

# **International Accounting and Finance**

**Master Thesis – No 2001:8**

## **Creating and Measuring Shareholder Value:**

**Applicability and Relevance in Selected Swedish Companies**

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## **Preface**

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## **Abstract**

To measure shareholder value creation has been the issue of discussion all around the world. It has become crucial since the companies were increasingly committing to creating shareholder value. Old traditional measures are criticised for having low correlation with shareholder value creation. Therefore, new valuation methods are needed to measure the shareholder value creation. However, the changing process from the traditional methods to the new ones is not easily welcomed. How then shareholder value creation is measured nowadays is of crucial importance. In order to address this issue, the thesis presents in a general way how shareholder value is created as a background to the valuation methods being used for shareholder value creation measurement. The empirical part of the study showed that although the companies in this study have implemented many ways to create shareholder value, little effort is being made to measure it since the majority of them are still using the traditional accounting measures. The reasons for this may be conservatism and lack of pressure from both the stock market and shareholders. Having noticed this we then recommended the companies to use “value based methods” when measuring shareholder value creation since they are more reliable.

Key words: Shareholder Value, Value Creation, Value Based Management, Choice, Measures, Advantages and Shortcomings.

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## **Introduction**

This chapter deals with the background, research issue. The purpose and scope of the thesis are also defined.

### ***1.1 Background***

One of the most frequently used terms in business today is Shareholder value. The "equity culture" wildfire is spreading rapidly from the US to the rest of the world (Thakor et al, 2000). It is seen as crucial all over the world. In Sweden the new measurement systems of shareholder value creation were introduced in the last decade and have been slowly introduced in various companies. Indeed, some of the leading companies like SCA and SKF have made the creation of shareholder value one of their key corporate objectives.

In the other parts of Europe this idea had spread earlier and rapidly. In Germany, for example, Veba's – one of the industrial giants – CEO closed divisions that date back to Veba's beginning, fired long-time managers, and laid off thousand of workers – all in the name of investors. That CEO worried about shareholder value. "Satisfying the shareholders is the best way to make sure that other stakeholders are served as well. It does no good when all the jobs are in the sick companies"—said that CEO (Eitemann at al, 2000).

What is shareholder value and why should the financial managers care about it? If shareholders believe that the corporation is underperforming, they can try to replace the board in the next election. If they succeed, the new board will appoint a new management team. But the vote on a new board is quite expensive and rarely successful so the shareholder will simply sell their shares (Brealey and Myers, 2000).

Moreover shareholders are the owners of the corporation and the board of directors are their representative and elected by them. The objective function of the corporation is to maximize the shareholder value. Managers in most of the developed world must focus on building shareholder value (Copeland et al, 2000).

If the managers and director don't maximize value, there is always the threat of a hostile takeover. The further a company's stock price falls, due to the wrong-headed policy, the easier it is for another company or group of investors to buy up a majority of the shares.

Large institutional investors are increasingly influencing corporate policies. They are creating a heightened awareness of the role of compensation-based incentives in focusing executive efforts on creating shareholder value. Companies are rewarding senior executives with shares and with options on these shares. Thus, share price is now critical for most senior executives (Thakor et al, 2000).

Most executives today understand that the need to create shareholder value is paramount and the world's most competitive management teams are responding to the pressure to create value by embracing new metrics and new models for managing their companies (Copeland et al, 2000)

Traditionally a variety of measures were used to show how much value was created. Some of them are earning per share (EPS), Return on Investment (ROI) and Return on Equity, EVA (economic value added). Moreover a variety of consulting firms have been creating their own measures and recommending them to their clients.

In today's Globalized world characterized by accelerated competition companies must stimulate profitable growth, measure value creation and continually learn from success and setbacks. The only companies that can acquire new capital, grow and remain profitable are those that create value. Active shareholders are putting more pressure on corporate management to measure and communicate how they are creating value and shareholders find anything other than value-creating companies unacceptable (Anelda, 2000).

Scott (1998) expressed that there is no doubt that nowadays the principal goal of management is the enhancement of shareholder value and this means



maximizing the returns generated to those people who have an ownership stake in the business.

This idea of creating shareholder value comes as an imperative to many companies and leads them to get actively involved in that process. Companies create shareholder value through a set of strategies, depending on what they believe would create more value.

## ***1.2 Research Issue***

When managers consider alternative strategies, those expected to develop the greatest sustainable competitive advantage will be those that will also create the greatest value for shareholders (Rappaport, 1998).

Companies can choose excellence in operations that is closely related to the profitability. They can get their financial structure right, which is closest to free cash flow among the fundamental drivers. They can also choose to be focused and this is linked most closely to profitability. Those are areas of comparative advantage. They can also create value through credible earnings growth, which matches the fundamental driver growth and many other ways are in place to create shareholder value (Dalborg 1999).

The research issue arises from this variety of different ways to create value. There is always scope for creating value in companies and they avail themselves of value-creating advice. The strategies are put in practice within the framework of that scope. We then find it worthwhile to investigate how strategies are handled in practice in some selected Swedish companies.

However, it is not enough to have strategies in place, there is need for some indicators to ensure whether value had been created. Thus the companies need to measure and make sure that they are being successful in creating value for shareholder. “What gets measured gets done” this was a famous statement by Percy Barnevik’s (Dalborg, 1999). That statement underlines the importance of measurement.

The idea of measuring value creation is not new. Most attempts to measure value creation have been based on numbers derived from historical performance. Research shows that many traditional accounting measures used have shortcomings (Pappaport, 1998). They have a fairly low correlation with shareholder value creation for example return on equity (ROE), and return on the capital employed (ROCE), return on the investment (ROI). That low correlation of ROE can be partly explained by the distortions introduced by non-cash nature of these measures, their use of historical asset values, the effects of deferrals etc. (Dalborg, 1999).

There is also a set of inventions and innovations that are designed to overcome the limitations of the traditional accounting framework, as seen from a 21st century perspective. This flow of new inventions to improved performance measurement hitting world business today, created in us, the curiosity also to investigate the measurement process used nowadays within the companies; whether they are still using those traditional measures or whether they have modified them or formulated their own.

Indeed, based on what is discussed above the research issue for this study is therefore formulated as follows:

How do companies measure shareholder value creation?

In order to better answer the research issue, creating shareholder value will be studied in general as background to the research issue. The research issue will cover the different valuation methods used by companies to measure shareholder value creation and also the advantages and shortcomings of those methods whenever identified.

### ***1.3 Objective of the study***

The purpose is to conduct an analytical study of different methods used by companies to measure shareholder value creation. The study also aims to give a general picture of how shareholder value is created as a background to measuring shareholder value. Furthermore all that will be done will be based on an empirical study.

### ***1.4 Scope and limitations***

Creating and measuring shareholder value can be studied from different perspectives. When studied from the shareholder or other stakeholder perspective, the research is mostly based on the information collected from the shareholder or stakeholders. When it is the stock market perspective, the information used in the study is collected mainly from the stock market. If the study is based on the company perspective then the information used will mainly be collected from the company. Every perspective is very important to investigate. However due to the time limit and the scope of the problem we are obliged to make some limitations.

In our study we are tackling this research issue from the point of view of the company. We chose this point of view since it is actually the company that is putting in place different strategies and using the measures for shareholder value creation. We therefore believe that our research problem would be well answered if we used the company perspective. We have then conducted interviews only in the companies. Even though we are considering this problem on that point of view, in our work we may when it is judged very imminent refer to some secondary data from the consulting companies but this may only occur occasionally.

We also limited our study to Swedish companies since we want to explore what is being done in Sweden and given that the new metrics for measuring shareholder value creation have reached Sweden in the mid of last decade, we want to know what has happened so far. Moreover, we are collecting our empirical data from the headquarters since we want to capture the information on the group level and for most of the Swedish companies the headquarters are situated in Sweden. That makes it very accessible to us given the time limit of our thesis.

Our study is also limited to 7 companies that we believe are in position to provide information that can be used to better answer the research issue. Thus not all Swedish companies will be included in our study. Those companies in our study are large and able to provide information we need, they are

international, create shareholder value and they are listed companies. More about the choice of companies is included in the methodology part.

Many factors can affect shareholder value such as the environment surrounding the firm, weaker business climate, political situation, and currency fluctuations. We are not going to cover the above factors in our study since the background information will be covered in general and it is not the main focus of our research. However they are discussed partially only when our sample companies consider them to be crucial factors affecting their operations.

### ***1.5 Chapter layout***

Chapter 1 covers the research issues. It includes the background information and the research discussion. The purpose of the study and the scope and limitation are also discussed in this chapter.

Chapter 2 is methodological discussion. It includes the description of the research approach, conceptual framework, and qualitative or quantitative, types and how we collected the data, and finally the research evaluation. The purpose of this chapter is to give a clear picture of how we carried out our study.

Chapter 3 explains the shareholder value concepts and related concepts. The Stakeholder in the shareholder value corporation is covered, and the different views on shareholder value creation. This chapter also discusses different ways or strategies for creating shareholder value. It also covers the value-based management. The purpose of this study is to give the reader a better understanding of shareholder value creation. It focuses on describing both traditional and recent methods used to measure value creation. It encompasses their definitions, how they function and their possible shortcomings and advantages. The aim of this chapter is to provide the information that will help the reader understand different existing measures of shareholder value creation.

Chapter 4 includes the results. It gives general information on strategies for creating shareholder value and the reason why they are chosen. It also describes

the identified measures used for value creation, why they are used and their possible shortcomings on the basis of the point of view of the companies.

Chapter 5 covers the analysis and the interpretation of the results. The analysis links the theoretical framework to the results that is linking what the theoretical part proposes to what actually takes place in practice. It covers general analysis of the shareholder value creation in order to give a background to the analysis of the measurement of shareholder value creation.

Chapter 6 covers main conclusions that are drawn from the study. It also includes our comments and recommendations to companies included in our study as well suggestions for further studies

Chapter 7 includes the list of references and appendix.



## **2 Research method**

This part covers the process through which our research was carried out. It describes and discusses different methodological issues used in the thesis.

### ***2.1 Research approach***

In the process of answering our research issue we used different approaches. We used an explorative approach. We went through the literature to document the shareholder value related issues in order to get basis information about the research issue. We also used a descriptive approach during the theoretical part where we give a general view on the existing ways of creating shareholder value and the existing methods of valuing shareholder value creation. Our thesis has also a prescriptive part where we explain what ought to be done in this area of creating and measuring shareholder value. We believe these approaches are best for our study since they allow us to better document ourselves, describe and prescribe furthermore, all these are vital in answering our research issue.

### ***2.2 Positivistic and hermeneutic perspective***

A scientific problem can be approached either under a positivistic or hermeneutic conceptual framework. In the positivist position there is a mind-independent that can be described with objective language. Statements are only meaningful if they are synthetic and represent contingents or empirical truths or analytic that represent formal truth. The meaning of a statement is delivered from the method of its verification (Ryan et al, 1992). Moreover, Ericksson and Weiedersheim (1999) state that in the positivistic approach the empirical research is the most important part; the scientific value has to be verified with empirical data.

Hermeneutics study is the interpretive understanding or meaning with special attention to context and original purpose. It takes the position that nothing can be interpreted free of some perspective so the first priority is to capture the perspective and elucidate the context of the people being studied and the researcher own perspective must be made explicit (Patton, 1990). The hermeneutic approach is that which has strong emphasis on the overall view

and it assumes that all actions, social names and values have a human foundation (Ericksson and Weiedersheim, 1999).

Positivistic framework is the best for our study since we collected the empirical data from the companies and we draw conclusions on the basis of them. Thus the empirical data have a great importance in our study. Moreover the empirical data are collected on the company perspective towards the measuring shareholder value and creation of shareholder value as a background, which then contribute in excluding our personal view and societal norms from our study. This has great importance for our study since it shows how the creation and the measuring of shareholder value is and not how it seems to be.

### ***2.3 Quantitative or qualitative methods***

Two methods may be used in the research, those are quantitative methods and qualitative methods. In the quantitative study the focus of the research is quantity and its goals are predictions, control, description, confirmation, hypothesis testing. Its associate phrases are experimental, empirical, and statistical. The sample in the study may be large, random, and even representative. The data collection is done through inanimate instruments such as scales, tests, surveys, questionnaires, and computers. The mode of analysis is deductive by statistical methods and the findings may be precise, narrow or reductionist (Merriam, 1998).

In contrast, the qualitative study usually involves the field work that is that researcher must physically go to the people, institutions in order to observe behaviour in its natural setting, however as exceptions some qualitative study can be undertaken using documents alone. The focus of the research is the quality, which may be defined as nature and essence. Its associate phrase may be naturalistic, grounded and subjective. The sample may be small, non-random, purposeful or theoretical. The goals of qualitative study are usually understanding, description, discovery, meanings and hypotheses generating. Concerning data collection the researcher is the primary instrument, and can use interviews, observations and documents. The model of analysis is inductive



by the researcher and the findings are comprehensive, holistic, expansive, and richly descriptive (Merriam, 1998).

Even though our research is mainly qualitative, in conducting our study both qualitative and quantitative techniques were used. The qualitative techniques are more used than quantitative ones in collecting, processing, and analysing the information that we gathered. This depends on the nature of our study, which is qualitative and the kind of information needed. A combination of both techniques is advantageous for this thesis since it allows us to identify, understand and tackle in a deeper way the research issue. It also contributes to the relevance of our study.

## ***2.4 Data collection***

“Research is simply gathering the information you need to answer a question and thereby help you to solve a problem” (Booth et al, 1995). In order to carry out our research project, we needed to collect the data. Since getting the data was one of the important parts of our work, we had to determine which kind of data would help us to better answer our research issue. We decided to use literature study and empirical data so that we would be able to have a balanced picture of what took place and also of what is currently going on in our research areas. The discussion below describes each type of information and discusses in detail what we actually did with each type of data.

### **2.4.1 Literature study**

By literature study we mean the information that had been collected by other researchers for various purposes and are available to be referred to. The sources for our gathering of the literature study are various documents; in our case there were annual reports, books, articles, databases and Internet search engines. Literature survey was done on the above-mentioned literature materials. The literature study was to help to get baseline information on what was known about shareholder value creation and measurement. Annual reports from different companies were also reviewed in order to provide information on what is being done by the company. All these secondary data that we gathered helped us to get a better understanding of the subject and the problem and it

also gave us the basic foundations for conducting this study on measuring shareholder value creation for the companies.

### **2.4.2 Empirical data**

Empirical data stand for the information that is collected by the researcher from the fieldwork. As mentioned in the qualitative study there are different way that can be used to collect the data. Among those ways we used the interviews for collecting our empirical data. The discussion that follows in interviews covers the reason why we chose to use interviews, how we selected the interviewees, the structure of the interview, the formulation of interview questions and the form of the interview.

We chose to use the interviews because of the nature of our study and we were convinced that interviews are best way we could use to get information, which was reliable, detailed and up to date that was needed for our study. This idea is backed by Merriam (1998) who mentioned that in qualitative studies interviewing is a major source of qualitative data needed for understanding the phenomenon under study. We also judge interviews to be the best way for us to use the following explanations from them given by Dalphnem (2000) who said that an interview is a controlled interaction, which uses verbal exchange as the main method of asking the questions and it has a direction and a shape. It is designed for a specific purpose and gives the opportunities to the interviewer to explore the reasons for a person's responses. Questions, which were not understood, can be rephrased, and being given encouragement can help reluctant or anxious interviewees.

Before discussing how we selected our interviewees we would like to make clear that the companies in our study sample are organized differently and conduct different business in their own way that made it impossible for us to predetermine the same department in all companies where we were to conduct the interviews. Thus, our interviews were not conducted in the same department but all of them were conducted at the headquarters. In selecting our interviewees we contacted the headquarters since we were interested in the information on the group level not on subsidiary level. We proceeded in this way. We first sent e-mails to the contact persons in the companies. That e-mail

explained what our research issue is about, our purpose, the kind of information we wanted from the company and we asked the contact person to direct us to the appropriate person meaning the person who works or is in charge of what we want to know on the group level. The contact person directed us to the person he or she believed was the right one.

We then proceeded in contacting the right persons by sending them e-mail messages explaining further our research issue. This was made again since we were aware of the problem that might arise from getting the wrong person if we let the companies choose for us whom to talk with. Thus we wanted to be very sure that the interviewees were the right people. Fortunately, in all the cases this was the right person to talk with. Later on, after the confirmation, we then phoned them to book the date and time for the interviews.

Our interviewees were of different characteristics since they worked in different departments and their tasks were not exactly similar this helped us to reap a rich content of information. It is also important to mention that our interviewees had some similarity. All of them work, deal or are in charge of information for creating and measuring shareholder value. Before, we conducted the interviews, we kept in contact with our interviewees in order to deal with some problems, which would arise such as change of schedule or change of position in the company. On the basis of the above information and on how the interviewees responded during the interview we believe that we talked to the right people in the companies.

Concerning the structure of the interview Anderson et al (1998) discussed that research interviews generally focus on collecting data or information that is essential for a larger task of learning about or deciding about, something and such research takes many forms. Merriam (1998) wrote that the types of interview used depend on the amount of structure desired. There are highly structured/-standardized interviews whereby the wording of the questions and the order of questions are predetermined and these interviews are like an oral form of written survey. There are also the semi-structured interviews whereby a mix of more or less structured questions are used. The last one is the

Unstructured / Informal interviews whereby the questions are open-ended questions and it is flexible and exploratory and it is more like a conversation.

We used semi-structured interviews where a mix of more and less structured questions were used. We are convinced that this was a good structure fitting our study since there were some areas in our study where we wanted all interviewees to give their point of view and it was necessary to have the same part for all interviewees. This constitutes then standardized parts of the interview where the questions were the same for all the interviewees. We also left the interview open by a flexible part of the questions where the questions were to be answered following the information available to the interviewees and also depending on the kind of business the companies ran.

In regard to the formulation of questions, Merriam (1988) pointed out that the questions are the heart of interviewing and to collect meaningful data one must ask good questions. Following the importance of the questions in the interview, we made a list of questions. These questions were based on our research issue and purpose. We also took into considerations previous research done on this area, thus our questions are good and balanced.

Our questions could be categorized as the kinds of questions identified by Patton (1980), there are some knowledge questions which aim at finding out what is believed to be factual information to the research issue. There are some opinion value questions which aims at what people think, feeling questions, which help to understand the emotional response of people and their experiences and thoughts; finally there are also experience/ behavior questions whereby description of experience, behavior, actions, and activities that would be observed are elicited. Having these different types of questions in our interview contributed to collecting a good, variety, quality information that was necessary for our research issue. We also needed facts, points of view and descriptive information and using different types of questions helped us to get as much information as we could.

Concerning the form of interview, the most common form of interview is person-to-person interview encounter in which one person elicits information

from another (Merriam, 1998). In conducting our interviews five interviews were person-to-person interviews and two of our interviews were done on the telephone. The reason for one of the interviews, which was done on the telephone, was the location of the office that dealt with the information we needed and the reason for the other interview on the phone was the wish and desire of the interviewee.

In conducting our interview we established a good, dynamic relationship with the interviewees by letting them express themselves and they were open. In case there was difficulty to understand the question we came in and made it clear for them so that it could help them to give us more information about our questions and at the same time we avoided influencing their answers. In some cases we also asked for immediate clarifications in case their responses were not clear to us and we also avoided the unnecessary interruptions of the conversation. We had also the responsibility of guiding the interview and making sure that its direction was not out of the area.

Our interview data was recorded by taking notes during the interviews, thus our interviews were not taped and that gave us an advantage since the interviewees were open and expressed their ideas freely. After the interview we synthesized the information written as soon as it was possible to make sure that we were not missing out some information. In some cases following agreement with interviewees we sent back what we wrote down to the interviewees for them to check if there was no misunderstanding or for them to add what they felt was missing in the written information. The dynamic relationship was maintained throughout the interview and by the end of the interview; both the interviewees and we felt that we had participated in a worthwhile activity. All interviewees agreed for further clarifications on e-mail or telephone if necessary.

### ***2.5 Sample of study companies***

In our study we could not include all the Swedish companies in our study because of the practicability and the time limit. We then had the task of choosing the companies that should be included in our study. In order to narrow

down our sample we set eligible criteria that companies must fulfill to be included. Those criteria were the following:

- More than one shareholder own them. In this case, there is a motivation to create shareholder value.
- They are Swedish companies since they will be easily reached and the study aim was to know how the situation is in Sweden.
- They are listed companies, the reason for this is that it is much more possible to measure shareholder value creation.
- They are creating directly or indirectly shareholder value since this study could be best done in the companies admitting that they are creating shareholder value.
- They have a history stretching back more than 30 years and in case the company may be a result of a new merger, then, at least one of the companies should satisfy that criteria. The reason for this criterion is that the companies with long histories are believed to be more stable and could manage to face the future challenges than those that are recently established.
- Finally, those companies are large and operate in international environments since such companies are believed to disclose more information than others.

We did not limit ourselves to specific industries since measuring shareholder value creation, which is the research issue of the study, does not depend on the industry that is even the reason why the companies in the study are not categorized. After setting these criteria, we then used a nonprobability sampling method, which is the convenience sampling to the companies that were fulfilling them. According to Fink and Kosecoff (1998) the convenience sampling is a non- probability sampling whereby one selects everyone who

meets the criteria for the study, who are willing to complete all questions and are available when they are needed. This means that we took a list of Swedish companies that fulfilled the criteria and we sent them e-mails explaining what we intended to investigate and asking them if they were interested in participating in our study; the companies that answered positively were all included in our study. These are then the following seven companies: Volvo group, ABB, SKF, Electrolux, SEB, Förenings Sparbanken, Bilia.

