the same time at the fund Company the beta value of 1 is used for calculation. However, it may vary depending on the type of company. For instance, for valuating of smaller companies the beta value of 2-2.5 is applied.

The direct answer about estimation beta value was not received from Handelsbanken's respondent. He states that it is an issue on how the beta value should be obtained. There are two alternatives; to use beta value for listed companies and thereafter make a given discount for smaller companies or the existing beta should be adjusted. The discount rate for valuating of small and non-listed companies is always higher and consequently these companies are cheaper. The appraiser admits that by using experience, knowledge and instinct the appraiser can make an instinctive assumption about what the company's value should be and thereafter the WACC may be changed a little bit if the predicted value is not received.

Conclusion: Income-based approach is a well recognised valuation model which has received wide application in practice. Because the company's value is determined by the company's future performance which is of significant concern for shareholders and other suppliers of capital. However, studying the literature and analysing the empirical findings the conclusion is made that the value obtained by this approach may be quite subjective since it is based to a great extent on the appraiser's consideration about the company's future return and the risk associated with that. In theory and in practice it was confirmed that the small modification of input variables affects the final value significantly. Also the appraiser can easy gear it towards the desired value. It should be noticed from the empirical finding that it is a common phenomenon that the value for smaller and non-listed companies obtained by income-based is always lower. Appraisers consciously increase the discount rate which leads to lower value which is motivated by higher marked and liquidity risks. The authors of this paper query the requirement of marketable difference in application of income-based approach on a particular type of companies. The authors believe that there is a preconception about the risk associated with small and non-listed companies' operations and consider that the application of incomebased approach should be preceded by comprehensive analysis which enables to determine the risk for each particular company regardless the size thus consequently increase the quality

of the valuation. The authors are aware that it is time consuming and that the obtained result perhaps will not be deviated much from praxis.

5.6.3 Market-based approach

To obtain the company value this approach compares measures of the company being valuated with similar measures of established companies that could be publicly traded or merged and acquired companies. Regardless of the choice, the companies have to be comparable, that is be in the same industry and have similar aspects such as cash flow, growth potential, and risk. It is most common to use publicly traded companies to compare since the information about them is easy to obtain. Looking at price multiples such as price-to-earnings ratio and market-to-book ratio the value can be determined. If merged and acquired companies are used, information of the transaction price must be found first and furthermore the companies must be comparable with the valuated company. The market-based approach is only practical if the company with which the valuated company is compared to is similar in all aspects.

The interviews revealed that the use of this approach was common in practise. PwC uses the approach for reinforcing the income approach. They use both publicly traded companies and transactions of merged and acquisitioned companies if such has occurred by comparable companies. If there is a difference between the estimated value from the income approach and the market value they try to find an explanation for it. The fund company also uses the market-based approach as they believe it to be the most well-recognized method. The value obtained from this approach is used as a guideline and prioritized over the estimated income-based approach value, if they differ. Although, it requires similar companies for making the approach usable. The fund company uses several multiples that are for instance the enterprise value set in relation with different income statement items. Handelsbanken compares the target company with equivalent listed companies and their p-ratios. However, they try to find adequate purchase transactions for equivalent companies and see possibilities to find out the price that was paid.

Conclusion; It became apparent that market-based approach is one of the most commonly used models to estimate the value of a company. In the authors' opinion, it could be explained that it is less time-consuming than the other approaches, since almost no estimating needs to be done. It is simple to find the ratios for publicly traded companies but harder to obtain information from mergers and acquisitions. The hardest thing is to find a company looking similar as the one being valuated. The authors got the feeling that the appraisers are not too particular when it comes to this point, if they were; they would not find any similar company since none are exactly the same.

6 Conclusion

In this chapter the results of the thesis are presented. These are discussed based on the aims and questions of the thesis and afterwards the authors' general reflections are provided. In the end of the chapter the suggestions for further studies are offered.

6.1 Answer to the formulated questions

Demand for valuation services is increasing for every day. Business valuations are performed for different situations as mergers, acquisitions, buy-sell agreements, IPO, debt financing, divorce, gifts, bankruptcy and others. Business valuation is associated with a lot of difficulties and insecurity. There is a lot of literature within the business valuation subject area to facilitate valuation procedure and minimize the risk of failure. However, there is no universal legal framework which dictates how the company's valuation will be performed and how to act in order to cover every parameter. Business valuation is described in the theory as not a precise science, there are many aspects which may affect the final value significantly. Consequently there is no right way to estimate the value. The value depends on what purpose of the valuation is and who does it i.e. the appraiser's personal character. Therefore the authors of this paper consider it quite interesting to study what procedure should be done to obtain the reliable result of business valuation, how the valuation process looks in practise and if there are any deviations of an appraiser's valuation procedure from the one presented in theory. According to the purpose of this thesis the authors have examined the following questions:

6.1.1 How should appraiser's valuation procedure look?

The results of the thesis illustrate that to accomplish entire business valuation requires knowledge about many economic theories and understanding of the particular company's operation. The business valuation process is an extensive procedure with several significant steps. All steps in the procedure are just as important as another and have to be done for a reliable result. By studying different views on the business valuation process represented in the literature the framework, which contingently should be applied to increase valuation quality, can be compiled:

1. To determine the purpose of valuation.

Depending on the purpose the further actions will be decided. Here in the beginning the appraiser becomes familiar with the company and obtains the understanding about the company's structure, management and business concept.

