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VALUE-BASED MANAGEMENT
CONTROL PROCESSES TO CREATE VALUE THROUGH INTEGRATION
A LITERATURE REVIEW

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ABSTRACT

In the last decades, management accounting faced increasing challenges to adopt new approaches, designed to fit the changes in the economic environment and to correct perceived inefficiencies in existing controlling structures. This paper focuses on one of those recent developments, viz. value-based management (VBM). Since VBM is claimed to be changing financial management at the highest level in some of the world's largest companies, this literature review compares the value-based management approaches of six consultants, viz. Stern Stewart & Co, Marakon Associates, McKinsey & Co, PriceWaterhouseCoopers, L.E.K. Consulting and HOLT Value Associates and tries to assess the potential of their management frameworks.

Value-based management can be defined as an integrated management control system that measures, encourages and supports the creation of net worth. Although VBM is more than metrics, we first focused on a non-exhaustive number of value-based metrics, divided in two segments, the listed perspective-segment and the non-listed perspective.

Since metrics are a means and not the goal of a VBM-program, we compared not only the metrics used by the six consultants, but also analysed their value-based management constructs as a whole. This analysis was based on the fundamental components of a holistic VBM-program, as defined by several researches on value-based management. This comparison revealed some clear similarities between the approaches, but also demonstrates distinctions and different accents. There is for instance a clear unanimity about the focus on maximizing shareholder value, about the conviction that the interests of all stakeholder groups are best served when putting the shareholder first and about the impact of value-based management on collaboration. Notwithstanding the similarities, they all six suggest using different types of measures, combine different systems and processes, have other views on strategy development and advocate their own training & education program.

1 INTRODUCTION

In the last decades, management accounting faced increasing challenges to adopt new approaches, designed to fit the changes in the economic environment and to correct perceived inefficiencies in existing controlling structures.

In the 1950s and 1960s an important debate focussed on the character of information for decision-making. Another group of scholars addressed the issue whether the contribution margin approach was superior to systems that fully allocated overheads. In the 1970s several researchers flocked around the topic of residual income and the optimal control of relatively autonomous divisions.

More recently with new developments in management accounting it appears that the three letter acronyms are becoming very popular. Some of the most fashionable are: SMA (strategic management accounting), ABC, ABM & ABB (activity-based costing and its variants; activity-based management and activity-based budgeting), BPR (business process re-engineering) and BSC (balanced scorecard). A common element, which distinguishes the later management accounting tools from the earlier ones, is that the more recent apparati have emerged predominantly from practice and from consultants. Another modern-day 'hot' topic in practice, which is claimed to be changing financial management at the highest level in some of the world's largest companies, (Bromwich, 1998) is value-based management (VBM).

This paper presents the results of a literature review of the approaches that these practitioners and consultants have developed concerning the pursuit of shareholder value. The objective of this study is to assess the potential of these management frameworks in order to ensure that organizations resources are obtained and used effectively and efficiently in the accomplishment of the organizations' objectives. The rationale for this paper is the perceived gap in the literature with regard to an overview of the value-based management practices offered.

The first chapter of this paper is a brief description of value-based management. We will concisely describe the history behind VBM, propose a general definition and give some insights in the application of value-based management. The second section pursues the matter of performance measurement. In this chapter we will introduce the most common valuation tools that are being used in value-based management systems. Because metrics are not the end to a value-based management program we describe in section four what kind of ingredients are indispensable in a well-designed VBM system. The methodology we used here is a review of the literature concerning the integrated approach of six high profile management consulting firms. The fifth and last section is a conclusive section.

2 VALUE-BASED MANAGEMENT

2.1 Value-based Management in Perspective

Value-based management is a management control system that measures, encourages and supports the creation of net worth. In the mainstream management accounting viewpoint the concept of control systems results from the behavioural shortcomings mentioned in the agency theory. In the perspective of a firm regarded as a set of contracts among factors of production with each factor motivated by its self-interest, a separation of the control of the firm on the one hand and the ownership of the firm, on the other hand, is an efficient form of economic organization. (Fama, 1980) However this separation can simultaneously cause austere dysfunctional behavior.

The agency theory focuses on the agency relationship between the actor or the group (the agent), who has certain obligations to fulfil for another actor or group (the principal) because of their economic relationship. The selection of appropriate governance mechanisms between the agent and the principal is, given the assumption that agents are motivated by their self-interest, necessary to ensure an efficient alignment in their interests. This alignment in interests can be disturbed by two main problems: the agency problem and the problem of risk sharing. The agency problem rests on the assumption that the desires and goals of the agents and principals can conflict; and that it is difficult or expensive for the principal to monitor what the agent is doing. (Eisenhardt, 1989) The problem of risk sharing is based on the assumption that the principal and the agent have also different attitudes towards risks, which explains their different courses of action. (Shankman, 1999)

Both problems are the corollary of a lack of goal congruence between the objectives of the agents and those of the principals of the organization. The central purpose of management control systems is to lead people to take actions in accordance with their perceived self-interest that are also in the best interest of the organization. (Anthony and Govindarajan, 2001) Value-based management systems are conceived to reduce this lack of goal congruence. Moreover, the various proponents of VBM systems think they have a very good answer to both problems outlined in the agency theory by trying to make managers think and behave more like owners.