#### *Description of companies*

We are giving in this section a short description of all the companies included in our study to help and give the reader general idea of the companies in case he or she may not know the companies.

#### *Electrolux AB.*

It is the leading white-goods company in Europe and the third largest in the USA. The Group is also the second largest producer of the floor-care products and garden equipment.

#### *ABB*

ABB was established in 1883 and nowadays is one of the largest energy and automation companies, which consists of several segments. Those segments are automation; power distribution; power transmission; building technologies; oil, gas petrochemicals and financial services. It is the Swedish-Swiss company that operates all over the world.

#### *Volvo AB.*

It is a one of the leading truck producers in the world: which consists of the following segments: trucks, buses, construction equipment, marine and industrial power systems, aero equipment and financial services.

#### *SKF:*

It was founded in 1907. It is the world largest manufacturer of roller bearings, which operates in the 22 countries. It consists of the following divisions: industrial division, automotive division, electrical division, service division,

seals division and steel division. It has around 41 000 employees and operates in more than 150 countries.

### *Bilia*

Bilia was established in 1967 and nowadays it is one of the leading car companies in services, sales and supplementary services.

### *SEB*

SEB was established in middle of 19th century as a private bank in Stockholm. The innovative forces and far-sighted investment during the 150 years have transformed the bank into the market leader in several fields of business. It has developed into a European financial group for primarily companies and financially active private individuals. The group is represented in some 20 countries around the world has 21500 employees.

### *Föreningsparbanken*

Föreningsparbanken is a result of a merger between föreningsbanken and sparbanken in 1997. However its history goes back to 1820 with the establishment of sparbanken. Nowadays it is one of the largest Nordic bank groups in the region.

## **2.6 Research evaluation**

### **2.6.1 Validity**

Ryan et al (1992) explained that the internal validity is determined by how much control has been achieved in the study and they defined the external validity as the extent to which the result of a study can be generalized to other settings and samples. Merriam (1998) added that internal validity deals with the question of how one's findings match the reality.

To be able to reach a high level of validity we concentrated much attention on the literature review and the definition of our research issue. The formulation of the interview questions was also done with much attention so that they would cover the subject under study. In addition we had a discussion with our tutor on the questions. We also explained clearly our research issue to the interviewees



so that they could get a good understanding of our study. This helped them to also get prepared and allowed us to get the right information from them. We also used these strategies to insure the internal validity. We used multiple sources and multiple methods to confirm the emerging sources. The validity of our study is also increased by the relationship between the result of our research and the primary data since our analysis and interpretation is mostly based on the information we got from the interviews. We are also using the peer examination whereby we ask our colleagues to comment on our findings and we also took into consideration their comments and we contacted, when it was needed, the interviewees several times in the process of the work on the topic of the study.

### **2.6.2 Reliability**

According to Ragin (1994) reliability concerns how much randomness there is in a particular measure. It refers to the extent to which studies can be replicated. In other words, for example, if the same study could be repeated would it give the same result? In our study, the main source of our empirical data collections is the interview and in the interview people give their points of view which may be different from person to person, then a certain degree of reliability of our study may be lost. That is because in case this study was repeated, it may not give exactly the same result since people would have changed their view or the circumstances in which they work would have changed. Moreover, in our study seven companies are included and by the time the study is repeated they might have changed the strategy or have restructured themselves. All these factors would affect the reliability of our work. Despite these factors that are likely to influence our study, we are sure that our study has a considerable degree of validity since to insure the reliability in our study we explained very well the assumptions behind the theories and the theoretical framework of reference were written based on reliable and objective sources. By setting good questions and using multiple sources and methods we also increased the reliability of our study.

## ***2.7 Summary***

The methodological part indicates that our study is done under the positivist perspective. The explorative, descriptive and prescriptive approaches are used in different parts of our work. In the study the qualitative methods are used but some quantitative elements can be identified. The literature review data is collected in different documents and Internet sites while we collect our empirical data through the interviews. The sample of our study includes seven Swedish companies. The notion of validity and reliability of our study are also discussed in this chapter.

## **3 Theoretical framework**

The theoretical framework includes two parts. The first parts give the general information about the concepts; theories and perspectives on the shareholder value creation in order to create a background for the second part that describes the present methods used to measure shareholder value creation.

### ***3.1 Creating shareholder value***

#### **3.1.1 Introduction and History of shareholder value**

The theories on shareholder value have a history stretching back to 1950s and 1960s and their intellectual roots are in the pathbreaking work of some economists of that time and a number of them have been honored with the Nobel prize for economics. Shareholder value started to take on a life of its own as a result of work done on what become known as the Capital Asset Pricing Model (CAPM) which argues that the returns both received and expected by investors are related to the risk incurred by owning particular financial assets. As it is commonly understood, the higher the risk the greater the return should be. The main insight of the CAPM model which is central to the shareholder view of the world is that there is a risk- weighted discount factor which allows one to assess the value today and tomorrow's developments, profits and cash flows. Not only the discount rate is delivered from the observation of the capital market but it also defines what the opportunity cost of the equity to an investor in the market is. It also states that what the company has to earn in order to justify the use of capital resources tied up in the business. During the late 1970s and 1980s the work in applying some insight of CAPM to the corporate sector began (Black et al, 1998).

Shareholder value was accredited considerable appraisal following a publication of *Creating Shareholder Value* in 1986 by Rappaport. In almost every industry, companies started considering the commitment to shareholder value. This implied a change in the management process; The CEO'S began to direct their focus on creating shareholder value.

Interest in shareholders received a further appraisal with the 1990 publication of *Valuation* by Tom Copeland and other publications from the Mc Kinsey

Group. In this book they show that the application of Shareholder value principal to company is feasible and highly desirable and that it yields substantial benefits not only to shareholders but also to other stakeholders (Black et al, 1998).

### **3.1.2 What is shareholder value?**

#### ***Value.***

Value is an impressive term whose analysis is more art than science. Value has a variety of meaning and people can have very different views on what the value of a company is at any given point in time, they may even disagree on today's value or on the future value. Even though the past value appears to be objective, the present and the future value becomes non-observable because of different value judgments. However, value can be quantified on the basis of a number of factors. Quality of information, perception control, time horizon, uncertainty and tolerance for risk are all factors that create the individual's perspective on the value of a particular company at any given time. What the investors expect to happen to the company's cash flow is the largest determinant of value. Value is a subjective statement of beliefs about the future and represents a perception (that is one of many possible perceptions) about the company's prospects (Knight, 1998).

According to Black et al (1998) value has existed as a concept as long as humanity has conducted trade and accumulated capital and wealth. It has been the consistence measurement used by those with freedom of choice to trade, invest and preserve capital.

#### ***Shareholder value defined***

“The total economic value of an entity such as a company or a business unit is the sum of the value of its debt and its equity. This value of the business is named *the corporate value* while the value of the equity portion is named *shareholder value*” (Rappaport 1998) In the form of equation:

“Corporate value = Debt + Shareholder value”.

This formula rearranged in order to compute shareholder value gives:“Shareholder value = corporate value – debt”. In this formula the debt

portion stands for the market value of debt, unfounded pension liabilities and also the market value of other claims such as preferred stock.

The corporate value is the value of the total firm or business unit. It includes three following components:

- The present value of cash flow from operations during the forecast period.
- “Residual value”, which represents the value of the business attributable to the period beyond the forecast period.
- The current value of marketable securities and other investments that can be converted to cash and are not essential to operating business. (Rappaport, 1998).

It is not only Rappaport who defined shareholder value but many other Authors have also defined shareholder value such as Black et al (1998) who defined shareholder value as being the difference between the corporate value and debt whereby the corporate value is the sum of the future or free cash flows discounted at the WACC. The free cash flows themselves are made up of the individual cash flows for each year of the growth duration or competitive advantage period or the residual value. Thus, cash flow is named free in the sense that it could be distributed to shareholders.

The Ernst and Young<sup>1</sup> attempted to define shareholder value as being the sum of discounted value of all cash flow from the company to the owner, including what is distributed when the company is sold or dissolved.

Serven (1999) commented that what matters most to shareholders is what happens to the price of their stock and then he defines shareholder value as being the market value of a common stock. Scott (1998) wrote that shareholder value is another term for the total value of equity of a firm or its “market capitalisation”. He added that the market capitalisation of a publicly traded firm is highly transparent and it is the number of shares listed on the market multiplied by the average price per share. Even though different authors give

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<sup>1</sup> From the class notes given while studying in Ernst and Young office

these definitions, the key element of most of the definitions seem to cover the Rappaport definition of shareholder value.

### **3.1.3 Shareholder versus other stakeholders**

Normally in the shareholder value management model the primary goal of the company is to maximize value for the shareholder. The opponents of this model argue that this model does not take into account other stakeholders of the companies. They therefore argue that the stakeholder model in which the ultimate goal of the company is to satisfy all stakeholders would be best. Many researchers who studied the shareholder value model have confirmed that other stakeholders are included in the shareholder value model.

Rappaport (1998) wrote that a growing number of domestic and global companies demonstrated that shareholder value orientation builds more attractive companies not only for investors, but for employees, customers, and also other stakeholders. He mentioned that there are powerful market incentives that lead value-maximizing managers to make decisions consistent with social desirable outcomes namely work place safety. He argued that the managements governed by shareholder interests would invest in technology, training, or reengineered workplaces that reduce safety cost. He criticized the stockholder model saying that it may be used by the managers to justify the uneconomic diversification or overinvesting in a declining core business since these moves are likely to be endorsed by constituencies other than shareholders. He explains then a view that would be an alternative to stakeholder model at the same time as being consistent with shareholder interests. This view recognizes that to continue to serve all stakeholder companies one must be competitive if they are to survive. Furthermore the company's long-term destiny depends on the financial relationship with each stakeholder who has an interest in the company. To satisfy the financial claims of those stakeholders, the management must generate cash flow by operating its business efficiently. Then this emphasis on long-term cash flow is actually the essence of the shareholder value approach. In fact a value creating company benefits not only its shareholders but also the value of other stakeholders claims and indeed all stakeholders are vulnerable when the management fails to create shareholder

value. According to him, self-interest dictates that shareholder and other stakeholders engage actively in a partnership of value creation.

Dalborg (1998) discussed further this issue and made it clear that the shareholders are the residual claimers on a company cash flow since they do not have claim to the company's cash flow until the other direct stakeholders have been compensated. He goes on to say that in the company's income, statement other stakeholders are paid first before dividends to shareholders are considered. He added that in the long run also shareholder oriented management benefits all stakeholders. Value cannot be created for shareholders unless the interests of employees are met, such as an attractive working environment. Therefore, fulfilling the goal of value creation is the ultimate test of how a company meets the interests of employees, customers and shareholders. He argues that creating value for employees, in the form of self-fulfillment, remuneration, personal development, etc., are necessary prerequisites for the provision of competitive products for customers. To create value for shareholders, value for both the employees and customers must be created. He then demonstrated this relationship in the following figure:

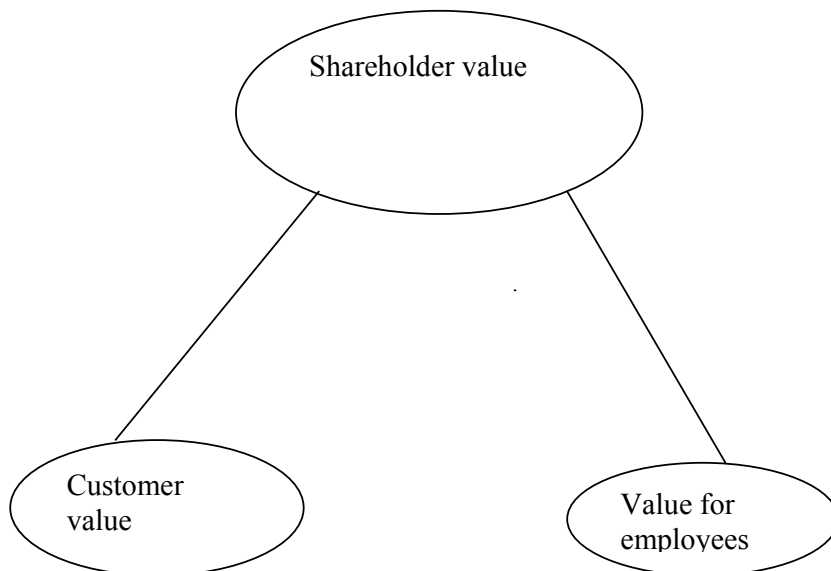


Figure 1: The shareholder value triangular (Dalborg, 1999)

He also stated that while a company managed by shareholder concentrate on its objective it cannot afford to ignore other stakeholders. That is because the employees would leave if they are under rewarded or mistreated, customers will leave if they are not satisfied. Furthermore, suppliers have to be kept happy.

### **3.1.4 Value drivers**

It is helpful to identify and use value drivers in decision-making and corporate objective for value maximization. Value drivers are the operating factors with the greatest influence on the operating and financial results and they also incorporate the entire decision- making dynamic. Value drivers helps make the strategy real at all level of specificity that is meaningful and actionable. Value drivers include aspects of the operating decisions and are used to understand non-financial operating measures. Value drivers occur in all parts of the company (Knight, 1998).

Value drivers are in fact at the root of value creation. Rappaport (1998) explained that value audit permits the managers to monitor the overall value creation and value drivers analysis is a very critical step in searching for strategic initiatives with highest value- creation leverage. He made it clear that the shareholder value analysis helps management to determine the areas of business which need to be managed most; otherwise it is not easy to set priority since many factors can influence the value of a business. Petty and Martin (2001) recognized that if one wants to manage for shareholder value, the first and foremost thing is to identify just what drives shareholder value in the capital market. A key issue that frequently arises in this regard involves whether share value reflects a firm's quarterly earnings or encompasses the future cash flow generating potential for the firm.

Dalborg (1999) identified three fundamental drivers of value creation. These are profitability, growth, and free cash flow. According to him, normally the value of a company is determined by its current profitability, expectation for profit growth and he added also that free cash flow could be considered to be a determinant of value in certain situations.



According to Rappaport (1998) there are seven critical value drivers in determining the value of any business: sales growth, operating profit margin, incremental fixed capital investment, incremental working capital investment, cash tax rate, cost of capital and value growth duration. However, he mentioned that for the operating decisions these factors are broad and in order to be useful there is a need to determine the micro value drivers that influence the above 7-macro value drivers. This means that the manager needs to set micro value drivers at the business unit level. It is seen to be very crucial since it presents a variety of advantages. It allows focusing on the activities that maximize the value, that have significant value impact that are most easily controlled by management. It also helps to eliminate cost in activities that provide marginal or no potential for creating value.

### **3.1.5 What is value creation?**

According to Copeland et al (2000) value is created in the real market by earning a return on the investment greater than the opportunity cost of capital. Thus the more you invest at a return above the cost of capital the more value you create. That means that growth creates more value as long as the return on the capital exceeds the cost of capital. They go on to mention that one should select the strategies that maximize the present value of expected cash flows or economic profits. The returns that shareholders earn depend primarily on changes in the expectations more than actual performance of the company.

Dalborg (1999) pointed out that value is created when the returns to shareholder, in dividend and share-price increases, exceed the risk adjusted rate of return required in the stock market (the cost of equity). He said that the total shareholder return must be higher than the cost of equity to truly create value.

Hogan et al (1999) state that in a competitive environment, shareholder value is created when a company invests in projects that earn a return in excess of the cost of capital.

### **3.1.6 Facts about shareholder value creation**

Shareholder value creation is seen as vital in many organisations. Before stating describing different ways to create shareholder value, it is important to first capture the following ideas about shareholder value creation. Knight (1997) said that higher profitability does not guarantee value creation for shareholders in a company. That is because creating value for shareholder operates under three rules, which are the slippery slope of value creation: the first rule is that the level of profitability has nothing to do with value creation. When it comes to creating value for shareholders, companies that are very profitable have no advantage over companies that are less profitable. Second rule, all management teams start on a level playing field for creating value. Last rule is that different companies face different challenges in creating value. Companies are handicapped based on the results to date. Clarke (2000) added that what it is important is that a company adhering to shareholder value principles concentrates on cash flow rather than profits.

Petty and Martin (2001) state that value creation involves much more than merely monitoring firm performance. Value is created where managers are actively engaged in the process of identifying good investment opportunities and taking steps to capture their value potential. Value creation requires management to be effective at identifying, nurturing and harvesting investment opportunities. In addition to this a capital–market focused measurement and reward system that ties employee-level performance to owners rewards will promote the establishment of a continued cycle of value creation that benefits everyone.

To be able to develop an effective strategy for increasing shareholder value, there is a need to first, understand the factors that determine shareholder Value, then assess by what means managers may create an environment where increased shareholder value is made possible (Michael et al, 2000).

Concerning creating shareholder value in the future, it is becoming increasingly more difficult to create value in the future since investors will realize no matter how good is getting in creating value and they will price the stock accordingly. By increasing the stock price, investors are giving managers credits for

performance to date, but they are also increasing the degree of difficulty in creating future value. “What have you done for me lately?” is what the shareholders are asking. Even though operating returns may have improved but investors gave credit for that by increasing the value of the company and yet they still want to know what is going to be done to create more value in the future. Companies face challenges in creating shareholder value such as increased complexity, greater uncertainty and risk, time compression, conflicting priorities. Managers are being required to make the complex simple, to reduce uncertainty and risk, to speed decisions making and to balance conflicting priorities. Companies have been trying to face these considerable challenges through different ways such as capturing the business strategy in performance measures, paying management for value creating performance and focusing managers on the business strategy (Knight, 1998).

### **3.1.7 Ways to create shareholder value**

Different ways are identified in which companies create shareholder value. Dalborg (1999) identified general four cornerstones in creating value for shareholders. Those are excellence in operations, getting the financial structure right, being focused, and credible earning growth. He believed that being successful in creating shareholder value, the company needs to be well positioned in both the four areas. Furthermore, other ways to create shareholder value are also identified under this section.

#### **3.1.7.1 Excellence in operations**

Dalborg (1999) states that excellence in operations means running the current business to produce maximum sustainable profitable growth from the current assets base. Operating efficiency presents a great importance for value creation since it contributes to the overall profitability and also when growth initiatives are being considered operating efficiency is also a prerequisite.

He explained that one key to achieving excellence in operations is to decide an outlay that promotes current and future revenue-generation capabilities while simultaneously enhancing cost efficiency, which is a difficult balancing act. This is because cost-cutting is never ending since new technologies oblige improvement continuously. Thus, the culture of change must be introduced as a

norm rather than an exception. Excellence in operation is closely related to profitability since with that profitability is maximized within the scope of a given product area and geographical markets (Dalborg, 1999).

### **3.1.7.2 Getting the financial structure right**

Dalborg (1999) based the discussion of getting the financial structure right on the cost of equity; it is seen as important because it is used as a discount factor in the calculation of value. A company's cost of equity is equal to the expected rate of return that investors require to purchase the company's stock. Although the cost of equity is not discernible from the market data, the information is needed to manage risk capital in the interest of shareholders.

Under the assumption that markets are efficient, a company that aims at maximizing shareholder value should pursue investments that are in line with company's strategy and have a risk adjusted rate of return that exceeds the cost of equity. Thus to make right investment decisions the company need to know its cost of equity, it is also important to know that the cost of equity varies with a company's risk level and debt structure. The risk level of a company needs to be carefully chosen since it is an important determinant of the cost of equity. Managing the level of risk capital is also important because companies get into problems when equity is too low. The solvency ratio must be kept appropriately high in relation to the risk in operations and expansion plans for the near future, and not higher than that (Dalborg, 1999).

According to Dalborg (1999) a company should keep the structure of equity as simple as possible in order to provide maximum value for shareholders. The structure of equity capital should not, in a company that maximizes value, be an obstacle to a takeover, instead a high share price should provide such an obstacle. He also added that getting the financial structure right is closely related to free cash flow since it deals with issues of capital, risk, and dividends, the important point being to manage the company's capital in the interest of shareholders.

### **3.1.7.3 Being focused**

Dalborg (1999) states that focus has become one of the building blocks in valuing the shares since investors are becoming increasingly aware that all customers need for different products cannot be met by one company. In order to maximize value, companies need to be focused. Therefore, they need to have clear strategy on where to concentrate efforts. This must be effectively communicated to the companies' staffs and then adequate mechanisms for follow up can be subsequently achieved. Companies can enter areas where they have competitive advantage and downsize, divest, or close operations that do not have the potential to create value, this has to start at the group strategic level and it must be understood and accepted by the successive layers of the hierarchy. Being focussed is linked most closely to the profitability since to better manage a company one needs to focus on its areas of profitability otherwise profits would deteriorate.

In addition to the above ideas of Dalborg, other authors had also some views on this issue. Van and Linde (1998) stated that cutting back on investment (and divert capital from) activities and lines of business which are uneconomic meaning that they do not generate returns in excess of the required cost of equity can also create value. Zook and Allen (2000) added that profitable core could be an extremely durable engine for profitable and value creation driving a company for many decades.