2. To carry out business, accounting and financial analyses.

Well accomplished business analysis enables to distinguish and to understand how the company's surrounding and internal environment may affect the company's future progress. Analysing the company's accounting and calculating of different ratios provide the information on how the company has performed historically.

3. To predict the company's future economical development.

The forecasting of the company's future performance requires certain assumptions which can be done based on the results of analyses. The reliability of the forecasted values depends to a great extent on how properly the analyses are accomplished.

4. To calculate the company's value by help of the all possible models.

Using as many valuation models as possible to estimate the value of the company increases the quality of valuation and provides a better starting point for negotiation and further to the

final price. Even if the value obtained by help of different models varies it has its own motivation and value for the parties.

The authors believe that, even if there is no right way to perform the business valuation, precise following all mentioned phases guarantees the trustworthiness of the result of business valuation.

6.1.2 How does appraiser's valuation process deviate from the one represented in theory?

The results of the empirical findings show that the valuation process in practise is based on the primary idea as it represented in the theory. That is to say valuation procedure aims to estimate the value, taking into consideration the company's possibility to generate future income and the availability of the assets it possesses. However, the compilation of information received from empirical data indicates that it is not always easy to make theoretical application in practice. In spite of the appraiser's valuation procedure consisting to a certain extent of all necessary phases presented in the theory, these do not have the equal importance. It was noticed that the preparatory work before valuation has an inferior meaning. Analyses are performed in order to confirm if there is a meaning of the forecasted values provided by the company's management. Then when the forecasted data is given, there is a risk that, the analysis can be left out for certain reasons, as for instance time limitation or the appraiser's belief that the company's management possesses more knowledge about the company. The omission of analysis will lead to subjective valuation which favours the company's management's concern since they are interested in the highest value as possible. Another deviation is that the models for estimating value are few in practical use. The income-based and market-based approaches are exercised mostly. The reason could be that these approaches are the most well-recognized and easy to apply comparing with other models. However, here the fact of possibility for manipulation, which these approaches cause, should not be forgotten.

6.1.3 How the result of business valuation can be evaluated?

As it was pointed out earlier, there is no right way to estimate the value since there are many factors that influence it. There is no answer to look up if the business valuation provides a correct value. Empirical findings show that the value can be evaluated in some situations, for instance, when the valuation was made in the purchasing purpose or the IPO, the final price can be compared with the calculated value and thereafter make an evaluation of contingent difference. Too high or too low difference gives the reason to suspect the failure of the proceeding of the business valuation. There are thousands of things that could have affected the value in either direction. The authors assume that since people and the world around us do not act rationally it is impossible to estimate a fair value. Additionally the estimated value is more as a starting point for the negotiation than a final definitive value. Therefore, the authors consider that credibility of value can be secured by an accurate following of all phases of business valuation.

6.2 Reflections on the thesis

"Good judgment comes from experience. Experience comes from bad judgment" Mark Twain, aka Samuel Clemens (Simmons, 2005, p.15)

According to the result of this study the statement that "valuation is not an objective exercise" and the final value is always affected by any perceptions and biases that an appraiser brings to the process can be confirmed. The empirical findings show that there is no unique framework for business valuation that exists in practice. In the authors' opinion it is impossible to obtain a framework which could cover all aspects that may have influence on business valuation and eliminate the subjectivity caused by the personal character of the appraiser. The results of this study show that the appraisers' valuation procedure is based on the primary valuation idea however, the particular appraiser has developed their own framework which is derived from the purpose of valuation and existing data. His/her experience and knowledge have a vital meaning in elaboration of the proceeding and consequently the determining of the final value. In spite of the fact that the theory recommends to follow all phases in the valuation process, in the authors' opinion the fault of some of them in practice can be motivated. To follow the theoretical recommendation to 100 percent will be time consuming and costly for the company. Then the consideration between the profit and cost should be done. The authors believe that the valuation experience will increase and valuation difficulties will decline.

6.3 Research suggestions

- In this study the review of the business valuation process was presented by qualitative investigation. The authors assume that a profound study on this subject with a combination of qualitative and practical application should be interesting to perform in order to complement this thesis' results.
- Since the calculated value is seldom equivalent to the final price obtained by negotiation, it would be interesting to investigate the importance of calculated value in the negotiation and its effect on the final price.

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Appendix 1

Interview guide for appraisers

For how long have you worked with business valuation?

Which are your assignments?

Which type of companies do you work with?

How does your company's business valuation process look?

Which are the difficulties with determination of a company's value, according to you?

Which valuation models do you use in your process?

Which advantages and disadvantages are there with the respective models?

If any valuation models are excluded, if it is so, why?

How do you judge the outturn of the valuation?

Appendix 2

Interview guide for theorist

How long have you worked with business valuation?

How does the valuation process in your eyes look?

Where should you start to choose a valuation model?

Which valuation model do you consider have a general usefulness regardless industry?

Which are the advantages and disadvantages of respective valuation model?

Why do you think the income and market approaches are the most commonly used by appraisers?

Which are the biggest difficulties associated with the business valuation?

Which general recommendation would you give a newly examined student who is going to work as an appraiser?