2.2 Defining Value-based Management

Although there is an ongoing polemic regarding the metrics that should be used and initially even more who could claim the copyright on them, we see that apart from which management approach or process is used, VBM measures are generally based on comparison between (a) corporate market value & corporate accounting book value and/or (b) on the residual income measure. (Bromwich, 1998) Moreover, it seems that even in the way the different practices are being described, authors tend to veil their concepts in mist. We find however that most definitions of value-based management are a sign of the same way of thinking.
A first set of publicists describes the output of value-based management:

> « Value-based Management is essentially a management approach whereby companies' driving philosophy is to maximize shareholder value by producing returns in excess of the cost of capital. » (Simms, 2001)
>
> « Value-based Management is a framework for measuring and, more importantly, managing businesses to create superior long-term value for shareholders that satisfies both the capital and product markets. » (Ronte, 1999)
>
> « Value-based management is a framework for measuring and managing businesses to create superior long-term value for shareholders. Rewards are measured in terms of enhanced share price performance and dividend growth. » (Marsh, 1999)
>
> « Value-based Management is a management philosophy which uses analytical tools and processes to focus an organization on the single objective of creating shareholder value. » (Condon and Goldstein, 1998)
>
> « Value-based Management is a new way for managing, focused on the creation of real value not paper profits. Real value is created when a company makes returns that fully compensate investors for the total costs involved in the

investment, plus a premium that more than compensates for the additional risk incurred. » (Christopher and Ryals, 1999)

« Value-based Management is based on the notion that the central objectives for all public traded companies is to maximize shareholder value. Because it offers companies a logical and systematic way to pursue improvements in shareholder value, it has received considerable action in the business press. » (Bannister and Jesuthasan, 1997)

« Value-based Management is a term that describes a management philosophy based on managing a firm with Economic Value Creation principles. » (Armitage and Fog, 1996)

A second group focuses on the combination of the process and the outcome:

« Value based Management is a combination of beliefs, principles and processes that effectively arm the company to succeed in the battle against competition from the outside and the institutional imperative from the inside. These beliefs, principles and processes form the basis of a systematic approach to achieving the company's governing objective. » (Mc Taggart et al., 1994)

« Value based Management […] can be all embracing. It aligns strategies, policies, performance, measures, rewards, organization, processes, people, and systems to deliver increased shareholder value. » (Black et al., 1998)

« Value-based management is a managerial approach in which the primary purpose is shareholder wealth maximisation. The objective of the firm, its systems, strategy, processes, analytical techniques, performance measurements and culture as their guiding objective shareholder wealth maximisation. » (Arnold, 1998)

« Value Based Management is a management approach which puts shareholder value creation at the centre of the company philosophy. The maximization of shareholder value directs company strategy, structure and processes, it governs executive remuneration and dictates what measures are used to monitor performance. » (KPMG Consulting, 1999)

« The founding principle underlying Value-based Management is the discounted cash model of firm value. However, VBM is more than a performance measurement system. Proponents argue that if it is to be successful it must be used to tie performance to compensation. The guiding principle underlying the use of VBM, then, is that measuring and rewarding activities that create shareholder value will ultimately lead to greater shareholder value. » (Martin and Petty, 2000)

« Value-based Management says, in a nutshell, the key to increased shareholder value lies in the integration of strategic planning, performance measurement and compensation. » (Leahy, 2000)

« Value-based Management is a different way of focusing an organization's strategic and financial management processes. In order to maximize value, the whole organization must be involved. » (Anonymous, 1998)

We found only one source that describes just the process:

« Value-based Management is a holistic management approach that encompasses redefined goals, redesigned structures and systems, rejuvenated strategic and operational processes, and revamped human-resources practices. Value-based Management is not a quick fix but a path requiring persistence and commitment. » (Boulos, Haspeslagh and Noda, 2001)

The references that define inputs, process and outputs of value-based management are scarce:

« An approach to management whereby the company's overall aspirations, analytical techniques and management processes are aligned to help the company maximize its value by focusing management decision making on the key drivers of shareholder value. » (Institute of management accountants, 1997)

In general, the distinctive features of value-based management are:

- Management

VBM is a management tool, a control system; an apparatus that is used to integrate resources and tasks towards the achievement of stated organizational goals. (Merchant, 1998)

- Approach

VBM is a prescribed and usually repetitious way of carrying out an activity or a set of activities that propagate its values all over the organization. It is a robust disciplined process that is meant to be apparent in the heart of all business decisions. (Morrin and Jarell, 2001)

- Maximizing shareholder value

VBM's purpose is to generate as much net worth as possible. Or put in another way: to distribute the given resources to the most valuable investments. Maximization also implies a forward vision, based on expected outcomes.