### **3.1.7.4 Credible earning growth**

Growth adds new assets that provide for future profits; therefore a company's growth prospectus is very important in creating shareholder value. Innovations that provide new rather than improved products are one of the explanations why companies achieve spectacular results in creating shareholder value. The market rewards investments for growth when expansion plans looks as if they will create value. Except for some exceptions, generally business with higher P/E ratios will expand faster than other businesses and companies that aim at value creation should direct their resources towards growth areas. Growth can be achieved through merger and acquisition and also it can be an organic growth meaning that it is the growth generated by the company itself. Credible

earning growth matches the fundamental driver growth since the growth prospect has to involve sustainable profitable growth not just growth per se (Dalborg, 1999).

According to Doorley and Donovan (1999) if a company does aspire to a high level of achievement, it must grow and companies with a near-fanatical focus on the growth outperform all others. Companies with high growth rates are mostly likely to have high returns to shareholders and companies with low growth rates are likely to realize low returns. However, he said that not every business could generate value by growing all the times. He also indicated that there can be value destroying growth. Therefore, before committing to developing a specific business, it is important for the company to determine whether or not its returns exceed the cost of capital. Rappaport (1998) discussed that Shareholder value creation in external growth such as merger and acquisition depends not on the pre-merger market valuation of the target company but on the actual acquisition price the acquiring company pays compared with the selling company's cash- flow contribution to the combined company. Zook and Allen (2000) discussed the potential series on growth and shareholder value creation and found out that sustainable revenue and net income growth is the only reliable way to create shareholder value.

### **3.1.7.5 Information**

Investors' expectations play a big role in determining the value of a company. Furthermore, the way companies present the information or the degree of disclosure of information can also create the value. Van and Linde (1998) state that it is important to tell investors about the strategies being followed and what is actually being done in the company. Directors must ensure that all interested parties are fully informed of any material matter affecting the company's business, with openness and substance over form being their guideline". By "Any material matter" the author means one, which affects shareholders' expectations, and the market prices that are based on those expectations. Failure to properly inform shareholders can be severe since investor confidence is difficult to regain.

According to Clarke (2000) giving out information will benefit individual shareholders as well as the company. He then suggested that management should report both why their strategies are expected to lead to the creation of value over the long term and their own view over actual performance. It will also facilitate the stock Exchange in allocating scarce capital resources. Knight (1997) states that information controls value since value is based on expectations of the future and what investors expect to happen to the company's cash flow is the largest determinant of value. He went on to mention that information is the most single factor in determining value and that information about the past is objective while information about the future is subjective.

#### **3.1.7.6 Stock repurchase**

Rappaport (1998) pointed out that one of the guiding principals of shareholder value management is to return cash to the shareholders and when the value creating investments are not available, share repurchase becomes a considerable supplement to the dividend in returning cash to shareholders. Companies may repurchase their shares as a signal to the market that their stock is being undervalued since average stock prices respond positively to the announcement of share repurchases and premium tender-offer share repurchase are most appropriate for reducing significant market undervaluation. Furthermore when the market undervalues company's shares, a share repurchase transfers wealth from the exiting shareholder to continuing shareholders. Then, in this case management objectives to maximise long-term value for continuing shareholders, are put in action. The continuing shareholders will thus get a return, which is greater than the required rate of return if the exiting shareholders sell at that undervalued price.

The companies may carry out stock repurchase since it is a more tax efficient means for distributing cash to shareholders. In most cases, taxes are lower on capital gains than on ordinary income. However this tax efficiency idea does not apply to some institutional investors such as pension funds with no tax status. Companies also use stock repurchase since it enables them to increase leverage and move towards a more desirable capital structure. Here, the management must first make sure that this would be the least costly way of

increasing leverage. The author then argued that a share repurchase is a good idea if it is at the right price ( Rappaport, 1998). Ehrbar (1998) had a discussion on share repurchase and said that the basic building blocks of financial strategy are the mix of debt and equity and the method that is used to distribute the cash to the shareholder – dividend or share repurchase. He added that Companies have far more flexibility when they choose the share repurchases because they can carry more debt on their balance sheet. The other positive money for the shareholders is that they pay taxes only on the portion that constitutes the taxable gain.

### 3.1.8 Shareholder value network

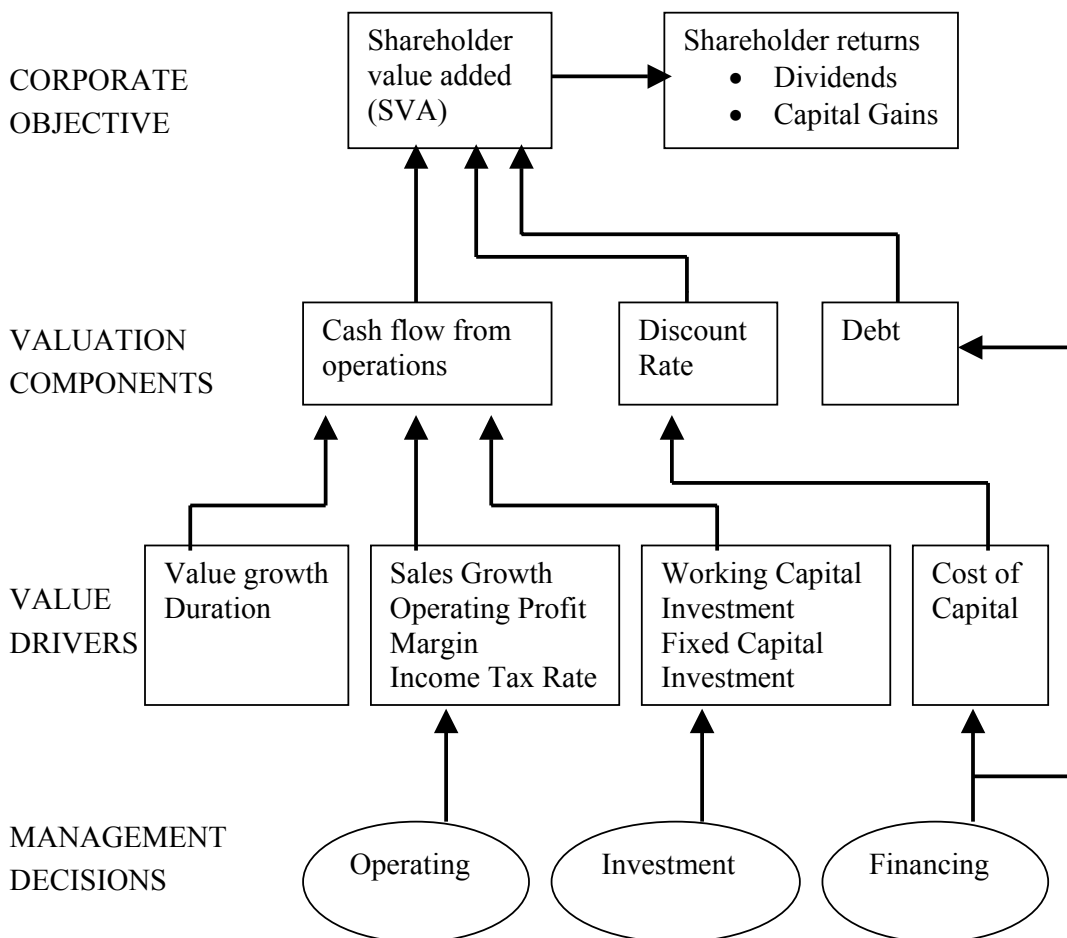


Figure 6: shareholder value network, Rappaport (1998).



The above figure represents the relationship between the corporate objective of creating shareholder value and the value drivers or basic valuation parameters.

The value growth duration, operating and investment value drivers determine the valuation component which is Cash flow from operation. The valuation component: discount rate is in its turn determined by an estimate of cost of capital. To obtain shareholder value from the valuation component: debt is deducted from the corporate value. Finally in its turn shareholder value added serves as a foundation for providing shareholder returns from dividends and capital gains.

### **3.1.9 Value Based Management**

Knight (1998) defined the value-based management as a way of focusing managers on the company's strategy to achieve a better alignment and create value. He goes on to say that managing for value means using the right combination of capital and other resources to generate cash flow from the business. This is an ongoing process of investing and operating decision making that includes focus on the value creation. In the value based management the focus on value is introduced into each of the three decisions making areas: objectives, alternatives, and information. These help improve the quality of the decision and create value. Managing for value means imposing on the existing businesses the same type of discipline applied to new project approval. Value based management companies focus on the value oriented decision-making in the four key management processes of planning, budgeting, compensation, and management reporting. When all of them are focused on the value they reinforce the value mind-set.

Value Based Management (VBM) is also an integrative process designed to improve strategic and operation decision-making throughout an organization by focusing on the key drivers of the corporate value. Value management in the strategic planning process should be conducted in the context of a value creation target set by the center. Concepts, Principles, Practices of value-based decisions are translated into the language of the business. The overriding role is to make everyone in the company understand how they can create value through their individual actions and decisions. The business managers can

develop alternatives, which can be compared to their potential value creation (Copeland et al, 2000).

Value based management means operating the company to create shareholder wealth and also take specific actions across the corporation to increase returns to shareholder. To take specific actions across the corporation to increase returns to shareholder-who after all, are the owners of the corporation and providers of its capital lifeblood. The thorough value based management approach increases the firm's future cash flow net of investment, with measures and tools specifically suited to that challenge. Management process and systems encourage the managers and other employees to behave in a way that maximizes the value of organization. They include the planning, target setting, and performance evaluation, incentives system, which every company needs in its running business ( Copeland et al, 2000).

Choosing the right VBM approach should be as much about how the method aligns with management's reason for adopting VBM as any argument of superiority of one method over another. So having a clear understanding at the outset of what you want to accomplish is absolutely essential. Successful VBM programs have certain common attributes: first, top management support-genuine commitment not simply taking involvement. Second, links to compensation. Third, investment of time and money in educating the firm's workforce about how the program works. Last, simplicity valued over complexity. And they also stated that it should be clear that not all firms derive the same benefits from implementing VBM (Petty and Martin, 2001).

Launching of the VBM program generally requires transforming the organizations at all levels. The most fundamental change will come at the top. There are many important corporate decisions which must be adopted from the value perspective, such as corporate shape; portfolio planning and resources allocation; mergers, acquisitions; financial policies such as leverage, rights issues and dividends. Equally important are empowerment and the move to the smaller corporate centers. The role these centers play in setting the framework, processes and measures should encourage the whole company to deliver the value (Monneri and Neil, 2000).

The method by which such VBM is implemented will be different in each company. However, common for all those companies is that it has to be based on adopting existing measurements processes and measures. These processes – strategic planning, target setting, and annual budgeting – and the measures used can be employed as direct behavior in the organization. The purpose of the management here is to translate the goal of value creation into the practical tools that can refocus and motivate the behavior within the different businesses. Fundamentals of aligning processes decision tools with the value creation are the development of the appropriate set of the internal measures (Monneri and Neil, 2000).

Value based management could be claimed to be evolutionary in terms of its break with past management accounting bases of performance measurement. There are numerous different VBM techniques, including residual-income type approaches, such as economic profit and EVA, 'shareholder value added' approaches, and 'cash flow return on investment' (CFROI). The key advantage of applying VBM techniques is that it can affect the behaviour of an organisation. Critical to the successful adoption of VBM techniques is actually changing the behaviour of employees so that VBM can be used as a strategic tool and, if accepted throughout the organisation, such a change can be beneficial in terms of providing both a common language and common objectives (Cooper et al, 1999).

In a well-functioning VBM organization, the management processes, such as planning and performance management, provide decision makers at all levels with the right information and incentives to make value-creating decisions. It operates in all levels of the organization. Line managers and supervisors can have targets and performance that are in line with particular circumstances to the overall business strategy (Petty and Martin, 2000). Some research was done and came up with conclusions that that VBM adopters decreased their new investments, increased the dispositions of the assets; increased their payout to the shareholder through the share repurchases and utilized their assets more intensively. All these responses are consistent with the shareholder value creation, because the dispositions of the non-productive assets, returning cash

flow to the firm's stockholders (dispensing free cash- flow) through the share repurchase, and the greater use of the existing assets are all ways to increase the SHV (Shareholder value) (Petty and Martin, 2000).

### ***3.2 Shareholder value creation – how to measure it?***

How can we define whether the firm raised the shareholder value in a particular time period or not? There are real “wars” between different famous authors as well as different consulting companies whereby every company defends its own indicators and tries to find the minuses in the others. It is possible to divide them into accounting based measures, such as ROI; ROE, EPS; and economic based measures such as economic profit. Some of them are considered to be better than others. The main idea of all these measures is to help the managers to make value-created decisions and orient all employees towards value creation (Copeland et al, 2000).

#### **3.2.1 Introduction**

Which measures are preferable? The McKinsey consultants - Copeland et al, 2000- state that the economic-based measures are preferable to accounting-based because it is easier to understand the value drivers, and second, the cash flow is what drives share price performance.

One of the most famous authors of shareholder value theory, Rappaport, considers that only DCF (Discount Cash Flow) can give an objective view of the company's performance and shareholder value increase (Rappaport, 1998).

However most of the authors agree with the following statement: *it is possible to talk about the shareholders value creation when and only when the company earns the rate of return on new investments higher than the rate investors could expect to earn by investing in the alternative, equally risky securities.*

It is possible to build the following framework for the metrics in order to better understand different aspects of the firm's performance.

<u>Value drivers</u>	<u>Financial indicators</u>	<u>Intrinsic value</u>	<u>Share price performance</u>
Market share	ROIC	DCF	TRS
Cost per unit	Growth (revenues,	Real option	MVA
Value of R&D ⇒ Projects	EBIT) Economic profit	⇒ valuation	⇒

Figure 1: Comprehensive Value metrics Framework, Copeland et al. (2000)

Each class of measures can have the following role in the management’s performance:

- The company can set targets concerning the terms of market value of the company or TRS;
- It can evaluate different strategies of BU (Business Units) or entire companies in terms of intrinsic value (DCF);
- Intrinsic value can be translated into short- and medium term financial targets for operating and strategy value drivers;
- Performance can be compared with targets, and managers’ rewards (compensation and other) can depend on financial measures and value drivers (Copeland et al, 2000).

### **3.2.2 Old and traditional accounting measures – plusses and shortcomings.**

#### **3.2.2.1 EPS – Earnings Per Share**

Since division of earnings of the company computes the earnings per share by the number of outstanding shares, we will concentrate on the numerator, i.e. earnings. According to Rappaport (1998), the *Earnings* fail to reflect the real picture of the company performance because of the following reasons. At first, it depends a lot on accounting principles such as various methods of depreciation, pooling interest versus purchase method for mergers and acquisitions. Secondly, it ignores time value of money since it does not take into account that a dollar of cash value received today is worth more than a dollar tomorrow. Thirdly investment requirement is excluded since the relationship between the change in economic value and earnings is obscured and investments in working capital are excluded from the earnings calculation. When the business grows, the increase in accounts payable and inventories is

inevitable. Another problem is that the earnings (and actually other accounting measures) don't include the opportunity cost of equity. Lastly is the fact accounting earnings don't reflect the firm's financial policy, for example, whether it is a unlevered or levered firm (Rappaport, 1998).

### **3.2.2.2 ROI: Return On Investment.**

ROI is one of the most popular measures the companies use in their financial reports as one of the key measures of success, and it remains one of the main measures of the division performance. The computation of ROI is expressed under the following formulas:

$$\text{ROI} = \text{Net income} / \text{book value of assets}$$

Or 
$$\text{ROI} = \text{Net income} + \text{Interest} (1 - \text{tax rate}) / \text{Book value of assets}$$

The increase in ROI is no guarantee of shareholder value creation despite its being one of the most popular measures. It is considered that shareholder value is created if ROI is bigger than WACC. But as Rappaport mentioned, it is the same as "comparing oranges with apples" (Rappaport, 1998).

What are problems with this measure? ROI is an accrual accounting return and cost of capital is an economic return demanded by investors. At first, ROI is the single period measurement and it does not consider the events beyond the current period. Computing an average ROI for several periods would reduce but does not solve this problem. Second, the numerator and denominator are affected by the accounting allocation. Rappaport compares the ROI with the discounted cash flow return (or economic one-year return on investments):

$$\text{DCF return} = \text{CF} + (\text{PV1} - \text{PV0}) / \text{PV0}$$

Where PV0 is the present value at the beginning of the year,

PV1 is the present value at the end the year

When the numerator is the *economic income*, the numerator in ROI indicator is the accounting income. The present value of the cash flow received one year from now excludes the present value of the current year's cash flow which has already been received in the formula of DCF return (it can be also called the *Internal rate of return*).

There are several misstatements of ROI over DCF – most often there are overstatements

- *Length of the project life*: the longer the project life, the greater overstatement since net income includes the capital expenditures, which can be very big; and investments in working capital, where CF excludes this, moreover, time factor is not taken into account.
- *Capitalization policy*: the smaller the fraction of total investments capitalized on the books the greater the overstatement will be.
- *The rate in which the depreciation has been put on the books*. Depreciation procedures faster than straight-line will result in higher ROIs.
- *The lag between investment outlays and the recoument of these outlays from cash inflows*. The greater the lag, the greater the overstatement (Rappaport, 1998).

It is important to emphasize that capitalization and depreciation policies are strictly accounting matters and do not affect the company's cash flow and economic rate of return. Research and development expenses, a form of capital investments, are expensed at the current period; so the comparing ROI of, for example, drug and some industrial companies can be misleading because the exclusion of R&D investments from the ROI base increases ROI.

Other additional shortcomings of ROI are that the economic rate of return depends solely on the prospective cash flow, when ROI depends not only on prospective investments and cash flow but also on underpreciated investments of the post period. Moreover ROI is criticized because it neglects the residual value of the company or business unit (the residual value is the present value of cash flow which is to be received at the post planning period). The other limitation of ROI is noticed in using it for the financial planning and control since it involves the sometimes counter economic effect of changes in financial policy on ROI.

### **3.2.2.3 ROE – Return On Equity**

ROE= Net income / Book value of shareholders' equity

The ROE has the shareholders' equity as the denominator; and it is more popular at the corporate level, whereas ROI is more popular for the measuring of the division's performance. One of the reasons for such a preference is that ROE is a measure of primary concern to investors.

Since ROE is similar to ROI, it has all the same disadvantages as ROI. The specialty of ROI is that it is very sensitive to the leverage. ROE will increase as more than optimal debt is issued and the value decreases, so the ROE and shareholder value criterion is in conflict here.

The different accounting practice and operating results can be misleading. If we want to increase ROE, we can do the following: increase the leverage (and decrease the denominator), increase assets turnover, or improve the profit margin. Of course, it is good when the company increases its ROE by the improving of the operations by the higher turnover or by a larger margin. One of the examples, except the different accounting practice, is the stock repurchase, which lowers the equity.

The accounting changes and the stock repurchases decrease the usefulness of other accounting-based metrics, such as dividend yield, price/earnings and market/book value. Market-to-book measures can be also misleading because of too optimistic or too pessimistic views of some companies, or because of the shrinkage of the book value. Price/ earnings ratio is also not too much reliable because the company's management can manipulate with the earnings.

Another problem of the ROI and ROE is that it is impossible to compare the returns for the knowledge company with that of an Industrial Company. The industrial company invests a lot in the fixed assets, while the knowledge company spends a lot on training, research, information but a small percentage is capitalized. (Rappaport, 1998).

Ehlbar (1998) also criticizes these measures, but he discusses them from the CEO's point of view, particularly, the rationale of connection of the CEO or CFO's bonuses to these indicators. If the bonus depends on ROI or ROE or ROA ( $ROA = \text{net income} / \text{total assets}$ ), the manager can take the project, which can destroy value but increase accounting earnings. Once again the author mentions (without any references to the previous author) the stock repurchase,



which increase ROE. So if for example, the ROA (or ROI) target is 25%, the manager will reject any project that will bring less ROA, even if it returns more than the cost of capital and creates the shareholder value. Or the head of the division whose target returns are 5% will accept an investment, and it does not matter whether it covers the cost of the capital or not. (Ehlbar, 1998).

Bennet Stewart III writes about the same things discussed above concerning the returns (ROE, ROI, ROA) but he divides the disadvantages into two types: the accounting and financial disadvantages. Accounting distortions deal mostly with the different costing methods (LIFO, FIFO etc) while the financial distortions deal mostly with proportion of debt and equity. If the management's task is the particular ROE, The manager can accept the bad project, which is financed by the debt, and reject the good one if it is financed by the equity (Stewart, 1991).

### **3.2.3 Recently developed measures – why are they better than the old?**

#### **3.2.3.1 TSR - Total Shareholders Return**

These measures are supported by the Boston Consulting Group (BCG). (In case one is interested on how TSR is calculated see Appendix 3- A3.1)

The CFO Magazine wrote about this measure: “ The TSR measure allows the managers to make the appropriate trade-off among profitability, growth and FCF (Free Cash Flow), and measure a unit's contribution to the overall company's capital gain and the dividend yield of the overall market (in this case it is Standard and Poor's 500) or to peer group to determine if the value was created by the management”. The calculation of this and other measures is possible to see in the Appendix. The Boston Consulting Group lists the following advantages of this measure such as that TSR is a final primary goal of investors; that TSR gives early warning signals; that it is a comprehensive ratio; that it is hard to manipulate this ratio and the last is that it enables competitive comparisons (BCG Study report, 2000).

This measure is helpful in the comparing of the companies' performance, of one share versus another; or against the market index or some other peer

groups. However, the focus on relative performance insulates managers from the macroeconomic factors, which are beyond their control. It creates a high hurdle, since, by definition half of companies in a given market will underperform the average (Monneri, 1998).

Another disadvantage noticed by Monneri is that TSR can be measured only for traded companies and only after the fact – not forward-looking (Monneri, 1998).