2.3 Why Value-based Management?

As in every economic trade-off, managers are confronted with optimising the allocation of scarce resources. The current economic and social environment, characterized by countless changes and evolutions (Young and O'Byrne, 2001) provides management and more particularly those in management accounting and management control functions, with new challenges. Those challenges not only reveal inefficiencies in the existing management systems but also support the need for an integrated management tool. The most important challenges and inefficiencies are briefly discussed below.

In the Anglo-Saxon countries and more recently also in continental Europe much attention is directed towards the issue of shareholder value. (Mills and Weinstein, 2000; Young and O'Byrne, 2001) The attention for shareholder value has always been on the management agenda but in the 1960s and the 1990s the focus on shareholder value was less explicit. A McKinsey & Co research reveals that shareholder-oriented economies appear to perform better than other economic systems, and other stakeholders do not suffer at the hands of shareholders. (Copeland et al., 2000)

Furthermore it appears that there is a paradigm shift with regard to management objectives. In the past (and probably still even these days in some organizations) sales-growth or revenue-growth was often the governing objective. Residual income theory applied to customer or product profitability analysis reveals us that not every growth is a good thing to pursue.

This is however not the only change in management objectives, since management more and more realizes that traditional earning measures do not reflect the real value creation. Those traditional metrics are accounting based and therefore do not take into account the risk notion, neither the impacts of inflation, nor opportunity costs. Stern Stewart & Co (Stern Stewart, 1999) calls this: " the switch from 'managing for earning' to 'managing for value' ".

In addition, value is said to be one of the best performance measures because it is the only measure that requires complete information. To understand value creation one must use a long-term strategic point of view, manage all cash flows on the income statement and the movements on the balance sheet, and one must know how to compare cash flows from different time periods on a risk adjusted basis. It is therefore impossible to make good decisions without complete information, and according to Copeland there is no performance metric other than value that uses complete information. (Copeland et al., 2000)

Companies are looking for an approach that serves as many purposes as possible. The VBM approaches are argued to subsume or render unnecessary most, if not all, other types of performance measures at the corporate and strategic business unit levels. They therefore contest the principle of different accounting for different purposes. Bromwich (Bromwich, 1998) but also Ottoson and Weissenrieder (Ottoson and Weissenrieder, 1996) mention the search for comprehensive systems. Bromwich observes the need for measuring tools, applicable to different organizational levels, such as corporate and business unit level, while Ottoson and Weissenrieder emphasize the need for measurement systems, that can be used for internal and external communication.

In recent times, business executives have concentrated on improving « operational » processes such as manufacturing, supply chain, sales and marketing, etc. All too often these activities have resulted in improvements that do not deserve the predicate 'sustainable'. Kotter notes that the large majority of large change processes have failed to produce the results expected (Kotter, 1995) for the reason that they are missing an important ingredient. This ingredient is a lack of corresponding changes in the business management processes and in the organizational culture. A lack of changes regarding an economic focus; clarity about how capital is to be deployed and managed in the future and how ownership and accountability for operational changes are to be balanced across the value chain, only serves to undermine the sustainability of these operational changes.

2.4 The Stakeholder Approach versus the Shareholder Approach

Managers in all kinds of organizations are now faced with the dilemma of how to reconcile the competing claims of shareholders and other stakeholders. Top management's concern with shareholder value has never been greater, as mentioned above. But, on the other hand, also the interest in stakeholder approaches to strategic management is growing around the world. (Mills and Weinstein, 2000; Young and O'Byrne, 2001)

Business is all about creating value. This value creation process is only possible with the support of the different stakeholder groups. Despite the fact that the objectives of the different stakeholder groups do not always converge, they realize that working together to realize the multiple goals of the firm is the only way to reach some of their own objectives.

At first sight, literature suggests a great distinction between the stakeholder and the shareholder approach. However, when we look at the interpretation and observations of Grant (1998) according to the shareholder theory, we detect a great similarity between his viewpoint and that of Mills and Weinstein. For indeed, Mills and Weinstein (Mills and Weinstein, 2000) point out that the shareholder and the stakeholder principle do not have to conflict if the issues of the measurement of value and the distribution of value are looked at separately. They state the belief that the quest to create value is important for all organizations. The efficient use of resources should involve ensuring that an economic return in excess of the cost of capital is achieved. However, the wealth created does not have to be distributed with the primacy of the shareholder in mind. There is no reason why other stakeholders with legitimate claims should not be a key part of the distribution process.

The 'socially responsible business behavior', as defined by Rappaport (Rappaport, 1998), integrates the statements of Pruzan (Pruzan, 1998) that most traditional business thinking is based and dominated by the concept of shareholder accountability, with the conclusions of Mills and Weinstein, since this behavior is described as an alternative stakeholder approach, consistent with the shareholder interests without neglecting the other stakeholder groups and the emphasis on the competitiveness of the organization.

Value-based management, as an approach to encourage management in the value creation process and more particularly in the maximization of shareholder value, does not have to conflict with the stakeholder approach if the value-based management process within the organization is combined with 'socially responsible business behavior'.

3 VALUE-BASED PERFORMANCE METRICS

3.1 Introduction

In management accounting literature it is often said that one can tell whether a subject is in fashion when lots of different measures, all claiming to be the paramount performance indicator, are competing against each other. Another symptom of a so-called 'hype' could be the fact that numerous acronyms are proposed to describe an identical framework. (Armitage and Fog, 1996) Both consultants and academics strive for an extensive platform and describe numerous value based performance measures like EVA, EP, CFROI or Q-ratio.

In most cases the development of these measures is based on widespread criticism on commonly used profit-related measures like return on investment, return on assets, earnings before interest, taxes and amortization of goodwill or earnings per share. (Günther, 1997; Mills et al., 1998) Some of the value-based measures have been developed recently; others have existed for decennia or have been derived from the capital market theory to be used for divisional controlling. We found references on value-based measures in both practitioner-oriented publications and academic journals, but also noticed that more and more mainstream corporate finance and investment textbooks are covering these new performance metrics.

In this chapter we will discuss a non-exhaustive number of value-based metrics. The value of an organization can be gauged from two different angles. Value-enhancing managers are considered to be those who create value by increasing the company's value relative to the cost of capital at their disposal. Managers whose accounting investments exceed the market value of their business are said to be destroying value. In the first viewpoint, the stock market data provide us with the information needed to calculate the value of the company unambiguously. We will entitle this approach the *listed perspective*. On the other hand, many companies (and obviously all non-quoted organizations) estimate the warranted value of their common stock indirectly, using an alternative valuation model. In this way, these performance measures can very well be used to assess divisional performance and to provide information supporting decisions on corporate or divisional level. In this paper we will entitle this method of quantifying value, the *not-listed perspective*.

3.2 Listed Perspective

3.2.1 Total shareholder return.

A first approach to measure shareholder value from the perspective of a quoted company is total shareholder return (TSR) that is, share price appreciation plus dividends.

$$\text{Total Shareholder Return} = \frac{(P_{t+1} - P_t) + D_{t+1}}{P_t}$$

Where

P	=	Share price
D	=	Dividends Paid

In a recent INSEAD survey Boulos et al. state that TSR is applied in 7.4% of the companies that responded to use value-based measures. (Boulos et al., 2001) TSR represents the change in capital value of a company over a one-year period, plus dividends, expressed as a plus or minus percentage of the opening value. Rappaport considers a company's stock price as the clearest measure of market expectations of its performance. (Rappaport, 1987) The capital markets are distinctively focused on the overall rate of return of any stock, which in addition to the stream of dividend appreciation also includes capital appreciation but excludes share repurchase.

Total shareholder return is also documented as shareholder rate of return or as total business return. The latter idiom is typically used by Boston Consulting Group. Although TSR is an unbiased measure of the return for the shareholder (Morrin and Jarell, 2001) it provides a direct link to external measurement because it must be reported under US GAAP in SEC filings (Smith, 1997) and it anticipates the future value and the expected risk (Rappaport, 1986), there are a few shortcomings in the use of TSR. First, as it can only be calculated for companies that are quoted on the stock exchange, it cannot be used to calculate shareholder return at business unit level or for specific product market combinations. Second, some authors claim that TSR is not an efficient indicator to judge managers' performance because it is driven by many factors beyond the control of the firm's executives. (Bannister and Jusuthasan, 1997; Bacidore et al., 1997)

3.2.2 Market value added.

The difference between the equity market valuation of a company and the sum of the adjusted book value of debt and equity invested in the company is called market value added (MVA). According to the INSEAD survey mentioned above, 7,9 % of respondents claim to use MVA as a proxy for shareholder value.

MVA = market value - invested capital

Market value added is said to be unique in its ability to gauge shareholder value creation because it captures both valuation – the degree of wealth enrichment for the shareholders and performance i.e. the market assessment of how effectively a firm's managers have used the scarce resources under their control – as well as how effectively management has positioned the company on the long term. (Ehrbar, 1998) Furthermore MVA avoids subjective accounting issues regarding anticipation of future cash flows and discount rates because it approximates the stock market estimation of net present value. (Hillman and Keim, 2001). Although we noted that little research has been conducted on the predicting power of MVA it is said to be a more effective investment tool than other measures.[1] In a recent study Yook and McCabe examined the cross section of expected stock returns between 1985 & 1994 and found evidence of a strong negative relationship between MVA and average stock returns. (Yook and McCabe, 2001)

3.3 Not-Listed Perspective

When unambiguous stock-market data are not available, the proxy for value creation should be calculated based on information from within the company. This often implies reliance on the financial statements. The conventional structure of financial statements creates some obstacles to an articulation between a (multi-period) measure of excess value created and a matching (multi-period) assessment of accounting flows. The shortcomings of accounting-based measurements are numerous: alternative accounting measures may be employed, risk is excluded, investment requirements are excluded, dividend policy is not considered, the time value of money is ignored (Rappaport, 1986), errors occur at different stages of project life, errors occur when firms or divisions have a balanced mix of old and new projects (Brealey and Myers, 2000) and poor correlation of profit-related performance measures with the valuation used on capital markets (Günther, 1997). To overcome these shortcomings, adjustments can be made to the underlying figures or to the metric itself in order to reflect value added more accurately.