Koller and Dobbs (1998) consider also that despite TSR having many merits, it also has several disadvantages. As they state any performance measure must incorporate a company's share price performance. However, it has to do more than simply record how much the stock goes up or down. It should provide how and why the management creates value. And there are several shortcomings to the TSR.

Share prices are driven by many factors other than management performance. During the period of one to three years over which TSR is usually measured for the purpose of evaluating performance, much of the movement in a company's share price will be driven by the market as a whole or by the industry it operates in. If the performance is measured on the basis of TSR alone, managers can be rewarded or penalized for events outside their control (Koller and Dobbs, 1998).

Moreover, the share prices in the short term are driven more by differences between actual performance and market expectations and by changes in this expectations, than by the level of performance per se. Companies that consistently meet the high performance expectations but don't exceed them have difficulty delivering high TSR. The market may believe that management is doing an outstanding job, but its approval has already been factored at the share price (Koller and Dobbs, 1998).

TSR assumes that the shareholders will reinvest their dividends but the shareholders in any company cannot reinvest their dividends; only to extent that another group of shareholders sells their shares. For example, we can take

two companies, with the same risk factor, the same total return and market capitalization. If one company's total return is higher than the cost of capital and the company pays no dividends, the shareholders will benefit more. Or, vice versa, if the company pays large dividends but its rate of return is lower than its cost of capital, the shareholders will benefit also; because in this case the company destroys less value (Ehrbar, 1998).

### **3.2.3.2 EVA – Economic Value Added**

Enter EVA, a performance measurement concept introduced to the corporate arena in the 1920s, by the General Motors Corporation, and then forgotten, until Stern Stewart Company, New York- based consulting firm, reintroduced it in the 80's as a replacement for the traditional measure of value creation. Stern Stewart now trademarks the approach (Shaked et al, 1997).

EVA® is an acronym for economic value added; it is a measure of the corporate performance that differs from most others by including a charge against the profit for the cost of all capital the company employs. The proponents of EVA claim that EVA is the framework for a complete financial management and incentives compensate system that can guide every decision a company makes, from the board room to the operation floor.

$$EVA = NOPAT - C\% (TC),$$

In the formula, NOPAT is net operating profit after taxes, C% is the percentage of cost of capital; and TC is total capital (see Appendix 3- A3.2) (Ehrbar, 1998).

Ehbar (1998) claims that EVA framework provides the “new lens through which the managers view a corporation”. The capital charge, for example, causes the management to consider the effects that their decisions have on the balance sheet as well as income statements; and gives them a basis for weighting trade-off between the two.

What then does constitute the wealth creation game? The TSR seems like the logical answer but total return does not really tell whether the one company does better than another one. The reason is that of a company's required rate of return, or the cost of the capital, rises with the riskiness of business.

Why EVA is more preferable? As Ehrbar explained in his book about EVA, the formula includes a lot of adjustments to eliminate accounting anomalies.

***The adjustments to NOPAT are necessary to make in order to calculate EVA.***

The first step of calculating EVA is to decide which adjustments are necessary to make to the GAAP accounts. The various types of adjustments can be made: the timing of expense and revenue recognition, inflation, foreign currency translation, inventory valuation, bad debt recognition, intangible assets adjustments, taxes, pensions, post retirement expenses, goodwill, strategic investments.

However, the major adjustments which are necessary to make are the following: Research and development, Strategic investments, Accounting for acquisitions, Expense recognition, Depreciation, Restructuring charges, Taxes, Balance sheet adjustments.

In fact, before a company decides which adjustments to make, it has to consider the following factors. At first, it is necessary to see whether an adjustment is material. By material is meant that the numbers involved are significant to the levels of decision-making. Material also means that the change in accounting could alter decisions in ways that alter shareholder value. If an adjustment doesn't alter decision, it is not worth doing (Ehrbar, 1998).

***EVA bonus system.***

Another issue, which was raised, is the bonus system. How people do their job depends on how to treat them and how to pay them. Whether the usual bonus systems, which are tied to ROA, ROE or other accounting measures, are good? Research has shown that the vast majority of the companies base their bonus payment to top corporate managers on achieving targeted level of earnings, earnings per share, operating profit, ROE, ROA. But such measures are as bad as earnings, since both the numerator and denominator are distorted by accounting anomalies. A division's head, whose ROA for example is 25%, will turn down every proposed investment that promises anything less even if they return more than the cost of capital and would add to shareholder wealth.

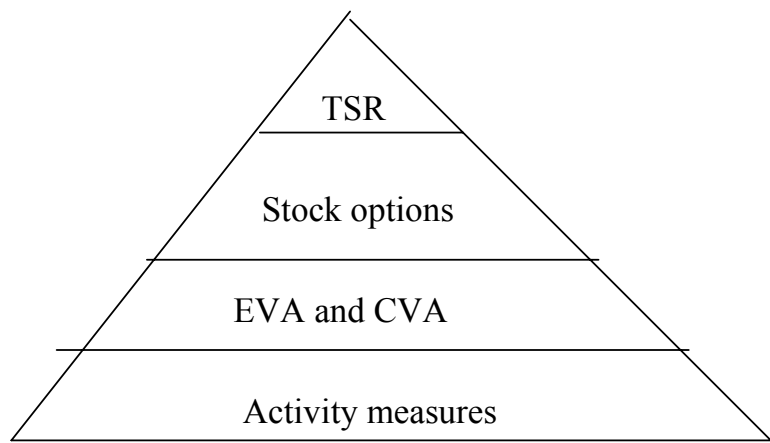
However, the head of division where the ROA is 5% will accept any investment (Ehrbar, 1998).

A critical factor in converting EVA measurement into corporate success is to make it the basis for the incentive compensation plan that encourages managers to think as owners and act like owners. Under such plan managers are rewarded for the value creation instead of the “budget making” (Shaked et al, 1997).

However a far better incentive is to pay managers for the improving EVA regardless of what they can earn. A properly constructed bonus plan can effectively turn the managers into the owners of the individual units under their control, they can become more entrepreneurial; operate with a renewed sense of urgency.

The different levels of management require the different compensation mix. Moreover, the each manager’s bonus should be based on the specific EVA that he or she can affect. Senior executives – the CEO and other key decision-makers – have a direct responsibility to shareholders. These executives should receive their bonuses tied to TSR, stock options to incentives the future performance and compensation linked to company-wide measures like EVA (see the exhibit #1) (Ehrbar, 1998).

Exhibit №1. The compensation pyramid.



Source: Shaked et al, 1997

Second-level managers, usually, key-division managers, play the more important role in the value creation, despite the fact that they have little direct shareholder value's responsibility. Middle and upper-middle level managers are generally responsible for a given level of the capital and have some profit and loss responsibility. To encourage cooperation between the units and to avoid conflicts it is better to tie the portion of their compensation to the company-wide EVA or CVA.

When establishing EVA or CVA objectives, it is necessary to pay attention to the EVA/CVA improvements, regardless of their absolute level. It is actually their improvements that have an effect on creating value above the price paid by shareholders.

Certain managers are responsible only for a subset of the factors needed to calculate the EVA/CVA. For these managers, relevant activity measures should be used. For example, for inventory managers the objective can be the inventory turnover. So the business unit manager, with the planned unit EVA, will have the incentive to minimize the cost of capital and to set the goals so as to induce an inventory manager to avoid excessive inventories (Ehrbar, 1998).

### **3.2.3.3 MVA – Market Value Added**

MVA= market value – total capital

The total value in this formula is the market value of debt and equity. The total capital here is the total assets from the balance sheet, which are adjusted according to the EVA concept (Weissenrieder, 1998).

Dobbs and Koller (1998) consider this measure to be complementary to TSR. If TSR measures the performance against the expectations of financial markets and change in these expectations; MVA, on the other hand, measures the financial markets' view of future performance relative to the capital invested in the business; and therefore; assesses the expectations about the absolute level of the performance.

Ehrbar (1998) claims that MVA reflects well how management has positioned the company for the long term, because the market value incorporates the

present value of expected long-term pay-off. MVA is automatically risk-adjusted because the market values of a company incorporate investor's judgment about risk as well as performance. That is why the MVA can serve for the comparing of performance of companies from the different industries

From the point of assessing the performance of the current management, the change in MVA over the period of one year or five years is more important than the absolute level of MVA. An increase in MVA means that the company's market value grew by more than any additional funds raised or retained from the earnings. On the other hand, a decrease in MVA means that shareholder wealth has been eroded (Ehrbar, 1998).

Changes in MVA can be caused by several factors. First, it is that all stocks tend to rise and fall with the overall market. However, it is necessary to notice here that companies also are beaten by the winds affecting their particular industries.

The most important factor driving MVA is the management strategy. Actually, what determines a company's fate is not industry but the rightness of its strategy and excellence with which managers execute their strategies (Ehrbar, 1998).

It is useful to keep in mind that stock prices are based on expectation since that value of stocks depends on the profit that investors expect companies to produce in the future. Past profits matter only because they are important factors driving expectations about the future performance. The cash that investors expect to get out of it, defines the value of the project or of the company, not what had already gone into it (Ehrbar, 1998).

A company's market value is the present value of future profit discounted to the company's cost of capital today. If a company earns exactly the cost of capital; and no more or no less, its market value added is supposed to then be zero. If expected returns exceed the cost of capital, the company's stocks will be sold at a premium and MVA will be positive; the management has then created wealth by convincing investors that it will produce profits that exceed

the cost of capital. If expected returns account to less than the cost of capital, management will destroy the wealth and MVA will be negative (Ehrbar 1998).

While the goal of every company should be to create as much MVA as possible, MVA by itself is useless as a guide to day-to-day decision-making. First, it is because the change in the overall level of stock market can overwhelm the contribution of the management actions in the short run. Second, MVA can be calculated only for publicly traded companies, i.e. for the companies, which have the market price. Third, MVA can be calculated on the consolidated level, not for business unit, division. As a result, managers have to focus only on some internal performance measures that are closely linked to MVA. According to Ehrbar, it is far better is to manage the increase on EVA since according to the creators of EVA theory, it is the most correlated with MVA (Ehrbar 1998).

Other consultants consider MVA a supplementary measure to the total shareholder return (TRS). Neither MVA nor TRS can be the only measure for the comparison of the companies. TRS measures the performance against the market expectations and changes in these expectations. MVA on the other hand measures the financial market's view of future performance relative to the capital invested in the business and therefore assesses the expectations on the absolute level (Dobbs and Koller, 1998).

#### **3.2.3.4 CVA® – Cash Value Added**

Cash Value added is a Net Present Value that periodizes the Net present Value calculation and classifies the investment in two categories: Strategic and Non-Strategic investments. Strategic Investments are those, whose objectives are the ones made to create new value for shareholders, such as expansion; while non-strategic investments are the ones made to maintain the value strategic investments create. Strategic investments – e.g. investments in new products, in new markets – are followed by several non-strategic investments. A strategic investment can be a tangible or an intangible asset. What is believed to be a value creating cash outlay can be defined as a Strategic investment (Weissenrieder, 1997).



Strategic investments are the capital base in the CVA® model because the shareholder's financial requirements should be derived from a company's venture, not the material assets. That means that all other investments with purpose of maintaining the original value of firm must be considered as "costs" (Weissenrieder, 1997).

What actually is CVA®? Cash value added is defined by the difference between operating cash flow (OCF) and operating cash flow demand (OCFD). Operating cash flow is EBIT, working capital movement and strategic investments. Working capital movement here is calculated using the following formula:  $\Delta$  (Receivables – liabilities+ stock + cash). Operating Cash Flow Demand represents the cash flow needed to meet the investor's financial requirements on the company's strategic investments i.e. the capital cost. However, in the CVA® model, the capital cost is not a percentage term but a cash term (Ottooson, Weissenrieder, 1997).

In order words it is a cash flow, equal amounts in real terms every year that are discounted using the proper capital cost. The OCFD is a real annuity adjusted for actual annual inflation, not average inflation. Simply, OCFD represents the annual cash flow amount, growing by assumed rate of inflation that will yield an IRR (Internal Rate of Return) equal to the WACC on the original investment (Weissenrieder, 1997).

Concerning the calculation of the CVA® and its components see in the Appendix 3- A3.3.

If the managers can evaluate whether the historic margins have been sufficient or not; they can more easily understand whether their plans will bring value; i.e. whether the planned investments are likely to have a CVA® index >1.

### **3.2.3.5 CVA developed by the Boston Consulting group**

The CVA® of FWC AB by no means should be confused with the other CVA – the CVA of Boston Consulting group because they are two absolutely different measures, with different ways of calculation.

CVA of the BCG is the cash value added as well but it is the absolute measure of the operating performance contribution to value creation. The CVA measure reflects operating cash flow minus a cost of capital charge against gross operating assets employed (Stelter et al, 2000). For different ways of calculating CVA see Appendix 3-A3.4

According to the consultants of BCG this measure (CVA or AVE – added value on equity) is an accurate tool of the determining priority of value drivers and assessing the value drivers' tradeoffs. It is a useful indicator that allows managers to balance the high level tradeoffs between improving profitability versus growing the business. Its measurement is based in cash flow and original cash investment, it avoids the key distortions that can cause measures such as EVA® to give misleading trends to capital-intensive business (Stelter et al, 2000).

### **3.2.3.6 DCF – Discounted Cash Flow**

Discounted cash flow – DCF – is the most accurate and at the same time most complicated measure according to Graph №1. According to McKinsey consultants, DCF approach is a more reliable picture of a company's value than an earnings-multiple approach. There are two competitive approaches concerning the value of the firm:

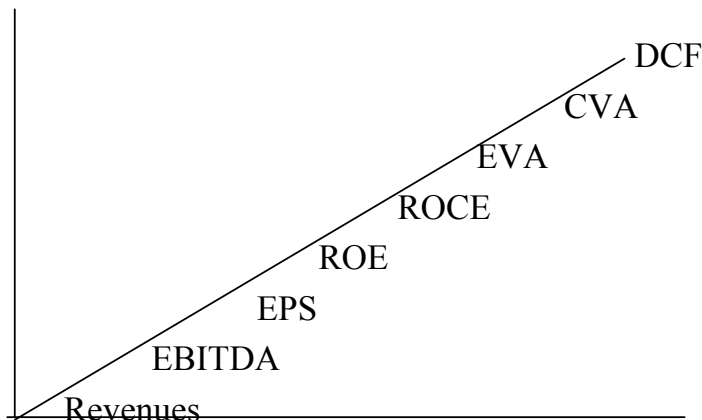
- In the earnings-multiple approach companies are valued based on a multiple of accounting earnings. In its extreme form the earnings-multiple approach indicates that only this year's or next year's earnings matter.
- In the DCF approach the value of business is the expected CF discounted at a rate that reflects the riskiness of the cash flow (Copeland et al, 2000).

Another problem with earnings is that investors cannot buy a house or car from earnings. Only the cash flow generated by the business can be used for consumption or additional investments. The DCF approach is based on the concept that an investment adds value if it generates a return on investment above the return, that can be earned on investments for a similar risk. Another

related measure to the DCF is the SVA – shareholder value added .The formula of SVA is the following: (Rappaport, 1998).

$SVA = \text{Cumulative present value of cash flows} + \text{present value of liquidatio}$   
 at the end of the forecast period – current liquidation value.

The classification of measures is given below:



Graph №1. The complexity and accuracy of the different measures (Laitinen, Leppanen 1999)

All metrics are classified following the grade of complexity and at the same time, the grade of accuracy of the shareholder value measures. Authors made the above graph № 1 where they shown all measures by the increase of the complexity and accuracy (see Graph № 1).

### 3.2.3.7 CFROI® – Cash Flow Return On Investments

The CFROI® model is rooted to the DCF principles: more cash is preferred to less; cash has a time value and less uncertainty is better. All valuation drivers in the CFRI model are calibrated as “real” values. Regarding the discounting rate component, the authors of the CFROI® model reject the CAPM and  $\beta$  procedures for estimating the firm’s discount rate – or the cost of capital – on the basis that they are rooted in a backward-looking estimate of a premium for the general equity market over the rate-free (Madden, 1999).

In Holt's model a firm's discount rate is determined by the market rate plus a company specific rate differential as a function of the market size and leverage. (See Appendix 3 for calculation details).

It is possible to say that value is created or the value creation is positive when  $CFROI > DR$  (real discount rate), negative when  $CFROI < DR$  and zero when  $CFROI = DR$ .

DR means Real Discount Rate.

### **3.2.3.8 Q ratios**

One more answer to the question whether the value is created is the VROI – Value Return on Investment – and Q ratio, based on the Nobel Prize – winning economist James Tobin. (Concerning the calculation's details of Q ratios see in appendix 3-A3.7).

The “pre-strategy” view is simply to capitalize the existing free cash flow – probably for the later available year. Then it is compared with the post-strategy value, which includes the value of cash flow generated over the forecast period. The decision rule is straightforward: if VROI is more than one, SHV has been created, if less – the destruction of the SHV – since incremental value added is smaller than the incremental value of the resource used (Black, 1999).

From the macro-economic point of view, a Q ratio of greater than one means that the market values of the company's assets are more than what they actually cost, while a ratio of less reflects the opposite. A high value of Q means that corporations have a good incentive to invest in new plant or equipment since the market values each unit of investment as more than it is really worth. A low value of Q reduces the incentive to invest but encourages acquisitions via the stock market since investors are paying less for an asset on the financial market than it would cost them to replace it on the goods market (Black, 1999).

### **3.2.3.9 The comparison of the new measures**

Blair (1997) considers that there is no consensus on what should replace the old measures. EVA's advance has been assisted by its positioning as a tool not only for investors but for the companies too. It's hard to find many City analysts

who are not familiar with the EVA idea. CFROI® of the Holt firm is also one which has a London office hawking CFROI analysis to fund managers for 2-3 years.

EVA is definitely the market leader among the new metrics despite the fact that the companies have not dropped the old apparatus of EPS and pie ratios nor that they are going to because it is too engrained to be swept away. It is also considered too useful. (Blair, 1997).

The most important issue is whether the new metrics have anything to tell to the companies about how to run their business. If so, to what extent should the managers assist analysts in providing the information that will enable EVA, CFROI® and rest to be calculated? On the matter of companies generating new metrics data for analysts and investors, there is a willingness to help, but disinclination to publish the companies' own calculations. As a financial director of one of the Burmah Companies said, since the analysts are looking at EVA, we need to as well. He states that in his experience EVA crops up with analysis, if at all, too late (Blair, 1997).

A similar view held by a financial director of another company, who considers that analysts and investors giving more prominence to EPS and traditional measures. He said that his company does its own calculations as fast as they understand these new metrics. They are ready to report pro forma CFROI® and EVA if any institution asks, but there is not any sign of it (Blair, 1997).

Bichard (1994) considers that the appeal of CFROI and other metrics that focus on cash is that they help managers get a clear picture of a business unit's capital efficiency. Unlike traditional accounting measures such as ROA, for example, CFROI looks at the true cash amount invested; adjustments for inflation, where significant are made. This helps managers to judge whether a unit's ability to create value can be enhanced through expansion, reduced capital allocation and assorted efforts to boost profitability.

There is no magic formula that always captures the long-term impact of a business strategy on shareholder wealth. BCG's CFROI and EVA happen to be

one of the most popular tools finance executives are reaching for. To ask whether EVA is better than CFROI is hard to answer. There is trade-off to each approach. CFROI is very accurate but complex, while EVA is easy to use but less comprehensive (Nichols, 1998).

While the attractiveness of EVA comes from the seeming simplicity of its application, the techniques bring substantial challenges if it is to be well used. Unless the right factors and adjustments are to be taken into account when applying EVA in order to reflect the unique identity of each company, it becomes difficult to get an accurate picture of value. In case few adjustments are taken into account, the picture can be distorted and when many adjustments are then made, the process risks becoming too complicated to be used (Bichard, 1994).

Bichard (1994) summarizes the pros and contras of EVA of Stern Stewart Co., CFROI and TSR of Boston consulting group as follows.

#### **Boston Consulting Group's CFROI/TSR -- Advantages and shortcomings**

- Data required by SEC for proxy reporting and used by investors.
- No biases regarding new and old businesses.
- Similar to IRR and NPV metrics used widely to assess incremental project investments.
- It is necessary to consider that market sentiment also drives actual shareholder returns.
- Required tailoring to eliminate unnecessary complexities.

#### **Stern Stewart's EVA/MVA – advantages and shortcomings**

- Easy for line managers to grasp.
- Easy for companies to apply and use without ongoing consultant help.
- Packaged neatly with training tools and software for reporting, planning, and compensation plan design.
- MVA ignores dividend and it is not used by investors.
- Can be biased against low-return start-up investments; can favor business with heavily depreciated assets (Bichard, 1994).

The other problem is that the companies and their business units have their own special characteristics, so EVA may not always be an ideal measure to use. Companies that are particularly sensitive to the availability of capital, might chose to use a measure known as cash value added, alone or with the conjunction to EVA.

The advantages of the DCF are that this model values the components of the business that add up to the enterprise value, apart from this, it helps in identifying and understanding the separate investments. Another advantage is that it can be applied at the different levels of aggregation meaning to a company as a whole and to the business units. It is also consistent with the capital budgeting process.

The problems with the free cash flow, is that FCF, while it is a valid measure of the company’s value when projected into the future, is useless as an indicator of the current performance. Nichols (1998) gives his analysis of the new measures in his work “Unlocking shareholder value”. There he explained the new measures briefly and he wonders whether these measures can tell more than merely the latest way the consultancy can make money? Only time can show this. Gunn (2000) gives his comprehensive comparison table for the comparison of the measures, one for old measures and one for new measures.

**Table №1. Comparison of Traditional Valuation methods.**

Requirement	P/E	EV/EBITDA	ROI
Simple and easy to use	Y	Y	Y
Applicable across borders and industries	N	N	N
Correlated with total shareholder returns	N	N	?
Accounts for risk	N	N	N
Accounts for incremental investments	N	N	?
Incorporates mean reversion	N	N	N
Estimates change in value	N	N	N

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**Source: Gunn, 2000**

**Table №2. Comparison of Three Alternative Valuation methods.**

Requirement	EVA	SVA	CFROI
Simple and easy to use	N	?	N
Applicable across borders and industries	N	Y	Y
Correlated with total shareholder returns	N	?	Y
Accounts for risk	Y	Y	Y
Accounts for incremental investments	N	Y	Y
Incorporates mean reversion	N	Y	Y
Estimates change in value	N	Y	Y

Source: Gunn, 2000

In the tables above “N” means No, “Y” means Yes and “?” means that it is unknown whether this measure satisfies the criteria or not.

According to Gunn’s opinion, SVA, CFROI also have their own problems despite the fact that CFROI is best for the share price forecasting and SVA is the best model of the incremental business value. The problems with the SVA are that it uses CAPM and users must tailor the model to each company. It can be useful for the corporate forecasting, not for investing. The problems with CFROI are the following: first, the market specific discount rate doesn’t make allowance for industry factors or for the global companies to which this discount rate should be applied. This model doesn’t work well in some industries, for example, in property, leasing, and exploration, for which estimating the project life is often difficult (Gunn, 2000).

### ***3.3 The particularities of the application of the shareholder value measures in Sweden***

CVA® -- Cash Value added – was elaborated by the consultants of the FWC AB (Sweden), and is used at SCA. Concerning other measures, Stern Stewart’s EVA and MVA are usually the most discussed in Swedish articles we were able to find. These articles usually outlined the problems and plusses of using EVA. The article: “EVA – is it something for Sweden?” one of the earliest written (March, 1996) that we used in our study, considered that EVA was better than the other key ratios and CEOs recognized this and sometimes even employ it at their departments of economics and finance but it was not used beyond this at that time. European chief of Stern Stewart & Co, Erik Stern, considers that EVA could be the base for the bonuses as well (Hedberg, 2001).



Affärsvärlden in its article about the companies – value creators and destroyers gave the following formula of cost of capital calculation, more precisely, the calculation of its components:

- The market cost of debt is the rate of the long-term risk free 10-year-Swedish state bonds;
- The risk-free premium is the same;
- Risk premium of the stock market is 6%;
- $\beta$  is the actual beta of the stock for the last 4 years before the current year.

The most usual problem the authors of the articles outline is the calculation of the cost of capital, especially the risk premium for equity. The  $\beta$ , which is used in the Stockholm Stock Exchange, is not proper for the companies, which have international financing. For them it would be better to calculate  $\beta$  in relation to the world index (Affärsvärlden, 1996).



## **4 Empirical studies**

The first part of the empirical study covers in a general way how companies create shareholder value. After giving this background information this chapter will then focus on different methods companies use to measure shareholder value creation.

### ***4.1 Creating shareholder value***

#### **4.1.1 Ways to create shareholder value**

We investigated the creation of shareholder value by asking interviewees about the methods their companies actually use to create shareholder value. We found out that all companies have undertaken some actions in regard to this issue. The ways they use them are varied. The more frequently used way concentrates on the core business. All the interviewees said that their companies were active using this way. All the interviewees admitted that they were creating much value by concentrating on the core business than when they were concentrating on many different business areas.

Being excellent in operation was also mentioned by the interviewees. Some of them said that creating shareholder value is all about how one runs the whole business. Then, in order to create value the company must be efficient and excellent in all the operations. Moreover, by doing that, it may provide the possibility for the company to be number one in the market. One interviewee, who indicated that the company managed to be number one in the world in their core business, confirmed this idea.

Companies create value through organic growth meaning that they want to expand their business. Concerning this, one interviewee says that the company has also a target of organic growth in Sweden or abroad, which they believe contributes to creating shareholder value. Another interviewee made it clear that in the company, they pursue profitable growth and they mostly concentrate on both the organic growth and acquisitions. In another company, they usually buy small companies with special capabilities that can strengthen their business and those small companies are easier to integrate within the corporate. More about growth, is noticed in a company that is involved in active divestments

and acquisitions to the extent that this company had made a great number of acquisitions, up to approximately 300 in the last 30 years.

According to the interviewees, having their capital structure right is necessary in order to create value for shareholders. The capital structure must be right and the objective is to have a capital structure that enables financial flexibility and long-term stability and at the same time conduct operations using capital in an efficient way.

Some companies have a clear-cut strategy to create shareholder value through eliminating some businesses with poor profitability. They do it because they have a policy, which states that every activity in the company should create value. However, according to other interviewees some parts that are underperforming in the company are not directly eliminated, instead, they are helped to perform well. They added that they couldn't just sell a business because it is underperforming. In this company selling can only be done if it is a strategic choice to keep up with competition.

Buying back shares was also identified as a way to create shareholder value. One interviewee indicated that it increased the stock turnover. In one company, the repurchase was made to finance the acquisition but the interviewee also felt that the company's shares were undervalued and it was good then to use the buy back share system. Other interviewees in favour of this share repurchase also shared the same point of view. Another reason of using share repurchase for one company was to improve its debt/equity ratio. Other companies that have not yet adopted this way, recognize that this is also an opportunity to create shareholder value and the annual meeting voted for a possibility to use it, but, they have not started to put it into action.

Some companies do create shareholder value through focusing on the new areas that will increase the profit and volume in the long run. One company focuses on service meaning high tech service to processing industry, trading, electronic to customise the product and enter into partnership with other companies that have successful competence and good service; in order to be able to offer customers a better service.

In line with creating shareholder value interviewees agreed that disclosing information was also a considerable step in creating value and almost all of them said that the companies give out enough information to the market. One interviewee made it clear that giving enough information to the market will influence the market to believe the good story and to believe in the future of the company as well and this will certainly create value.

Some of the companies have in place a policy that by creating customer value, they will create shareholder value. They consider that giving better service to customers and satisfying their needs is also very important for the companies. One interviewee explained that the company's main business idea is to turn and to develop the consumer market.

One interviewee indicated that the company also created shareholder value through developing a brand name. He said that before subsidiaries had different names and there was no name for the whole group, then the brand name for the whole group was set. Some other interviewees indicated that strengthening their brand name was as well very important. In regard to this issue, one company creates value in the opposite way, it instead use a multi-brand strategy and the philosophy behind that is that each brand has the responsibility and authority to further develop and nurture its established market position based on its own specific attributes and value offering and with due consideration given to the role assigned by its parent company. Then, this strategy will create value.

According to one interviewee the decision to created a separate company for properties created shareholder value in the company. The company had many properties then, they created that separate company to lend out what was not being used by the company, the company had a very large amount of hidden value.

Adopting the new business philosophy was identified by one interviewee as vital for the company since much value for their shareholders was created after adopting the philosophy which indicated what the company actually was and

what the actual business it runs is. This way made it clear to market that the company is actually more and performs other services than what the market thinks the company was involved in. It also showed that the company earned much more from these services. The market's response after this action was positive and this created value to the company as well as to the shareholders.

In regard to creating shareholder value most of interviewees identified innovation as also being important. Some companies innovate in terms of service. Concerning this in one company there is a speciality in service of what they called happy deal. Technical innovation is given much attention in many companies and more is being invested in it.

According to one interviewee to deliver increased shareholder value, the company constantly challenged itself to do what is right, smarter, faster, and cheaper. In doing that the company creates an exciting, competitive, fast – paced environment for the employees, where there is a great opportunity and rewards for innovation and success.

One interviewee indicates that the value is created for shareholders through leading competence, long-term relationship and good objectives, which would push them to create value. To reorganize the company was considered also by one interviewee as creating value for shareholders. He indicated the actions have been taken to reorganise the company and the company became more centralized. This facilitated, according to the interviewee, the taking of decisions for the whole group. Finally, reducing cost was also mentioned by one interviewee as being vital in creating shareholder value in the company. The company has a philosophy of reducing cost whenever it is possible and this contributes to less spending while more value is created.

#### **4.1.2 Reasons behind the choice of the ways used**

Not only ways to create shareholder value are interesting, the reasons behind choosing these particular ways are important. In order to gather information on this particular point we asked the interviewees why they chose these particular ways not the others. In general terms the interviewees do acknowledge that there are a variety of reasons behind the choice they made.

Profitability was mentioned as one of the reasons. Interviewees argued that the market concentrates much on looking at the profitability. Thus they chose the methods that will help them to make their business more profitable. Another interviewee added that they chose the strategies, which are very suitable for the kind of the business they run and which will make much profit for the company. The way that will increase profit will be favoured. To this point, then, profitability was a reason behind concentrating on core business, eliminating unprofitable business, adopting the new business philosophy and even developing brand name.

Wanting to increase focus on the hidden value in the balance sheet was also identified. The interviewee who said that the company has a lot of hidden value, which in case there is a focus on, would be of great importance for the company. Then this justified the fact that they chose to use the strategy that would best show it to the market. This reason was behind the creation of a separate company that the company used.

Wanting to do what they can better is also another identified reason. The proponents of this reason argue that it is vital to run their businesses doing what they can to perform well. Thus, they needed first to identify what they can do best and concentrate on it. This reason was especially behind excellence of operation.

One of the identified reasons was giving the customer a better service and good trading environment. The company believe that this is also very important for the success of its businesses given that they have a large number of customers. Then, they focus on service – high tech service that is a new area to be able to succeed.

Interviewees identified also offering a more added value product as another justifying reason behind their choice. They want to offer a good, better and up to date product, which will offer more value and make a difference. This pushed them then to focus on electronic in their operations, thus, focusing on new areas.

According to one of the interviewees gaining something new in the company and easier facilitated integration were the reasons why the company took a strategy of buying small companies. The interviewees argued that the company is very big and have a well-established culture. Then the policy is to buy small companies that will be more easily integrated into the company's culture. Moreover, those small companies must have some contribution to add to the company such as new techniques that are not already in place in the company.

Future target growth markets and suitable strategic positions were also identified. This was behind buying companies especially in Baltic countries. To be strong enough for the market and to continue to be first in the market was another reason. The company wants to occupy a considerable place in the market and be known in its market, therefore, it chooses the strategy, which will help in a faster way to become strong in the market. This reason was behind the actions that the company took to concentrate on being efficient in operation and also to undertake many divestments and acquisitions.

Capital structure was another reason identified. Concerning this the company is very concerned with having its capital structure right. Thus, the strategies that it prioritises are those which will not affect its capital structure and which will contribute instead to getting it right.

To get a bigger volume and to expand more were also mentioned as reasons justifying the choice made. They mentioned this, since they believe that when you buy and sell in bigger volume, this contributes in cutting costs and then passing the savings to the customers. The product would be then much cheaper as result of that. Interviewees argued that to expand more has a connection with the growth need because it is assumed that bigger may be better. That bigger companies may be more successful, survive and prosper. This reason was then behind merger and acquisition as well as organic growth.

To have low costs and to maximize the shareholder value are also other reasons identified. Some of the companies want to offer a very high service level at very low cost. They also want to maintain a low cost position and look for



activities that will enable them to create cost saving and value creating opportunities. This would help them to reach their determination of value creation for shareholders. One company wants high performance at low cost.

The ways that will be chosen are the ones suitable for the kind of business the companies run meaning that they do not just choose the way, it has to be in accordance with the business in place. This was also behind the choice of excellence in operations.

### **4.1.3 Successfulness of the ways to create shareholder value**

Under this subject the interviewees were asked to evaluate to which extent the companies' actions to create shareholder value had been successful. The answers to this question differed substantially. Interviewees answered in three different ways. Some said that they are successful, others said that it is very hard to tell. Finally, the last part said that they cannot be sure in the short term but in the long run they will be successful.

For those who argue that their ways are successful they said that they have reached their target or they indicate that they are successful because the share price has not fallen much. Moreover, they argue that their EVA is positive thus their ways have been successful. One interviewee mentioned that the company had even paid all its debts and has strong cash flows and claimed that all that is a sign of successfulness of the ways the company use to create shareholder value.

The interviewee, who said that it is very hard to tell, argued that the successfulness could depend on different factors and on time. For example, the system of selling a product where one earns a fee may be expensive because the personnel become expensive with the bonus they need on that fee. Therefore the interviewee said that the answer could not be known for sure.

The last part that said that they cannot be sure in the short run but that they will be successful in the future argued that time is needed to be able to tell whether a way used is successful or not. Then, they cannot confirm at the present time

but in the future given the ways they are seeing the situation, they will be surely successful.

#### **4.1.4 Shareholder value creation as key corporate objective**

In order to find out whether shareholder value creation is a vital objective in the companies, we asked the interviewee the following question: Is shareholder value creation an explicitly communicated key corporate objective? The interviewees answered in different ways, following what the companies were putting into action.

Among the 7 companies one, of them has shareholder value creation as an explicitly communicated key corporate objective. Two companies have value creation as an explicitly key corporate objective but they clearly mentioned that value creation is for shareholders, employees, business partners and consumers.

For three companies shareholder value creation is not explicitly the key corporate objective but it is an internal goal for the management and they combine it with creating value for customers.

One company does not have creating value as an explicitly key corporate objective but it does create value considering not only shareholders but also it creates value on the same level for the other stakeholders such as employees, customers and society. It uses instead the stakeholder model. The interviewee expressed the view that a company cannot easily succeed by only putting much focus on shareholders without looking at the other parts such as employees, customers, and society.

Contrary to this above idea, in the company that has shareholder value creation as an explicitly key corporate objective, the conflict between shareholder and other stakeholders is not remarkable since when the company is doing well and creating shareholder value, the employees benefit as well as the society. The interviewee in that company said that shareholder and stakeholder fit together. Even if a conflict may occur it is very minor in the sense that it may be hard for the employees to balance everything since they know that in everything they have to think about cost. Time may also be a problem.

#### **4.1.5 Shareholder value creation in the long run**

The long-term creation of value is very important both for shareholder and for the companies. We then asked the interviewees what the companies were planning to do for the future value creation and we got the following replies.

Interviewees agreed that the creation of value in the long run is very important for both companies and shareholders. We identified different points of view towards the ways they plan to do it. One company plans to stick with its current strategy since it is very suitable for the company and the company will also try to fulfil the targets it has set, with that the company would create value in the long run.

To deliver good results and credible earnings were also mentioned. The company was to try in all its operations even in the future to be best and always have the objective of delivering good results that will create value.

“Build a brand name and communicate it very openly”, the interviewee who mentioned these ideas said that the company was preparing to manage its operations very well and build a brand name, which will be communicated to the market very openly. Thus, this will create future value since the market will be very well aware of the brand name of the company and the reputation behind that name.

“To find out the need of the customers was also mentioned”, in the long run perspective the company was to identify the need of the customers to offer the customer up to date products that would satisfy their needs and the company would even market to them what the customers may be not aware that they need while they surely need it. According to another interviewee, using resources as efficiently as possible was what the company was to do for future value creation. The company was to continue working with capital structure using the resources in economical ways. The company plans to increase sales without increasing the assets employed in operations. Thus, the company could continue to focus on growth and stay number one in the market.

Watch what happens in the market. The interviewees argue that it is very important that they keep watching the evolution of the market, what is

happening in the industry, the technological development and also what the competitors are doing. All this would be done in order to stay competitive in the market and be the market leader in the long run. Otherwise, the company would not manage to stay in the market if it was not watching what is happening there and adapt to it accordingly.

Be efficient in operations was also identified and the interviewee argued that the company would be running its operation in a very efficient way. That would be done by managing and conducting their operations in a way that will create value. One interviewee said that in the long run they would focus on the profitability and work with liquidity of share. In this company, buying back shares that will translate to big turnover would be used as well as coming out with the information about the surplus value. All these ways would create shareholder value.

Moreover, according to one interviewee divestments and acquisitions will create value for shareholder in the long run since the company would invest in profitable acquisitions, which will in its turn add value to the rest of the company and to the shareholders.

In relation to this issue in one company the interviewee said clearly that in the company they do not give information about their future plans. For this company, much of what is being planned for future value creation is not disclosed.

#### **4.1.6 Value-based management**

It was important in this background study to have some investigation about value-based management given the place it occupies in value creation where it is used. We were very curious to know exactly how interviewees feel about this new emerging term. Then, we ask the interviewees whether value based management was used in their companies. Some of the interviewees knew little about this term. However, other interviewees were very much aware of value-based management.

Three companies out of seven use value based management. One interviewee mentioned that the company use value based management, thus, managing for value is the organization's principal objective for creating value for all the stakeholders. The creation for value is the foundation of the corporate culture and the basis for everyday business activities. Everyone of the business managers knows the cost of capital for his or her business, the economic yardstick for measuring the potential value of business strategy for allocation of resources and assessing of performance.

The managers are challenged to maximize their free cash flow while at the same time investing sufficient capital to position in the future. There is a primary focus on the free cash flow generation in all employees and this policy is fully incorporated in the enterprise planning and management. The starting point is that the goals for value creation are set for the whole group and its individual businesses. Those goals are in its turn translated into value driver targets, which are then prioritized and broken down into specific actions directly linked to increasing value. Finally these are communicated throughout the organization. Everyone in the organization is a direct contributor to and a beneficiary of value creation.

Value creation is a measure of performance in another company. That model for value creation is used internally to measure performance by sector, product line and region. They drive down costs, improve the rate of capital turnover, and rationalize assets that don't generate sufficient returns. Improvement of value creation is driven by greater internal efficiency, which generates higher margin. The company continued to implement value-based management at all of its subsidiaries. The third company uses value-based management and it is considered as a systematic approach to creating shareholder value.

The remaining companies do not use value-based management and interviewees had some comments on this issue. They said that they have instead goals and objectives that are adapted to each category of employees. They also believe that not all the employees would understand the real term of creating value even if it was communicated to them. They set a target for each

business and have a very centralised system whereby each has to fulfil its target. Another interviewee said that basing performance on value creation would not be good since creating value depends on many factors. The interviewee added that employees, in this case, may have worked hard, but, might be judged negatively if at the end, value was not created.

## ***4.2 Measuring shareholder value creation***

### **4.2.1 Valuation Methods**

After having the general information on how shareholder value is created, we then investigated how the companies measure shareholder value creation. In replying to this question, the interviewees explained how they measure shareholder value creation by presenting the different valuations methods they use.

Those methods are then identified in the table below and each horizontal column stands for one company in the study, as mentioned earlier in the method part, there are seven companies.

#### **Used measures for shareholder value creation**

Companies	Measures used
Company 1	ROA, ROE, ROCE
Company 2	EVA, ROE, EBITDA
Company 3	DCF, ROE, EBITDA.
Company 4	ROI, EPS
Company 5	ROE, ROA (DU-PONT model)
Company 6	EVA, TVA
Company 7	ROE

Source: own

According to the replies we got from the interviewees most of the companies use ROE – Return On Equity. Some of the companies use it with other methods and it is not the only measure, which shows them the shareholder value creation. However, some of companies consider it to be the main method for shareholder value creation. One interviewee defined it as being a result for the year as a percentage of the average of taxed shareholder equity at the opening

of the year and the close of March, June, September and December respectively, adjusted for Dividends paid during the year and any possible right issue. Another interviewee said that ROE is calculated as the profit for the period divided by average shareholder equity. Average shareholder equity is adjusted for the new bonus issues, dividends, and minority interest.

Two companies out of seven included in our study use EBITDA – earnings before interest, taxes, depreciation and amortization – It is used alongside other methods. According to one interviewee, the company uses traditional measures that indicate best the profitability, which is –operating profit/loss for the year in relation to the net turnover – and according to the interviewee profitability is vital in the company and recognized that for different levels of the company the profitability is also different. Concerning the group level the company uses the operating margin. The same interviewee said that profitability is most directly connected to the shareholder value and that is the reason why the company considers it to be important.

ROCE – return on the capital employed is used in one company alongside other traditional methods. According to the interviewee it is calculated as operating income plus interest expense in relation to the average capital employed. Average capital employed is calculated as total assets less non-interest bearing short-term provisions and liabilities and deferred tax liabilities.

$$\text{ROCE} = (\text{Operating income} + \text{interest expense}) / (\text{Total assets} - \text{non-interest bearing short-term liabilities} - \text{deferred tax liabilities})$$

According to one interviewee RONA – return on net assets – is also calculated and it indicates shareholder value creation. This is calculated as net income divided by the net assets. Net assets are calculated as total assets minus non-interest bearing liabilities, interest bearing financial receivables, and provision.

$$\text{RONA} = \text{Net income} / (\text{Total assets} - \text{non-interest bearing liabilities} - \text{interest bearing financial liabilities} - \text{provision})$$

One interviewee said that they use ROI – return on investments – to measure shareholder value creation. In one company the whole group use Dupont model whereby according to the interviewee, ROE and ROA included in that model indicate shareholder value creation. Here  $ROA = \text{profit margin} \times \text{assets turnover} = \text{operating profit/net turnover} \times \text{net turnover/ total assets}$ .

EPS – is used in one company the interviewee also said that the equity per share is used and it is shareholder equity divided by the number of shares outstanding. Shareholder equity is equity according to the balance sheet adjusted for the equity portion of the difference between fair and book value of financial instruments.