Various authors (Ittner and Larcker, 1998; Bromwich and Walker, 1998; Dechow et al., 1999; O'Hanlon and Peasnell, 2001) have stated that residual income can be considered the basis for many value-based metrics. Residual income is defined as the accounting income attributable to shareholders at the end of the period minus the accounting book value of shareholders funds at the end of the previous period multiplied by the cost of capital. It provides a clear indication of whether a firm has made enough profit to satisfy both creditors and equity holders. (Eiteman et al., 1999) Besides the residual income based measures that evaluate the generated shareholder value ex post for a single period, one can also gauge the value of a company by discounting future cash flows or free cash flows that are based on forecasts for a multi-period planning horizon. We will therefore subdivide this perspective in single period measures and multi-period measures.

3.3.1 Single period metrics

3.3.1.1 Economic value added.

Economic value added (EVA) is the most straightforward antecedent of residual income. It is also considered to be the best known of the shareholder value metrics. (Brown et al., 2000) More than 47% of the respondents in the INSEAD survey claim to use EVA as the economic profit measure. (Haspeslagh et al., 2001)

EVA = NOPAT – (K_c*Capital)

or

EVA = (r – K_c) * Capital

Where

[1] More specifically: market value of equity, book/price value ratio and price/earnings ratio

NOPAT	=	Income available to common + Increase in equity equivalents[2] + interest expenses after taxes + preferred dividends + Minority interest provisions
		OR
		Sales – Operating Expenses (Incl Depr) – Taxes
Capital	=	Common Equity + Equity equivalents + Debt + Preferred Stock + Minority Interest
		OR
		Adjusted current assets – Non interest
K_c	=	bearing current liabilities + Net fixed
R	=	assets
		Cost of Capital
		Rate of return on capital

EVA and related measures attempt to improve on traditional accounting measures of performance by measuring the economic profit of an enterprise. Economic value added is defined as net operating profit after tax (NOPAT) less a company's cost of capital (including the cost of both equity and debt). (Morrin and Jarell, 2001) NOPAT equals the sum of income available to common plus the increase in equity equivalents plus interest expenses after taxes plus preferred dividends plus minority interest provisions. Equity equivalents gross up the standard accounting into what Stewart calls 'economic book value'. (Stewart, 1999) They eliminate accounting distortions by converting from accrual to cash accounting.

When NOPAT is divided by adjusted book value of capital, we abandon the residual income formula and note that EVA can also be computed by taking the spread between the rate of

[2] Equity equivalents gross up the standard accounting into what G Stewart calls 'economic book value'. They eliminate accounting distortions by converting from accrual to cash accounting.

return on capital and the cost of capital, multiplied by the economic book value of the capital committed to the business. (O'Hanlon and Peasnell, 1998)

When EVA is projected and discounted to a present value, EVA accounts for the market value that management adds to, or subtracts from, the capital it has employed. (Stewart, 1999) This relation between MVA and EVA is the theoretical foundation for Stern Stewart's management system. In line with residual income theory, business success is defined in terms of the present value of future EVAs. Stewart's claim that it is the only performance measure that ties directly to the intrinsic market value of any company (Dodd and Chen: 1996) is also true when taken into consideration all metrics that are being used in the residual income-based valuation framework like economic profit, shareholder value added, economic value creation but also shareholder value analysis (see infra).

Both academics and practitioners point out numerous benefits of EVA. Because it is a single period measure, it allows for an annual measurement of actual not-estimated or forecasted, value created performance. (Armitage and Fog, 1996) Others refer to the fact that it corresponds more closely to economic profit than accounting earnings do and, as an objective, is consistent with the pursuit of shareholder interest. (Grant, 1998; Young and O'Byrne, 2001) Claims have also been made that EVA can drive behavioural change by providing the incentive for managers to promote shareholder wealth as the primary objective. (Dodd & Chen, 1996; Biddle et al., 1997; Brewer et al., 1999; McLaren 1999)

Although some research indicates that EVA indeed is quite well correlated with stock price performance (O'Byrne, 1996; Lehn and Makhija, 1996; Bacidore et al., 1997) other research points out that EVA does not dominate earnings in association with stock market returns (Dodd and Chen, 1996; Biddle et al., 1997; Günther et al., 1999). The implied effectiveness of economic value added as a performance measure based on the association between EVA and stock return is therefore at least ambiguous.