According to the replies from the interviewees, some companies in our study do use the economic measures and they consider it to be the main measure for shareholder value creation. In these two companies EVA is used. For one company the aim of using EVA is also to improve the margin; reduce the capital and create the profitability growth and then TVA (Total Value Added) is operating income minus the cost of the capital in the currency the entity operates in. The development for the concerns' EVA numbers is correlated with share price development over the long-term period. Company's concern's bonus and option program is based on this model. However, this company does not publish any figures of EVA in its annual report.

In the second company, where EVA is used, value creation is the measure of performance within the group and the interviewee referred to the following value creation model present in the annual report. This model is accompanied with the figures in the annual report.

### **Value Creation Model**

NET SALES

- Cost of goods sold
- Marketing and administrative costs
- = Operating income, EBIT
- WACC x Net assets

Value creation/ destruction



According to the information referred to by the interviewee present in the annual report 2000 WACC is the weighted average cost of capital, and it is 14 % for years 2000 and 2001 in this company. The calculation of the cost of capital is as follows:  $R_e = \text{market interest plus risk premium divided by tax adjustment}$ , approximately 0.7%. The market interest rate on the loan, and debt/equity ratio is 0.5 or 50%. This company started to use EVA model since 1998 during all this time EVA was positive.

Concerning this issue of economic measure some interviewees in the companies that still use the traditional measures as their main indicator for shareholder value creation mentioned that for curiosity EVA or DCF are calculated only on the top management level to get a picture of their performance and the make it clear that these measures cannot be considered as the measures that group use for measuring shareholder value creation.

#### **4.2.2 Reasons behind the chosen methods**

There are many measures that the companies can use, to then find out about the reasons that pushed the companies to choose the particular methods that they use to measure shareholder value creation, we asked the interviewees to identify those reasons. It is also important to mention that in very few cases specified in this report, some reasons present in the journals were also added.

Concerning Du-Pont model the interviewee mentioned that the reason why it is used is that the company considers the model to be comprehensive, since it is possible to break it down by components and identify which factors influence ROA.

According to one interviewee the choice of EBITDA used in the company is based on the fact that it can be applied deep down within the group, to different units etc. The interviewee added that the company had been using it for a longtime. Interviewees pointed out other reasons for using this accounting measure among those reasons is that it is easy to communicate them to the lower level. The interviewee said also that it is easier to communicate that especially when compared to the Cash Flow that is considered to be difficult

when it comes to communicating it to people without economic / finance education within the company. One interviewee added that the company concentrates on profitability, then, the measures chosen are those, which show most the profitability.

One interviewee mentioned that they chose to use DCF because it would help them to estimate what the company wants to achieve and according to him, it is a useful tool in the investments' measuring.

One of the reasons mentioned for using EVA is that it helps the company's management to see if every business unit is able to cover its cost of capital. Moreover, as noted earlier, the company uses the bonus system based on EVA.

The most comprehensive information about the usage of EVA and its implementation is that the company that has been using it for three years seems to be satisfied with its choice. As it can be read in (Ekonomi&Styrning, №1, 2000, ) one person from this company 's top management did mention another reason for using EVA and said that they wanted to choose the practical model which gives the positive effect; which is relatively simple and compacts with the language and the priorities of the company. The same person added that the advantages are obvious. The company has got the simple measure for growth, margin and capital. In the company it is possible to compare the return with the real cost of the capital and try to reduce the capital part when necessary; all that because they use EVA.

#### **4.2.3 The benefits of measuring shareholder value creation**

To know what the interviewees think about the benefits of measuring shareholder value creation we asked them to give us their views on this issue. Generally, all interviewees perceive that measuring shareholder value does indeed provide some benefits.

The most common view on the benefit of measuring shareholder value creation identified by interviewees is that it can raise the share price. They added that this is an important step since by measuring it; they will be sure of the value created. Furthermore, if this information is well communicated, it can also create value.

Another point of view on benefit mentioned by interviewees, is that measuring shareholder value creation helps management make the right decisions. For example they said that if the company measures shareholder value creation, this will enable it to know whether the value is being created or not. On the basis of that information, the management can take the decisions accordingly. They can easily identify the activities that do not create value and eliminate them. They added that it then is useful in taking the operating, investment as well as financing management decisions.

One interviewee made it clear that this is especially important for the company since it helps them to see which businesses should be developed more. These are the businesses that give more cash flow and became more profitable. The interviewee added that this also could be classified under the fact that it helps in the management decisions.

Another interviewee said that measuring shareholder value creation helps them to keep the optimal capital ratio on the level the group has set. It is by measuring it, that they will be sure if they are keeping that level or not. They will then know what to do in the next step.

It was also stated that measuring shareholder value creation contributes to increasing the turnover of shares and liquidity of the shares. The interviewee said that if the share price is increasing then people could sell them or buy them at a greater speed. Once the company performs well the market should notice it and increase the share price.

#### **4.2.4 Development of measures that the companies use**

Nowadays, some companies are developing their own performance indicators. To get some ideas on whether the companies in our study had developed those measures they use internally and if not what their views on this issue are, we asked the interviewees. It was quite clear after the replies to the preceding questions, that none of measures, which the companies use was developed entirely internally. However, interviewees did mention that even though they

did not develop the measures, they do set their own definitions of some the components of these measures.

One interviewee mentioned for example that the firm did not develop the Du-Pont model by itself but it had its own definitions of some existing terms connected to that measure inside the company. Another company sometimes uses the help of the consultants when it comes to defining WACC. However, the measure the company uses that is DCF was also borrowed.

EVA was developed by Stern Stewart &Co. The authors of this method recognize that there can be a lot of adjustments to the NOPAT. The interviewees who said that their companies use EVA mentioned that they chose to use the simplified methods, without a lot of adjustments.

Interviewees that use the accounting measures also did not develop these measures internally but gave their own definitions of the main components (numerator and denominator). All the interviewees mentioned that so far the companies have not considered developing entirely their own measures.

#### **4.2.5 Advantages and shortcomings of the chosen measures**

In this section we present advantages and shortcomings of the measure used by the companies from the point of view of the interviewees. We brought up this issue to see what the users of these measures consider to be good and what they feel is the weak part of these measures as well as some problems in the application of those measures.

Concerning the traditional measures, the interviewee avoided making many comments about the ineffectiveness of them but were much more concerned about what the benefits are of using them. They mentioned for example, that they are easy to communicate. One interviewee identified shortcomings and advantages of the Du-Pont model. According to the interviewee it is difficult to relate the real growth to the real value. Concerning the new measures, interviewees said that their shortcomings are that people without financial knowledge do not easily understand them and it is hard to communicate them to the lower level employees. As for advantages, interviewees mentioned that it

is possible to emphasize that for people in the administration these measures are good since they create goals. Another advantage is that when the company uses them, it becomes possible to convince the manager to reduce the stocks and as a result the profit may go up. It was also added that they facilitate the taking of decisions.

One company that uses EVA considers the advantages of EVA as being its simplicity when many adjustments are not made and its shortcoming being many adjustments that should be made. This company does not make many adjustments; or use more superior models – because of their complexity. Another EVA company recognizes that EVA may be a shortsighted model but considers that this is not a big problem since there are other ways to eliminate those shortcomings. EVA is also considered a good tool for the central management since it makes it easier to see value. The DCF-user doesn't see any weakness in the DCF model, but mentioned the advantage of it as being that the company can see whether it is going the right way or not.

#### **4.2.6 The test of validity of the chosen measures**

This section covers the interviewees' replies on the testing of the validity of the chosen performance measures in the companies in our study. It also raises the issue whether companies are planning to change those indicators in case their validity is questionable. It is interesting to notice that all the interviewees had some views on this issue.

Concerning the testing of the validity of the chosen performance, all the interviewees agreed that this is very important to do and that their companies were in one way or another testing the validity of the measures. Some companies made adjustments whenever necessary. However when it came to whether the company could change the measures that are known to be no longer valid or appropriate, we got slightly different ideas.

Some interviewees mentioned that the companies are not planning to change the models they used since they are slightly modern. They consider that their systems function very well and there are no reasons to make any changes. One EVA Company added that some adjustments can be made but there are not

going to be any significant movements to the other performance models. Another company's management said that their system the Du-Pont model – contains the components for shareholder value creation gives them a “flexible way to look at information and express it in different ways” and that it may not change it but that there is always room for flexibility.

One reasons mentioned for not changing the traditional accounting measures was the lack of the pressure from influential shareholders and the stock market. It was also added that the stock market is quite conservative and it still wants to use old measures. Consequently the companies prefer to keep the old methods. Some interviewees mentioned that the business the companies operate in is very conservative. Consequently the flexibility to change is very low. Therefore, these companies are not planning to change in the near future.

## **5 Analysis**

This chapter covers first the analysis of the information collected on creating shareholder value and after analysing this background, the chapter focuses on the analysis of measuring shareholder value creation.

### ***5.1 The shareholder value creation***

#### **5.1.1 Ways to create shareholder value**

Most of the companies create shareholder value and have started to integrate that in their daily ways of working. This may be the reason why for every company we interviewed, there were a number of answers they gave us to indicate that they are creating shareholder value. Moreover, all the companies mentioned at least in the annual report that they create shareholder value. However, all of them do not create shareholder value in the same way or to the same degree. From what we found out, there are some ways, which seem common to every company that were mentioned before any other ways. The most used way concentrates on the core business, it is considered to be very effective. The occurrence of this way may depend on the high competition present in the market, which is forcing the companies to concentrate on what they can do best and be able to offer good products, which can be competitive in the market. It is also important to notice that the globalisation that is taking place nowadays may be also another reason pushing companies to concentrate on their core value.

The company cannot act in this way alone and to be able to create shareholder value, it must combine it with other ways to ensure success. The interviewees also shared this view and they mentioned several other ways they put in place to create value. Being excellent was also mentioned by many interviewees, this might due to the fact that many of the companies are actually very well known companies that may be sure that the market does appreciate their operations and they could then declare that being excellent is one of their ways. Organic growth, which was mentioned, may also be justified by the ways the companies are expanding and making a lot of acquisitions.

It is also interesting to see that most of the companies consider share repurchase as a way to create shareholder value and some of them have already

done it or are preparing to use it. However, it appears that from the interviewees' information, some of the companies did it for the purpose of meeting their own needs such as the conditions other business partners put on them. In this case share repurchase may not have been done for the primary reason of creating shareholder value or because they felt that their shares were undervalued as they claimed. Even though this cannot be ruled out, it may be questioned. Moreover, whatever the motive behind it, the result of it is that share repurchase created shareholder value.

One of the other reoccurring ways is eliminating some businesses with poor profitability. This appeared to create some controversial ideas among the interviewees. Some interviewees mentioned that it is good to use and this may be due to the fact that they are from the companies that have creating value as the explicitly key objective. Other interviewees stated that they could not just dispose of a business because it is not profitable, they can instead try to support it so that it can become profitable. Eliminating business with poor profitability can get our support since we think it is a waste of resources as well as time to continue to invest in activities that are not productive. They should instead use those resources to invest in other activities that can create value or to develop and expand the existing profitable activities.

It was unexpected that the idea of having a correct capital structure was not directly mentioned by many companies, given its importance. Two interviewees identified it. We feel that it should be the focus of each company in its process of creating shareholder value. It is more likely that other companies consider it, but they should not underestimate communicating and revealing to the market the actions they are taking in regard to the capital structure.

Disclosing enough information was seen as an important step in creating shareholder value. Some of the interviewees shared the view that the information they disclose can affect the price of their stock, that is the reason why they disclose as much information as they can. This may be due to the fact that these companies are large and disclose a lot of information. However, this cannot exclude the fact that we found out that companies were not disclosing



the information to the same extent. Some companies have made a considerable effort to really give out a lot of information while others still have to make effort to disclose a lot of information which we feel could create a lot of value for shareholders in those respective companies.

Innovation is also one of the most common ways mentioned by the companies concerning creating shareholder value. It thus seems that the pressure to innovate is very much at work in the companies. Different actions to innovate are being taken and a lot of investment in research and development is under way. We found out that this is especially true and to a large extent in the manufacturing companies than in the service companies even though the fact that the service companies are also making some effort in this area cannot be excluded. The manufacturing companies are time after time coming up with new technological development and new products. All these are the fruit of innovation, which is contributing to the creating of shareholder value.

If we turn towards developing a brand name as way to create shareholder value, it appears that there were two points of view, which we also feel both create value when taken from their context. The first view stated that the company decided to have one name and develop it instead of having different names for each subsidiary. This may create value for this company since when all the subsidiaries are known under one brand name and behind that brand name there is a good reputation, this could attract more customers than if all the subsidiaries had different names. The second view involves the case whereby the company bought or acquired other companies that already had developed and reputed brand names and preferred to keep the brand names of those companies within the corporation. Each brand name has the responsibility and authority to further develop and nurture its established market position. This could be seen as a good way to create value since by doing that the company would not only keep the customers of those acquired companies but it would also reap an advantage of having many more customers who may hear about that multi-brand strategy.

Concerning creating shareholder value, some companies adopted the strategy that by creating customer value, they will then create shareholder value. They

concentrate on the fact that giving better service to customers and satisfying their needs will create value for customers and thus for shareholder value. This view may be due to the fact that the companies favouring it, are much more customer oriented than shareholder oriented. It seems as if everything they are doing for the customer, they are trying to relate to the shareholders. However, a more common way, which we feel may be in accordance with shareholder value model, is the other way round. That is creating the value for shareholder then the value of other stakeholder will be automatically created. More related issues are going to be discussed later in this thesis.

Focusing on the new areas that will increase the profit and volume in the long run was seen as creating value for shareholders. It can be seen as important for companies to focus on the emerging new areas that are attracting many customers, such as to focus on electronics, to further develop e-business, to gain competitive advantages by combining technological expertise and know-how or by creating joint activities. This adopted procedure also should be seen as a way to invest for the future since it may help the company to keep up in the future.

Reducing cost, that was also mentioned, may be considered a good way to create shareholder value since the company would avoid any unnecessary expenses while it offers good products and be better off without many expenses. This may be the reason why many of the companies in our study are reducing the cost through for example laying off many personnel. Companies might be judging that they can still cope and at the same time offer better services without a great number of personnel. Many jobs have been lost in that process of reducing cost and while this may be negative for the personnel who are losing their jobs, it seems that companies are getting better off with this strategy. However, it cannot be ignored that many other driving forces may push the company to lay off personnel, such as reduction in the market share, losses etc.

### **5.1.2 Reasons behind the choice of the ways used**

Before carrying out a certain way to create shareholder value the company does make a choice since there exist many ways to create shareholder value. The

companies in the study use many ways and different driving forces were mentioned as to being behind those ways. Different reasons were mentioned even when the way chosen was the same. Therefore, we looked into them closely to try to get the reasons why that might be that case. One explanation about that choice may be that the nature of decision-making process may be different from company to company. We also found out that there is a possibility to group these reasons.

Profitability is very important for quite a number of the companies. To have a low cost and to maximize the shareholder value, the companies plan to use the ways, which will be more profitable. The need to eliminate some businesses with poor profitability and deliver good results are also other reasons. These reasons appear to be cost oriented since they seem to be directed to the process of lowering cost while increasing profit.

Wanting to increase focus on the hidden value in the balance sheet lead the company to choosing the way, which would reveal that information in a remarkable way. This was then behind the creation of a separate company and giving out information. This reason appears to be value oriented since they seem to show that the company has more value than what the market perceived.

Wanting to do what they can do better, Suitability for the kind of business they run are the reasons that influenced the companies to concentrate their actions on the core value. Gaining something new in the company and easier facilitated integration led one of the companies to choose ways that will welcome new ideas and intelligence. These reasons appear to be service oriented. This is because it seems to have in common improving activities in order to offer better services.

Offering a more added value product influenced the company to concentrate on the ways that would allow the company to produce and offer up to date products. This reason appears to be product oriented since it seems to centre on the product. That means the state in which the product should be in once delivered.

Future target growth market, suitable strategic positions, to be strong enough for the market and to continue to be the first in the market were also reasons mentioned. To get a bigger volume and to expand more while developing a brand name. These reasons appear to be market oriented. They actually seem to cover the market issue, how to expand the market share, the position that can be occupied in the market and the reputation in it.

Capital structure as well as giving the customer a better service and good trading environment were mentioned as reasons for some companies and for others they were identified as ways to create shareholder value. This may indicate that some ways or reasons may be interpreted differently from company to company depending on the scope the companies have.

However, how the reasons were determined in the companies seems to be unclear. It would be better if the ways were chosen after the company had identified its value drivers and chose ways that will maximize those value drivers. However, the various reasons mentioned behind the ways were in most of cases very different to the value drivers or they just included only one of the value drivers that the companies had. It seems that the importance of value drivers was not underlined when determining the reasons that stood behind the ways. In some cases companies did not make it clear what their value drivers were, which complicates the procedure of judging whether there may be any link between their value drivers, and the reasons why the companies made such choices. This may also partly explain why some considered ways in some companies, were mentioned as being the reasons behind the ways in other companies. In our view, the reasons behind the ways should at least have some link with or even be the value drivers that the companies have in place. That is because when the companies consider the value driver as the reasons behind the ways used and choose the ways on the basis of those value drivers; the companies may best meet the value drivers and would create much more value.

### **5.1.3 Successfulness of the ways to create shareholder value**

The success of the ways to create shareholder value is judged differently in the companies in the study. The results seem to show that the companies that said that they were successful based their view on the financial situation of the

company and the share price. This may be due to the good financial situation the companies had that time. However, nobody from these companies wanted to raise the questions of other factors in place that may influence the successfulness. It seems that the companies were ready to continue with these ways.

It may be suggested that the companies reluctant to state that their ways were successful, took that position not only because their financial situation was not good as well as the price of share that was not being stable but they also raised the question of other influential factors to be considered in deciding whether a certain way is successful for creating value.

The time factor was introduced, in the view that the interviewees cannot be sure in the short run but that they will be successful in the future. However, this may be subject of argument since some of the ways were introduced in the companies some years ago in these very well established companies, if time was the factor then the interviewees arguing for these ideas should have been able to give an answer to this issue. We therefore sense that many other reasons should have been behind this view such as the falling of the share price, the bad condition of the financial situation, to mention but a few.

Even though the successfulness of the ways depends on different factors as many of the interviewees proposed and that different people have different views on what really shows success, we feel that it is very important to know whether a way is meeting the expected results based on different aspects before finance is invested in it, this would give room to change to another way that may be successful. The complicated nature of judging success should not be used as an excuse of not knowing the answer concerning the successfulness of a certain way. We feel as many other authors did that this evaluation should be based both on financial and non financial aspects, it would be then more accurate.

#### **5.1.4 Shareholder value creation as a key corporate objective**

The shareholder value model indicates that shareholder value creation is the explicitly communicated key corporate objective and it is used as the basis for

valuation. The problem is to know whether companies consider this as a very important step in their creation of value. The results seem to show that this objective does not correlate with the majority of the companies in the study. Although all the interviewees were able to identify various ways in which they create value for shareholders, few companies implemented the shareholder value model. That is one company out of the 7 companies did implement the shareholder value model with the shareholder value creations as a key corporate objective. This company argued that it was creating value in an impeccable way. Other 2 companies had also value creation as an explicitly key communicated objective but not only for shareholders but also for other stakeholders. One possible reason for this could be that the companies do that to avoid many complaints that would arise from other stakeholders.

Other companies use the stakeholder model which is the opposite of the shareholder model, within this model shareholders are not the only important stakeholders, they are considered on the same level as employees, society, customers. The replies we got from the interviewees seem to exemplify the conflict that the opponents to the shareholder model said existed. Some of the interviewees seemed to be opponents of shareholder value model while others seemed to be the proponents of it. The opponents of the shareholder model said that the companies could hardly survive if their main objective was to create shareholder value and they feel that shareholder value creation is not a good measurement system to base on when it comes to valuation. This idea seems to show that the companies have not yet welcomed this immerging issue of shareholder value model, which seems indeed successful in the companies that did use it. However, the proponents of this model mentioned clearly that by creating shareholder value they also create value for other stakeholders. They also mentioned that they do not experience the conflict between shareholder and other stakeholders. We feel that this view could be supported since the shareholders seem to be becoming increasingly important and could in many cases influence considerably the companies' decisions. Having creating their value as a key objective would not only encourage shareholders but would also create their value as well as the value of other stakeholders.

When examining this issue some interviewees judged that shareholder value creation is simply an internal goal. This answer could be seen from two points of view. This answer could simply have been given to us because the interviewee did not want to state openly that it is not their objective and preferred to stay vague. Or it may be that the interviewee wanted also to state that they create shareholder value but not to the degree of having it as their key corporate objective. For these companies, it seems that they use neither of the two models: shareholder or stakeholders model. However, their views seem to direct to the stakeholder model since most of them criticised having this shareholder value creation as an explicit key corporate objective. They said that it would not produce good results for the companies. We feel that if the objective of the company in regard to shareholders is very clear and openly stated the company may reap more benefit and this would have some influence in its value since the market would take into consideration that such a company is doing its best in that area, given that it has shareholder value as its key objective.

### **5.1.5 Shareholder value creation in the long run**

Creating shareholder value in long run plays a very crucial role for shareholders. They always want to know what the company plans to do concerning their future value. Even though all interviewees agreed on this issue and stated that their companies were also planning for the future, it seems that for some companies little was being done to prepare for more future value creation for shareholders. In some cases the future value creation was to maintain the strategy, which is in place. Usually, shareholders expect in future much more than the present ways, they then expect the company to have in place many more plans and projects which would increase their value. If then the company takes that opinion that it will only maintain its present ways, there may be a risk that shareholders would tend to think that the company is doing little or nothing when it comes to the future value creation.

Delivering good results and credible earnings were also mentioned as offering a promising future for shareholders. Even though this way was mentioned as how the company would create future shareholder value. We feel that this is instead a result of the actions the companies would take. This would seem to indicate

in this specific case that the notion of what to do to create shareholder value might have not been very well communicated. Furthermore, the theoretical part discusses that delivering good results meaning high profits is not a guarantee for value creation.

Building a brand name and communicating it very openly would be beneficial and help the companies to create future shareholder value since the brand name contributes to differentiating the companies' products from those of its competitors. We feel that shareholder value may be created if the brand name is promoted since this may exercise some psychological power over the customers who may then favour the companies' products. This would also provide some market power for the company. However, it should not be forgotten by the companies that the brand names might in some cases not be received well in other cultures; the company should consider that, when it comes to cross culture transfer of the brand name.

To find out the needs of the customers and to watch what is happening in the market were also to be done for future value creation. It seems like this may require a constant commitment and could involve costs of conducting inquiries. It may also ask for patience but if the companies are determined to satisfy expectations of high profile customers and not to disappoint them in the future, they would then reap the benefits of it. The companies may be underlining those ways since knowing what customers need, as well as their purchasing power, may be used to determine the ways their products should be made available to generate a competitive advantage in the future. We also feel that by watching what is happening in the market would not only create value for shareholders but would contribute to the technological development and the survival of the firm in the future.

Use of resources as efficiently as possible was mentioned also as a way to create shareholder value in the future. The company was to continue working with capital structure using the resources in economical ways. The company was also to produce good quality and bigger volume at low cost. We feel that this would also create more shareholder value in the future. This is because the company may reap the benefits of achieving economies of scale since by



producing more in an efficient way, the company may achieve lower costs as well as higher profit. This would also add value to its reputation.

It should be noted that divestments and acquisitions are also thought by some interviewees as creating value. This may be due to the business environment, which presents many numerous opportunities for assets acquisitions and divestments. Once the company identifies and evaluates these opportunities and succeeds in managing them well, this may create future shareholder value. Furthermore, once divestment and acquisitions manage to add value, it may then have some contribution in developing the brand name, which in turn would create shareholder value in the future.

When we examined closely the responses given to us under the future shareholder value creation, we noticed that the majority of them were marketing related efforts that were planned to be done in the future. This may underline the importance that the marketing activities occupy for the future of the companies and the creation of shareholder value. This may be a sign that companies are very much concerned about the increasing greater variety of competition and are striving to develop as well as to expand their marketing activities.

### **5.1.6 Value-based management**

Value-based management implies that the value creation is at the centre of all the activities, every activity should create value and that value creation is the basis for performance evaluation. The interviewees who were aware of the rationale behind value based management agreed on this.

It should be noticed that even though all the interviewees agreed that creating value was important for the companies, only 3 companies use value based management. This seems to indicate that the majority of the companies in the study did not welcome the value based management issues. The companies in the study using value-based management were mostly manufacturing companies. However, it should be stated that there was one manufacturing in our sample that did not use this value-based management at all. In some of the users of the value-based management all aspects of value-based management

are implemented from the top level down to the employee and value creation is a measure of performance in those companies. Therefore, this would contribute more to shareholder value creation.

Other interviewees who were also aware of the value-based management had some views on it. They stated that basing valuation on value creation would be simply not fair since an employee can always do his job well and at the end, the reported result may indicate that the value was not created and this would come as discouragement to the employee who is working hard. To the above ideas, we suppose that they may not be an excuse not to use the value based management since when value creation is the measure of performance then the employees may be more concerned about the value they create than when the value creation is not a measure of performance. The other interviewees' idea was that every employee would not understand the value creation. We felt that this view may not be practical since every employee may well be able to identify which activities in his job can create value. This has to do with knowing what they are doing and having more training within their careers and it should be not forgotten that this training is included in the implementation of value-based management.

For the value-based management to be successful, all individuals at all functions should have the ability to fully understand the concept behind the VBM and then be able to put it into practice. This may be the reason why some of the interviewees did not favor the VBM on the basis that not all the employees would be able to go through that process and succeed. It should be noted that the value based management was not rejected as a whole, some of its ideas were supported by the same interviewees who work in the companies that do not use value based management. They feel that some elements of it can also work well in their organization. The key finding from these ideas may be that some companies still have yet to fully grasp the ideas behind the value based management and learn how it can produce good results when applied fully in the companies. We feel that it may not be practical for a company that is said to create shareholder value to completely ignore this issue since Value Based Management is part of the sources that increase considerably shareholder value.

Under the value based management all the activities that do not create value are eliminated or sold. This means that the companies would not invest in any activities that do not create value. All the interviewees in the companies that use value based management agreed on this line of reasoning. However, this may raise a line of questioning. That is because some of these companies using value based management said that their focus is to create value for shareholders, customers, and other stakeholders. However, Rappaport (1998) made it clear that within the companies that are committed to balancing the interests of every stakeholder, there may be overinvesting in the declining core business even though that core business is not creating value for shareholders. In this case, for other stakeholders, this would mean for example more jobs for employees, suppliers would benefit, larger taxes to the local community. On the basis of all that, we feel that it may be hard to eliminate all activities that do not create value in those companies using value-based management and are at the same time committed to balancing the interest of all stakeholders. Therefore, in order to avoid this conflicting issue the companies using value based management should focus on creating value for shareholders, then, the value of other stakeholders would be created during that process.

## ***5.2 Measuring shareholder value***

### **5.2.1 Analysis of valuation methods**

Interviewees mentioned several methods the companies use to measure shareholder value. First, we noticed that most of the methods were the “traditional/old methods”, which are highly criticized because of their ineffectiveness in measuring shareholder value creation. They use for example ROE, ROA, RONA, ROI, and EPS – in other words most of the traditional measures. Here, we should mention that for the companies that use the same measure, the general formulas are the same but the calculation details are different from one company to another. It should be noted that most of the interviewees mentioned ROE and research has shown that this measure has a very low correlation with shareholder value creation.

Concerning the companies that use only those traditional methods, we feel that this would put into question whether these companies can really claim to measure shareholder value creation. Moreover, in one case it looked like the interviewee was presenting different measures they use for the group but it seemed that it was not that easy to identify the exact method they use to know whether shareholder value has been created.

We feel that these shortcomings of the traditional methods should have been identified and dealt with especially nowadays whereby the companies are claiming to create shareholder value. It is good that the companies are presenting different ways they use to create shareholder value but it may be unacceptable to see the low commitment in regard to the measuring of shareholder value creation. Measures used should be more reliable to better measure the value that the companies claim to create.

It is interesting to see that some companies in the study use the new methods such as EVA, TVA, DCF as their main indicator of shareholder value creation. Some of these companies also calculate using the traditional methods. This fact that some interviewees mentioned that they use these measures may be seen as a strong indicator that some companies are determined to present more reliable results concerning shareholder value creation. This may be also seen as a positive effort as far as shareholders are concerned. In some cases, the EVA results are even published in the annual reports. Concerning EVA, its popularity may be easily understood. This measure helps to see whether a firm's profit covers its cost of capital or not; and it can be useful for the business units' estimation. Stern Stewart (2000) suggests making nearly 164 adjustments. We however think that it may be quite a labor-demanding process, and companies usually do very few of them or do not do any (as one of the interviewees who use EVA stated). More about EVA is that this method is easy to manipulate and it distinguishes itself from others in that it takes into consideration the cost of the capital. This may be the reason why the interviewees from the company using EVA mentioned that they could easily identify some business units that do not cover their cost of capital, and then these business units are usually divested. Bonus systems connected to EVA may also be quite attractive since they value managers by result of their job.

An interesting point to note is that EVA may be easy to calculate if one does not consider the complicated adjustments. EVA deals with the past NOPAT, which has been earned already. The DCF deals with the forecasted cash flow, which is supposed to be earned in the future. Here, it can be mentioned that forecasts may not turn out to be true. Furthermore, the forecast of the perpetual cash flow may also have mistakes since it does not reflect the macro economic situation, the market peaks and recession, the situation within industry the company operates in. Probably, here the so-called sensitivity analysis could be helpful. This means that the cash flow from the optimistic, pessimistic and most realistic ways of the business development could be considered. Even though these two valuation methods present various disadvantages, we feel that EVA, DCF are good measures of shareholder value creation especially if we compare them to the traditional methods.

Even though the companies in our study do not use the methods mentioned below, we feel that a discussion of them may give a hint to why the companies may not use them or why they should be good to use. Concerning TSR and MVA, both of them depend on the market movements. This may mean that the firm's management should not be responsible for the events outside its control, such as macroeconomic events, market recession etc. If we take for example the situation during the past year, the stock prices of most of the companies decreased. Therefore, if company had MVA as a measure of the shareholder value creation and periodically reported the indicators of MVA, there could have occurred some consequences. The shareholders looking at the results would have sold their shares, and the situation would worsen. Moreover, the CEO would be replaced; despite the fact that he or she might pursue a right strategy that creates the value. In order to improve the MVA, a CEO could try to manipulate the book value of the company (depreciation in order to decrease the assets etc).

Concerning TSR, the problems may arise with treadmill, it is hard to reach and maintain the proper speed of the growth and beat the expectations. Furthermore, nothing is known about the current situation of the firm profit, CF etc when using this measure. Even though it can be argued that if the share

prices go up, the company is doing well, it is necessary sometimes to consider the financial situation, and other factors. Concerning the decision-making we feel that TSR and MVA may not be very good methods to use since they do not relate to the current situation of the company.

CVA—cash value added is the name of two different measures elaborated by two different companies. The first method of CVA calculation, direct, seems to be quite clear. It is possible to see whether the cash flow is enough to cover not only the capital charge but also the implicit investments. This may indicate whether the investments made could be used better somewhere else, or whether it is worth taking the project. It seems as if there may be a number of problems in using this method. At first, the complexity arises while trying to predict the economic life of the project and WACC. Another problem may be the complexity of calculation since it may be necessary to create special programs – software – to make calculations using this method. However, this method may present some strength since once the calculations are done the companies may be certain in part concerning answers whether to take a project or to reject it.

It is also interesting to see that this method not only answers the question whether the value was created but also answers the question of “How much?” CVA® of FWC AB goes further, and tries to predict which Operating Cash Flow is necessary to get if a firm wants to add value, or at least, not to destroy it. That amount is equal to the minimal amount of cash flow necessary to collect. CVA index is also quite demonstrative since it is easy to see whether the firm performed well or badly. Furthermore, CVA® considers the inflation which other valuation methods do not take into account. Perhaps this may be the reason why this method is thought to be accurate and useful for the companies despite its complexity. This method may be good to use when the company are considering making big, strategic investments.

CFROI of the Boston Consulting group as well as CFROI® of Holt Value associates answer the question of whether the value was created but do not answer how much. It is interesting that CFROI® of Holt Value is mostly created for the prediction of the share price and used mostly by investment

bankers, stock exchange brokers, fund managers and analysts but not too much by companies. We realize so far that this method has not become so popular. Maybe, the companies may not win too much benefit from the implementation of this method since it does not provide the information about the situation in the company that the managers may use.

One interviewee mentioned that where he worked when they tried to use the new methods, the result indicated that the company incurred losses and that those methods were not working well in the companies consequently they suspended the use of them. On this particular issue, we feel that it is really difficult to know whether the root reason for this impact was the use of the new measure or whether the company was doing actually badly at that time. However, on the basis of the idea that the new methods are better in the comparison to the old ones, the results shown by the new measures should be more trustworthy than the result shown by the old ones. Therefore, we feel that it would be good for the company to maintain the new measures.

The problem for most of these new measures which may be the cause that the companies are not choosing them is that they are not easily understood by the non-financial people: line managers etc, as well as for shareholders with non-financial education.

The question is to know whether the companies still using only traditional measures will also make efforts to change to new measures. Concerning this issue some of the companies revealed that for their own curiosity, they use these new measure only on the management level to see how far they are performing but this is not communicated to the lower levels. Furthermore, they made it clear that the group as whole use the traditional methods. This seems to indicate that they indeed consider the new measures to be more effective than the older ones. We may expect also that maybe step-by-step these new methods could be used as group 's methods for measuring shareholder value creation.

It is interesting however that some of the interviewees said that they do not exclude the possibility to turn to the more accurate measures such as DCF etc. Maybe in future MVA, CVA of BCG, CVA® of FWC AB, DCF would also

attract attention. As for CFROI they don't show the real value creation, they just answer the question whether the value was created or not. It seems like time is needed for these companies to successfully implement new measures. We feel that this issue should be more reflected in business press, and the new indicators should be shown in the same line with ROE, ROI, EPS.

It is important to point out that the importance of combining financial and non-financial measures that are published should not be ignored under this issue. We feel that in the process of improving the shareholder value creation measurement, the non-financial measures should be as well integrated step by step. This would give much more reliable results. Moreover, this may increase the confidence that shareholders have in the companies.

### **5.2.2 Reasons behind the chosen methods**

A variety of reasons why the companies chose methods they use were given to us. One of the reasons that were mentioned by many interviewees who are still using traditional methods was that they are easy to calculate and to communicate to low levels in the organization. Even though it is true that those methods are easy to use, we felt that it should not have been the reason not to use the new methods, which would be more appropriate especially when companies claim to create shareholder value.

According to one interviewee profitability was also another important reason since it is directly connected to the shareholder value creation. Therefore, the company is using the methods that indicate most profitability. This argument however comes as a contradiction to the idea of Knight (1997) who stated that the level of profitability has nothing to do with value creation and when it comes to creating value for shareholders, companies that are very profitable have no advantage over companies that are less profitable. This is also supported by Clarke (2000) who proposed that it is important that a company adhering to shareholder value principles concentrates on cash flow rather than profits. We therefore feel that even though it is good to have good profit, and that the profitability is considered to be one of the value drivers, it should not be used as an indicator since it may not be a good indicator of the shareholder value creation.



From the information we got, conservatism may be a reason why old measures are preferred. Some interviewees indicated that their companies are in a conservative business, which is not easily changed. The traditional measures were used for a long-time. Even though these are facts they should not be used as reasons to choose the measures that are no longer beneficial or accurate.

### **5.2.3 The benefits of measuring shareholder value creation**

Measuring shareholder value presents a variety of benefits and the company does reap those advantages. All the interviewees agreed with this statement. One of the benefits mentioned was that this could raise the price of shares. However, it may be questionable whether the companies that use only the accounting measures to measure shareholder value creation are gaining this benefit. It was shown already that the ROE or RONA or other accounting returns do not reflect the real situation and even may be misleading. Therefore, the price of shares may not be raised because of the fact that the companies measure shareholder value creation while they are using methods that are less trustworthy. In case, however, the company uses the new valuation methods to measure shareholder value creation, it may reap that advantage even though these new valuation methods are not 100% accurate.

To measure shareholder value creation helps the company to make the right decisions about investment or divestments and it helps to see whether to take or to reject the project. These were answers from the companies that implemented EVA and DCF. This may be practical since the results of these measures can contribute to the taking of right decisions. Even if it cannot be underestimated that minor errors may occur in the project's life forecasting or the cost of the capital estimation, DCF is more reliable since it considers the cost of the capital and EVA is reliable as well given that it considers the future situation such as cash flow and risk. Concerning this advantage of measuring shareholder value creation, if the traditional accounting methods for example ROA or ROE are the basis for taking decisions good projects may be rejected, or the bad projects, which destroy value, may get approval. Therefore, the above-mentioned advantage may not profit the companies that still use the traditional measures.

#### **5.2.4 Development of the measures that the companies use**

All the companies in our study did not develop the valuation methods they use internally; this may be due to the cost and time issues. The elaboration of the new method of the performance measurement takes years and usually takes place in the consulting companies. Other companies simply cannot elaborate the measures themselves because it seems costly to them. Moreover, it may take a very long time to fully integrate the new metrics internally in the companies.

The new metrics are usually developed when there is a necessity, i.e. when the company sees that the old management system does not work. Concerning the companies in the sample this need is not present.

Even though the companies in the study did not develop any measure internally, it is quite interesting that they do make their definitions of different components of the measures within the companies. This would seem to indicate that there is at least a certain degree of relating the measure to the companies' specific conditions.

#### **5.2.5 Advantages and shortcomings of the chosen measures**

When discussing the accounting measures, some of the interviewees did not want to point out the weaknesses of the traditional measures. This may seem to indicate that they are still supporting them given that they were mentioning mostly their advantages such as they are easy to use. Most of them were concerned about the weakness of the new measures and they said these new valuation methods are complex and are not easily understood by non-financial people. Perhaps, this may be an indication that they have not welcomed yet the ideas behind the new measures. However, one interviewee mentioned that the traditional measures – the Du-Pont model in this case – does not relate to the real value. This may suggest that there is at least some progress within the company to consider the problems associated with accounting measures. Concerning the advantages of the traditional measures, some interviewees mentioned also that they help to create goals. This may be a very doubtful

advantage since relying on the traditional measures might lead to wrong decisions.

The disadvantage of the economic measures – EVA in this case – is if all adjustments are not made, then, this measure may not be accurate. If one considers this closely it may be very difficult to make all the necessary adjustments. Concerning the advantage of EVA, it is mentioned that EVA is a good tool for the management, and it helps to make decisions concerning the different business units. It is interesting that the important factor here is the simplicity of EVA, and we feel that this may facilitate the process. According to one interviewee DCF does not have any disadvantages. However, we feel that even though this is a very good indicator of shareholder value creation it does as well present some weaknesses. Concerning the view that it helps to see whether the company makes the right investment or not, we realize that this opinion about DCF seems to be in line with the opinion mentioned in the theoretical part.

### **5.2.6 Test of the validity of the chosen measures**

All interviewees agreed that their companies do test the validity of the indicators. We feel that this is a positive action since if done well it would keep the actions of the companies up to date. However, what is questionable is that the companies that use the traditional accounting measures that are known to be ineffective are the same companies that agreed that they do test the validity of the measures. They still use these traditional accounting measures because of conservatism. Furthermore, some interviewees mentioned that the stock market and most of influential shareholders still judge the companies using the old methods. In regard to this issue the stock market and influential shareholders put no pressure on the companies. The interviewees then argued that this pushes them not to change to the new measure. Here, we feel that the necessity of pressure for change would be effective.

The complexity of the new measures plays also some role. Almost all the interviewees mentioned that they can (and do) understand EVA etc but they cannot go to the floor manager and say to him that his department has to cover the cost of capital since all the employees would not understand that term. We

however feel that all these thoughts should not be a barrier to the company that plans to present more reliable results. In addition to this the companies in the study that have adopted the new measures seem not to have a problem with the stock market, the shareholders or employees.

It is interesting to notice that even though some companies do not calculate or use new measures, some consulting companies do it for them. Then we feel that this might create unpleasant surprises for companies. For example, Stern Stewart & Co. calculated EVA for almost all famous and big Swedish companies. Some of the companies are included in this study. Even though it is unknown how it calculated WACC, other components are easily obtainable from the annual reports. The results it published seem to show that EVA's indicators were not always good for those companies in this study that do not calculate it. We therefore feel that it would be better for the companies to use the new measure since their results would be comparable to those of the consulting companies and this would give more confidence to the shareholders.

### ***5.3 A comparison between the empirical findings and theoretical framework***

In this study the theoretical part gives recommendations on how to create and measure shareholder value while the empirical findings constitute what is actually being done by the companies in regard to creating and measuring shareholder value. Even though the analysis part picks up some of the relationship between the theoretical part and the empirical part, we are bringing up some of the key comparisons in this section since this would help to know whether what is being done in practice has any connection with various recommendations from the theoretical part.

When we consider the different ways to create shareholder value that the companies use, they correspond with different ways recommended in the theoretical part. However some minor differences can be identified. Theoretical part proposes that in order to maximize shareholder value, no value creating activities should be eliminated but this is not the case in some companies.

The literature proposes that it is important to identify first the value drivers of a company since they are at the root of the value creation. Then, those value drivers would be based on making a choice of, which methods would maximize shareholder value. However, some of the companies did not follow this recommendation since they did not identify first the value drivers in their corporation and then base their choice of the ways on them.

Shareholder value model proposes that having the shareholder value creation, as the key corporate objective would be a very important step in the value creation. One company uses this model and the rationale behind this model corresponds with what was being done in this company. However, the shareholder model did not correspond with what was being done in many other companies that have ignored this issue. Moreover, the theoretical part proposes that there is actually no conflict between shareholders and other stakeholders in the shareholder value creation model but this view is not shared by many of the companies in the study. They still admit that the conflict does exist between shareholders and other stakeholders; as a result they still follow the rationale behind the stakeholder model.

When it comes to creating shareholder value in the long run, the theoretical part recommends that shareholders expect much more in the future. Operating returns may have improved as a result of the ways in place and investors give credit for that by increasing the value of the company and yet they still want to know what is going to be done to create more value in the future. Furthermore, according to the theoretical part, future shareholder value creation is also important. However, some companies seem to take it lightly and seldom inform the shareholders what they are going to do in the future, to create more value. Here, it is important to notice that some companies have followed this recommendation very well and do much in this area.