Moreover, EVA, being a single period measure, does not address the problem of the time period over which profits are to be maximized (Grant, 1998) nor does it deal with issues over shorttermism. (McLaren, 2000) Furthermore, the EVA practice of 'decoupling' performance measures from GAAP while having significant incentive benefits, also induces potential costs in the form of increased auditing requirements (Zimmerman in Minchington and Francis, 2000). Due to the fact that EVA is a monetary measure, G. Bennett Stewart proposes to standardize the metric on business unit level to reflect a common level of capital employed. (Stewart, 1999; Morrin and Jarell, 2001) Finally, because EVA assesses the capital charge on the firm's economic book value rather than on its market value, next to the fact that the adjusted capital represents only the values of the physical assets in place and not the strategy, some authors suggest using total market value of the firm's assets instead of the adjusted book value. (Bacidore et al., 1997)

3.3.1.2 Equity spread approach.

The equity spread approach is a future-oriented, accounting based model. It compares return on equity (RoE) against the cost of equity (k_E), and ascertains, by calculating the difference, if shareholder value has been created or destroyed. The equity spread approach is based on the Gordon Model (Günther, 1997) which represents a market to book value relationship in efficient capital markets, under assumption of unlimited constant growth (g) and with two other dependent variables; RoE and k_E. The Market to book value can be calculated by dividing the difference between RoE and g, and k_E and g, when g is less than k_E.

$$\frac{M}{B} = \frac{(RoE - g)}{(k_E - g)} \quad \text{with } k_E > g$$

and

$$\frac{M}{B} = \begin{cases} +\infty & if\ RoE > g \\ 0 & if\ RoE = g \quad \text{with } k_E > g \\ -\infty & if\ RoE < g \end{cases}$$

Market to book value ratios are well known and very much accepted among the financial scientific community. (Günther, 1997). The consulting companies Marakon Associates and HOLT Value Associates have applied the approach in their value-based management practices. Although McTaggart suggests not to use the market to book equation to estimate precisely the value of a company, he asserts it can be used in three cases. Firstly, this ratio produces a meaningful quick and dirty valuation. Secondly, it draws out the key relationships between equity spread, growth and the ratio of market value to book value. And finally, the equation can be used to estimate a company's (or a business unit's) value at the end of the planning period. (McTaggart et al., 1994)

The significant difference between both approaches, is that in the EVA approach economic value added is assessed by means of the weighted average cost of capital – and therefore considering both debt and equity – whereas the equity spread approach is interested only in the return against the cost of equity. The hurdle rate is therefore noteworthy different as it is recognized that the after tax borrowing cost of debt is generally cheaper than the cost of equity. (Pratt, 1998)

1.1.2 Multi-period metrics

1.1.2.1 Cash flow return on investment.

We can define cash flow return on investment (CFROI) as the annual gross cash flow relative to the invested capital of the business unit. (Lewis in Günther, 1997)

The mathematical formula for CFROI is the solution of r in:

$$I = \sum_{i=1}^{n} \frac{CF_i}{(1+r)^n} + \frac{W_{n+1}}{(1+r)^{n+1}}$$

Where

W	=	Expected residual value of non depreciating assets
I	=	Gross Operating Asset Investment
CF	=	Gross Cash Flow

HOLT Value Associates in cooperation with Boston Consulting Group has developed CFROI. According to Haspeslagh et al., CFROI is quite popular; 23% of the respondents in their survey affirm to use cash flow return on investment as an indicator for shareholder value creation.

The CFROI calculation requires four major inputs: the life of the assets, the amount of total assets (both depreciating and non-depreciating), the periodic cash flows assumed over the life of those assets and the release of non-depreciating assets in the final period of the life of the assets. (Madden, 1999; Young and O'Byrne, 2001; Morrin and Jarell, 2001) From a methodological point of view CFROI can be determined in two steps. (Myers, 1996) First, inflation-adjusted cash flows available to all capital owners in the firm, are compared to the inflation-adjusted gross investments made by the capital owners. The ratio of gross cash flow to gross investment is translated into an internal rate of return by recognizing the finite economic life of depreciating assets and the residual value of non-depreciating assets.

Madden, who is partner at HOLT Value Associates, cites a number of authors who claim that security analysts and corporate managers increasingly employ CFROI as a key tool for gauging corporate performance and shareholder value. (Madden, 1998). Some of its users perceive CFROI also as an investor-oriented tool. (Mills et al., 1998) The CFROI model avoids the use of accounting book capital in valuing the firm's existing assets. Since the underlying gross cash flow for the calculation of CFROI is assumed to be constant during the useful life of the fixed assets (Morrin and Jarell, 2001), it is an annual performance figure that has to be recalculated yearly. (Günther, 1997; Young and O'Byrne, 2001) An often-heard comment with regard to CFROI is that it is perceived as a complex financial measure device. (Fera, 1997; Young and O'Byrne, 2001)

Based on a simplified CFROI rate[3], Boston Consulting Group developed a residual income measure, which is called cash value added (CVA). CVA is the spread between CFROI and the real cost of capital, multiplied with the investment in fixed assets plus working capital. Due to the fact that investors use analogous methods to valuate financial assets, CVA is seen as a consistent and relevant tool in communicating both internally and externally. (Ottoson and Weisenrieder, 1996) In the above mentioned study based on companies of the German capital market, Günther et al. found that the CVA approach delivered better results on a low level of correlation than the DCF approach or EVA. (Günther et al., 1999)

[3] In this approach CFROI is no longer calculated as the internal rate of return of a standardized gross cash flow profile but as gross cash flow minus economic depreciation, divided by gross investment.