Concerning value based management the literature proposes that it involves developing a systematic approach to creating shareholder value. It has to do with managing for value and it creates value that generates competitive advantage for the company. This allows the company to create more value for investors. Managing for value has been adopted by 3 companies out of 7 in the

study. These companies that have adopted it, most of what they do in their companies corresponds to the rationale behind value based management except for a minor difference noticed in two companies. These two companies direct the value creation to all stakeholders instead of indicating that it is directed to shareholders. In the other companies that did not apply value-based management what they do and their different views as well, are very far from the rationale behind the value-based management.

Concerning measuring shareholder value the theoretical part discusses the traditional method and shows their shortcoming and discourages their use. It proposes to use the new methods, which are much more reliable. However, most of the companies do still use the traditional methods and only very few have started to use the new recommended methods.

## **6 Conclusion and Reflections**

This chapter provides insights and concluding remarks on creating and measuring shareholder value in selected companies by taking a closer look at the analysis of theoretical framework and empirical study. It also presents some possible recommendations. Finally, the chapter gives suggestions for future research.

Shareholder value creation has gained much attention in many companies situated across the globe. This has preoccupied the manager in relation to choosing the strategies. The measuring of shareholder value creation has also been considered and increasing critics of traditional accounting measures have been published. Consulting firms are increasingly creating new metrics; and there is a flood of the new measures thought to be measuring shareholder value creation in a better way when compared to the old traditional measures.

The empirical study shows that the companies are aware of shareholder value creation and the importance it has on their companies' process of decision-making and to the whole activities that the companies run. Companies identified different related issues to shareholder value creation. The empirical data focused on the measuring of shareholder value creation and the companies identified a number of different measures and other related issues to measure shareholder value creation.

On the basis of the empirical findings, we were able to answer the research question by setting first the background information on shareholder value creation. We were able to generally give companies information on creating shareholder value. The shareholder value is created through many different ways and we found out that companies do use a combination of many ways that are applied differently from one company to another. The choice of using those ways also varies from company to company even in the case where the same way was chosen. It turned out to be that the reasons behind the choice made were not necessarily the value drivers of the company. This seemed to depend on the nature of decision-making that was different in companies.

Future value creation is being considered in some companies. It was interesting to find out that most of the actions the companies were planning to take for shareholder value creation were mostly marketing related issues. This seemed to underline the importance of marketing activities in the companies and in the future shareholder value creation.

In general companies in our study have not welcomed the ideas of having shareholder value creation as their key corporate objective. They prefer to have it as an internal management goal. This may be due to the fact that they believe that there is conflict between shareholders and other stakeholders.

Value based management has mostly been welcomed by some manufacturing companies in the study but it is not yet popular in other companies. The reasons behind not using it, may be that basing performance evaluation on value creation would not be fair to the employees and that value based management is too complicated to be understood by every employee.

After setting the above background we were then able to answer the research question on how the companies measure shareholder value creation. The survey of companies we made showed that most of the companies do not measure shareholder value creation in the appropriate way. We mean that most of the companies use the accounting measures, which are criticised for not reflecting the real value creation since they do not consider the cost of the capital, risk, and are distorted with the accounting rules. Thus, they do not reflect the shareholder value creation.

The reasons for still using these traditional measures are mostly conservatism; lack of pressure from stock market, main shareholders and that everybody in the company cannot easily understand them. Some of the companies made steps forward by starting using the new methods to measure shareholder value creation but, it will take quite a long time for most of the companies to shift to the new metrics.

The shortcomings of the old accounting measures used in the companies were not necessarily identified instead it seems that they were ignored. However, the



advantages of those old measures are the ones that are considered. We found out that the advantages that the new measures present, are not that much considered, as they should be. The fact that they are complex seems to cover their advantages.

It was also interesting to find out that companies recognized that they could reap some benefits from measuring shareholder value creation, such as it that can raise the price of their share; it can help in their management decision. However, we believe that the company using the traditional measures may not benefit from that since those measure are not reliable.

Concerning developing measures for shareholder value creation, companies are not doing that, they are using the measures that are already established. This may be due to the cost and time it involves. However, companies do make their own definitions of the terms, which would be seen as trying to adapt to the situations in the companies.

Having identified all that is discussed above, we would like to recommend to companies not using value based management to start considering it since they may create more value for shareholder value if they properly implement the value based management issues.

We also feel that shareholder value creation should be the key corporate objective for the companies claiming to create shareholder value because by doing that, real commitment to that issue would be fully reached. The stakeholder model would be replaced by the shareholder model since the company or other stakeholder would not lose anything since the value of shareholders cannot be created when other stakeholder are not satisfied and this was the case in one company. However, on the other hand, the value of the shareholder may be lost from using the stakeholder model.

We would therefore recommend the companies still using the old measures to consider the following measures: EVA, CVA® of FWC AB, CVA of the Boston consulting group, DCF, Q ratios. Even though there are no ideal measures since every measure has its own shortcomings, we believe that these

above-mentioned measures are far better when compared to the traditional ones. The companies are to choose among them following what they intend to discover because some of these measures show only whether the company created value, others show how much value was created or destroyed and other metrics depend mostly on the company's management. We also feel that the companies should not ignore changing to the new measures since the consulting companies are increasingly making calculations using those new measures and publishing the results of different companies; even though these companies may not be using those new metrics.

**Suggestions for future research.**

Creating and measuring shareholder value is a broad subject, we covered only one perspective of the shareholder value creation and measurement. To conduct our research we mainly looked at this problem from the companies' perspective, it would be therefore interesting to look at this issue using an expanded perspective such as shareholder, analyst, stock market and consulting companies' perspectives. It would be also interesting to make a deeper study on how companies create shareholder value. Finally, making a comparative study would be interesting since it would highlight the differences that exist between companies that we did not cover in this study.

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SEB, Annual report, 2000

SKF, Annual report, 2000

Volvo, Annual report, 2000



## **Appendix 1.**

### **Interviewees.**

Carl-Henrik Lindgren, Electrolux, chief accountant of Electrolux group, Stockholm, personal interview.

Fredrik Hjelm, Group Controller and Bo Gustavsson, Head of Business Control, Volvo group, Gothenburg, personal interview.

Hans Bertelius, Group Controller, Bilia AB, Gothenburg, personal interview.

Johan Karlsson, ABB, employee of the Value Services department, Stockholm, interview by phone.

Lotta Treshow, SEB, Senior Vice President - Head of Investor Relations - Group Treasury, Stockholm, personal interview.

Marita Björk, SKF, the chief of the investor relations department, Gothenburg, interview by phone.

Staffan Salén, Chief for Investor Relation- Director of Information, Föreningsparbanken, Stockholm, personal interview.

## **Appendix 2**

### **The interview questions**

As an introduction we asked the interviewees to give a brief introduction to their background information on the person we were interviewing such as education, experience, the current position and task in the company.

### **Questions on creating shareholder value**

1. Given that nowadays companies are creating shareholder value through different strategies for example they sell and buy business, they restructure themselves etc. Which methods or strategies do you use to create shareholder value?
2. What are the possible reasons for choosing these particular strategies?
3. How successful are those ways or strategies to create shareholder value?
4. Is shareholder value creation an explicitly communicated key corporate objective?
5. What can the company do to increase shareholder value in the long run perspective?
6. Does the company apply the value-based management?

### **Questions on valuation method or on measuring process**

1. On the corporate level how do you measure the shareholder value creation; in other words which method or ways do you use to be able to know whether the value had been created?
2. What are reasons behind choosing these particular measures?

3. How will the company benefit from measuring shareholder value?
4. Did you develop this method internally in the companies?
5. What are your views about the strengths and weaknesses of this performance measure you use to evaluate the creation of the shareholder value?
6. Does the system regularly test the validity of the chosen performance indicators as predictors of future financial performance and adjust the indicators as necessary?

### Appendix 3.

#### A3.1 The calculation of TSR.

There are different steps that were suggested by the Value Based Management Resource center ([www.valuebasedmanagement.com](http://www.valuebasedmanagement.com)):

- Begin with the one share of stock at the beginning of the period.
- Determine the number of additional shares that can be purchased this month with the dividends and the cash equivalents distribution earned each month.
- Add this amount of the share purchased to the to current share added.
- Multiply the number of shares owned by beginning month's stock price to get the "compound value" of stock.
- Total return equals the growth in stock price plus the effect of reinvested dividends over the period being measured.

The formula of this measure is the following

$$\text{TSR} = \frac{\text{Price gain} + \text{dividend}}{\text{Price at beginning of the period}}$$

Table № 1. The TSR calculation.

	Dec-93	Jan-94	Feb-94	Mar-94	Apr-94	May-94	June-94
Beginning share owned (a)	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dividend (b)		0.00	0.00	1.00	0.00	0.00	1.00
Cash equivalent Distribut. (x)		0	0	0	0	0	0
Share price (c)	22.50	22.73	22.95	23.18	23.41	23.65	23.88
Additional share purchased (d= $a*(b+x)/c$ )		0	0	0.043	0	0	0.044
Adjusted share owned e=a+d		1.0	1.0	1.043	1.043	1.043	1.087
Compound value (c*e)	22.50	22.73	22.95	24.18	24.42	24.67	25.95
TSR (monthly)		1%	1.0%	5.4%	1.0%	1.0%	5.2%

Source: <http://www.valubasedmanagement.com/>

### A3.2 The calculation of the EVA components

$$EVA = NOPAT - C\% (TC)$$

Where NOPAT is net operating profit after taxes, C% is the percentage of cost of capital; and TC is total capital. (Ehrbar, 1998)

Table № 2. The example of EVA calculation.

MSEK	1994	1995	1996	1997(budget)
Sales	234	258	305	420
Operating expenses	- 200	-205	-243	-285
Tax	0	-3	-10	-28
-----				
Operating profit	34	50	52	107
Financial requirement	-45	-50	-60	-62

Source: Weissenrieder F., 1998

The financial requirements are calculated as the defined capital (adjusted the balance sheet) multiplied with a suitable WACC:

Table №3. The financial requirement calculation:

MSEK	1994	1995	1996	1997(budget)
Capital	375	417	500	520
WACC	12%	12%	12%	12%
-----				
Financial Requirement	45	50	60	62

Source: Weissenrieder F., 1998

### A3.3 The calculation of CVA®

The calculation of OCFD has three steps:

- Identification of the initial outlay for each strategic investment still in use in a strategic business unit.
- Estimation of each strategic investment's economic life.
- Finding the amount of the nominal cash flow which each strategic investment is to produce every period in order to give that strategic investment a NPV of zero in a nominal calculation.

The table beneath shows the CVA® model in its basic form with one strategic investment. The amount of strategic investment is \$100 m. This strategic investment can be R&D investment or an investment in advertising and promotion brand. It is strategic decision by itself and what the investment meant to do (create or maintain the value) that determines if it should be considered to be a strategic investment. The initial investment in working capital could be considered as a part of the strategic investments. The economic life is estimated to be 11 years. The historic inflation is 3% and the same inflation rate is assumed for the future. The pre-tax cost of capital (WACC) is 15%. The strategic investment has in this case been running for 7 years of those 11 years.

Table №4. The CVA calculation.

M\$	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Sales		160	170	250	185	200	215	200				
Costs		-150	-155	-220	-160	-170	-180	-155				
Operating surplus		10	15	30	25	30	35	45				
WCM		0	-1	-6	5	-1	-1	1				
Non-strat. invest.		-1	-3	-1	-3	-12	-4	-3				
OCF		9	11	23	27	17	30	43				
OCFD		17	18	18	19	19	20	20				
CVA		-8	-7	-5	8	-2	10	23				
CVA index		0,53	0,64	1,29	1,42	0,88	1,51	2,11				
Strat. inv.		-100										
Cash Flow		9	11	23	27	17	30	43				

Source: Erik Ottosson, Fredrik Weissentireder, “Cash Value Added – a new method for measuring financial performance”, 1996

Since the OCFD should be adjusted on inflation, the formula of the adjustment is following:

$$\text{OCFD}_{\text{year1}} = \frac{\text{Investment amount}}{\frac{1}{r - \text{inflation}} \cdot \frac{(1 + \text{inflation})^n}{(1 + r)^n}}$$

The total OCFD for a company equals the sum of the OCFDs on each investment for any period in the past, present and future.

When we know how all other components are known we can show the whole CVA model (Weissenrieder, 1997).

$$\begin{aligned} & \text{Sales} \\ & - \text{Costs} \\ & = \text{Operating surplus} \\ & +/- \text{Working Capital Movement} \\ & - \text{Non- strategic investments} \\ & = \text{Operating Cash flow} \\ & - \text{Operating cash flow demand} \\ & = \text{Cash Value Added} \end{aligned}$$

$$\text{NPV (Investments)} = \text{PV (OCF1..n)} - \text{Investments} = \text{PV (OCF1...n)} - \text{PV (OCFD 1...n)} = (\text{OCF1} - \text{OCFD1}) / (1+r) + \dots + (\text{OCFn} - \text{OCFDn}) / (1+r)^n$$

If the company wants to add value to its stockholders the NPV of CVA should be positive.

Another dimension of CVA model is the CVA index. It is calculated as

$$\text{CVA (index)} = \frac{\text{PV (OCF1...n)}}{\text{PV (OCFD1...n)}}$$

A CVA index above 1 indicates that the strategic investment produces sufficient OCF. The CVA index can be split also into four value drivers (in relation to sales):

- The operating surplus margin
- The working capital movements
- The non-strategic investment margin and
- The OCFD margin.

### **A3.4 The calculation of CVA of the BCG.**

There are two ways to calculate the CVA of BCG: direct and indirect. Direct calculation:



CVA= gross cash flow -economic depreciation-capital charge.

Indirect calculation:

CVA= (CFROI-cost of capital) x gross investment.

The components of the formulas are following:

$$\text{CFROI} = \frac{\text{Gross cash flow} - \text{economic depreciation}}{\text{Gross investment}}$$

This CFROI-indicator shouldn't be confused with CFROI® of Holt Value Associates which will be explained later.

Economic depreciation is an amount, which has to be put aside annually to finance future replacement investments. It is calculated using the following formula:

*Economic Depreciation* =  $\text{WACC} / (1+\text{WACC})^n \times \text{Depreciable assets}$

*Gross cash flow* = adjusted profit+ interest expense+ depreciation

*Gross investments* = Net current assets+ historical initial cost (possibly adjusted for inflation)

Example (BCG: New perspectives on the value creation): We have the following data for the CVA calculation:

Gross cash flow	150
Economic depreciation	50
CFROI	10
Gross investments	1,000
Cost of capital	10%
Capital charge	100
Non depreciable assets	200
Asset life	10 years

Economic depreciation =  $10\% / ((1+10\%)-1) \times (1,000-200) = 50$

CFROI=  $(150-50) / 1,000 = 10\%$

The CVA (direct method) =  $150-50-100=0$

The CVA (indirect method) =  $(10\%-10\%) \times 1,000=0$

### A3.5 The calculation of the DCF.

There are several steps in DCF calculation:

- Reorganizing the accounting statements in order to get a greater analytical insight and calculating FCF;
- Estimation of the cost of the capital;
- Forecasting performance;
- Forecasting the continuing value.

$$\begin{aligned} \text{FCF} &= \text{NOPLAT} - \text{net investments} = \\ &(\text{NOPLAT} + \text{depreciation}) - (\text{Net investments} + \text{Depreciation}) = \\ &\text{Gross cash flow} - \text{Gross investment} \end{aligned}$$

The next step of the DCF calculation is the estimation of the continuing value but for this it is necessary to forecast the future performance of the company. When it is done and the NOPLAT is known we can estimate the continuing value. There are several formulas of the continuing value estimation but the simple one is the

Continuing value =  $\text{FCFT}+1 / \text{WACC}-g$  , where

FCFT+1 is the normalized level of FCF in the first year after the explicit forecast period; g is the expected growth rate in NOPLAT in perpetuity.

Table №5. Cash projection for period of 5 years.

Year	1	2	3	4	5
NOPLAT	100	106	112	120	126
Net investment	<u>50</u>	<u>53</u>	<u>56</u>	<u>60</u>	<u>63</u>
Free cash flow	50	53	56	60	63

Sources: Copeland et al (2000), p.271

When WACC is 11% and the growth rate for NOPLAT and FCF each period is 6% then if we are going to forecast for example, for 150 years we will get the following result:

$$CV = 50/1,11 + 53/1,11^2 + 56/1,11^3 + \dots + 50(1,06)/1,11^n = 1000$$

Or if we use the growing free cash-flow perpetuity formula:

$$CV = 50 / (11\% - 6\%) = 1000$$

The explicit forecast period should be long enough so that business will have reached the steady state of operations by the end of the period.

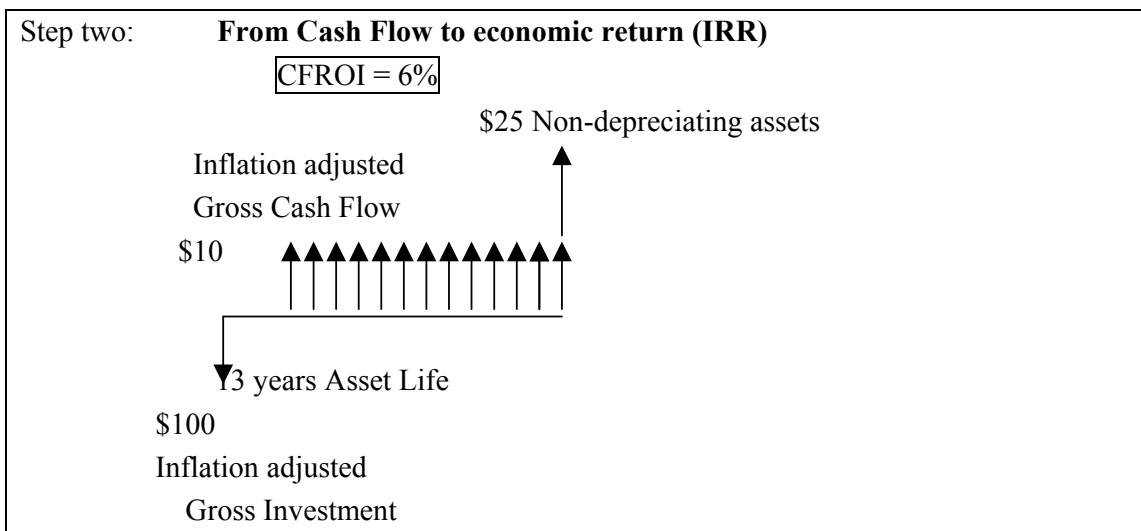
### **A3.6 The calculation of CFROI® of Holt Value Associates.**

The calculation of the CFROI® is the following. Holt calculates the CFROI® in two steps (Holt Value Associates®) At first, Holt measures the inflation – adjusted gross cash flow available to all capital owners and compares that to the inflation adjusted (current monetary unit) gross investment made by those capital owners. In other words; gross cash flow is equal to Net Cash Receipts – this term is used in the book of B. Madden about CFROI (Madden, 1999).

$$\begin{aligned} \text{NCR} &= \text{net income} + \text{depreciation expense} + \text{interest payment-outflows} = \\ &= \text{Gross CF} \end{aligned}$$

Step ONE:		<u>From Accounting to cash</u>	
		Net income (Before extraordinary terms)	
		+/-Special Items (after tax)	
		+ Depreciation expenses	
		+ R&D expense	£10
		+Interest expense	
		+Minority interest	Cash in
		+Rental expense	
		+/-Holding gains (losses)	Inflation Adjusted
<b>Net income</b>		- FIFO profits	Gross Cash Flow
			<b>= 10%</b>
		Book assets	Inflation adjusted
Book assets	+ accumulated depreciation	Gross Investment	
	+Inflation adjustments	Cash flow	
	+Operating assets		
	+Capitalized R&D	£100	
	+Goodwill		
	-Non-debt monetary Liabilities		

Next, Holt converts the ratio of gross cash flow to gross investment into an Internal Rate of Return (IRR) by recognizing the finite economic life of depreciating assets and the residual value of non-depreciating assets such as land and working capital. The process is identical to calculating the yield to maturity of the bond. As a percent per year internal rate of return, the CFROI is directly comparable to the shareholder return investors expect to receive, i.e., their cost of capital or discount rate.



**A3.7 The VROI and Q ratios calculation.**

The formula of VROI calculation is the following:

$$\text{VROI} = (\text{Post-strategy value} - \text{pre-strategy value}) / \text{Present value of projected investment}$$

Table №6. Example of VROI and Q ratios.

At Wacc of 15%	year 0	year1	year 2	year 3	year4	year5	year6
Profit after tax (PAT)	16						
Assets employed (nominal)	80						
Cash flow		12	14	12	14	16	12
Discount factor		0.9	0.8	0.7	0.6	0.5	0.4
Present value		10.4	10.6	7.9	8.0	8.0	5.1
Present value (perpetuity method)							200.0
Present value of residual							84.6
Present value of cash flows							50.0
Total PV (post-strategy)							134.6
Assets employed inflation adjusted (3% inflation assumed)							95.5
<b>VROI calculation</b>							
Net investment	5.0	8.0	6.0	7.0	8.0	4.0	
Discount factor	0.9	0.8	0.7	0.6	0.5	0.4	
Present value	4.4	6.0	3.9	4.0	4.0	1.7	
Total present value							24.0
Total PV (post-strategy)							134.6
Pre-Strategy value =year 0 (PAT/WACC)							106.7
Value increase post-pre-strategy							27.9
VROI=Value increase/PV investment							1.2
Q ratio= Total PV post-strategy/assets (Inflation adj.)							1.409

**Source: Black, 1999**