1.1.2.2 Shareholder value added.

Shareholder value added (SVA) is defined as the difference between the present value of incremental cash flow before new investment and the present value of investment in fixed and working capital.

SVA = (Present value of cash flow from operations during the forecast period + residual value + marketable securities) – Debt

The measure has been described by Rappaport (Rappaport, 1998) who is regarded as one of the most prominent publicists in the field of shareholder value metrics. (Copeland et al., 1994; Günther, 1997) Shareholder value added is less popular than its founding father; only 8% of respondents in the recent INSEAD study confirm to use this indicator.

SVA can also be defined as incremental sales multiplied by incremental treshold spread, adjusted for the income tax rate, divided by the present value of the cost of capital. (Rappaport, 1998) Incremental treshold spread is calculated as the profit margin on incremental sales less the break-even operating profit margin on total sales in any period. In the latter way of representing, SVA leans towards the shareholder value network, which depicts the essential link between the corporate objective of creating shareholder value and the basic valuation or value drivers. (Morrin and Jarell, 2001) The value driver model is a comprehensive approach that centres on seven key drivers of shareholder value i.e. sales growth rate, operating profit margin, cash tax rate, fixed capital needs, working capital needs, cost of capital and planning period or value growth duration. (Rappaport, 1986) Compared with EVA, Mills and Print express their preference in favour of SVA because the driver tree model appears to be very useful in helping managers to understand the dynamics of value creation. (Mills and Print, 1995) In a multi-divisional organization the measurement of selected value drivers at the divisional level could be complementary to value-based measures at group level and eradicate the need to calculate divisional cost of capital.

4 VALUE-BASED MANAGEMENT PRACTICES

4.1 Introduction

In addition to the various performance indicators mentioned in the previous chapter, it should be clear that metrics are not the goal of a value-based management program. As always, one should never confuse the ends with the means. Alas for some CEO’s, a managing for value focus does not create value through financial manipulations. It merely creates value through developing sound strategic and operating plans for a company and its business-units.

In this section we will first introduce an overview of the fundamental components of a holistic value-based management program. The components of this framework are deduced from several research reports concerning a comprehensive view of the practice of value-based management. We have set our framework side by side the recently published report of INSEAD (Boulos et al., 2001), "Getting the value out of value-based management". In addition, we studied the results published in "Value Based Management. The growing importance of Shareholder value in Europe" (KPMG, 1999) and the conclusions of a PwC inquiry (PwC, 2000), elucidated in "Inside the Mind of the CEO in Belgium". After a description, we continue with an overview, based on a literature review and analysis of what each of the consulting firms has published as its methodology. As stated earlier, value-based management as a practice emerged from the experience and fieldwork of professionals and consultants. We will describe six of these value-based management constructs.

4.2 Value-based Management in Practice

Fieldwork by Boulos et al. (Boulos et al., 2001) concerning the VBM practice, reveals that a successful VBM program is much more than the adoption of an economic profit metric as key measure of performance, combined with tie compensation to agree-upon improvement targets in that metric. The authors conclude that a successful VBM program is about introducing fundamental changes in the company's culture.

INSEAD's extensive research on value-based management (Boulos et al., 2001) has revealed 5 key value-driven elements, described below, which set up a virtuous circle of behavior and benefits as foundation for sustained value creation. The first key element is an explicit commitment to value, which becomes apparent to everyone when the company sets shareholder goals to guide and stretch out the thinking and actions. The education and intensive training of a large number of managers and employees in the shareholder value creation process and in the awareness of how their actions can contribute to economic profit creation, forms the second element. Building ownership is the third element mentioned. Rewarding large numbers of managers and employees on corporate and/or business unit economic profit measures, has a positive influence on the creation of ownership. Empowering business units is the fourth main element. This empowerment concerns the evaluation of the strategic options and subsequent investment, based on the maximization of the business units' long-term economic-profit creation. The fifth main element concerns broad process reforms. The most important rules concerning these broad programs are: avoiding accounting complexity, identifying the value, integrating budgeting with strategic planning and last but not least investing in information systems to develop an overall corporate strategy.

A correct implementation of those five key elements is necessary to benefit from VBM, but apart from that the survey of INSEAD (Boulos et al., 2001) also specified some success factors, indispensable in the VBM practice. A clear explicitation of the commitment to shareholder value and intensive training for as many managers and employees as possible or desirable, are success factors situated at the beginning of the VBM implementation process. The involvement of the CEO is as success factor applied to the whole VBM practice. The extent of the bonus program, the depolitization of budgets and less frequent interventions in the resource-allocation programs can be viewed as success factors, resulting from an adequate implementation and supporting the ongoing use of the VBM-system.

Boulos et al. are however not the only ones trying to explain the components or elements of a holistic value-based management system. Slater and Olson (Slater and Olson, 1996) describe a comparable overview of the components in a VBM system. The first stage in their system consists of a value-based analysis. The value-based analyses and planning techniques use several well-known financial tools, such as DCF and EVA, to evaluate new strategic initiatives and existing operations. Slater and Olson subscribe, just like Boulos et al. the need to buy in all levels of management to achieve a successful VBM-system. The commitment and support of top management is here the most important aspect, followed by the need to educate all other managers in order to create commitment in the whole organization. The final step in this stage concerns, according to Slater and Olson, the establishment of a clearly communicated gain sharing program for all employees and thus not exclusively for managers. More than Boulos et al. they underscore that the gain sharing program can only be an effective motivational tool if the payout formula is clearly constructed. VBM training and open-book management are the key elements of the third stage in their VBM system. After this stage, everybody in the firm should understand the purpose of the VBM system, the mechanisms of the financial framework, the current financial situation and the benefits of achieving the firm's goals. The fourth stage focuses on employee empowerment and task-focused training, and the last stage concerns the value sharing.

4.3 Value-based Management as a Practice

Numerous financial planning / consulting firms have developed proprietary theories of value creation (England, 1992). Each of them claims to have a specific presumption of how value can be managed. In this paper we attempt to analyse their documented methodology. Figure 1 gives a synopsis of the approach of six financial planning / consulting firms i.e. Stern Stewart & Co, Marakon Associates, McKinsey & Co, PriceWaterhouseCoopers, L.E.K. Consulting and HOLT Value Associates. Before analysing the similarities and differences in their approaches, we briefly describe the six consulting firms.

Stern Stewart & Co was founded in 1982 (Stewart, 1999), based on the development of their EVA® Management Framework. The EVA- and MVA metric (Günther, 1997; Myers, 1996) created internally, are probably the best-known assets of this New-York-based consulting firm. Marakon Associates, based in Stanford, was once depicted as the best-kept secret in consulting. (Stewart, 1998) This management-consulting firm developed the equity spread-metric (Günther, 1997; Reimann, 1991), which, as we wrote infra, is rooted in the Gordon model. Their main interest in basically one governing objective, viz. the increase in shareholder value, explains their strong focus. As small as Marakon Associates is, as big is McKinsey & Co, the third consulting firm in our analysis. McKinsey & Co (Copeland et al., 2000) advises companies on more general issues as strategy, but is also active in more specialised areas as finance. Their ideas about value-based management are described in “Valuation”, where they pay a lot attention to the valuation-metrics, and the DCF-model in particular. The fourth financial planning firm is PriceWaterhouseCoopers (PwC), with offices spread all over the world. The global Financial & Cost Management consultancy team of PwC (Read, 1997) is active in the field of planning and large-scale change projects through for instance value-based management. L.E.K. Consulting, founded in 1983, provides her clients world-wide with strategic advice and commercial support. The prominent publicist in the field of shareholder value, Alfred Rappaport (cfr. Supra) has been L.E.K.'s strategic advisor concerning the application of shareholder value to business strategy since their merger with The Alcar Group in 1993. HOLT Value Associates, with headquarters in Chicago (Young and O’Byrne, 2001), is the sixth and last financial consulting firm in our analysis. HOLT developed, in co-operation with the Boston Consulting Group (Günther, 1997;

Myers, 1996), the CFROI-metric. Their expertise is mainly focused on understanding how companies, worldwide, are valued in stock markets (Madden, 1999).

FIG. 1: COMPARISON OF SIX VALUE-BASED MANAGEMENT APPROACHES

		Stern Stewart & Co	Marakon Associates	McKinsey & Co	Price Waterhouse Coopers	L.E.K. Consulting	HOLT Value Associates
Management focus		Successful companies maximize creation of wealth for the shareholders					
Why shareholdervalue maximization?		Recognition of ownership	Best objective in going concern	Prosper in business	Prosper in business	Prosper in business	Prosper in business
Philosophy of the consulting company with regards to stakeholder groups		Stakeholder Theory, by means of putting the shareholder first					
Fundamentals for value creation		Strategy Structure & metrics	Strategy	Metrics & Belief systems	Structure	Strategy & Metrics	Strategy & Metrics
Main elements in the consultants approach		Systems with focus on measuring, training and rewarding	Culture, structure and systems with focus on decentralised strategy development	Culture, structure and systems with focus on corporate strategy and valuation	Culture, structure and systems with focus on training and communication	Culture and systems with focus on strategy and education	Systems with focus on valuation
Scope / Purpose of external communication concerning VBM		Better quality information Marketing advantage	Focus on wealth creation	Univocal information to all stakeholder groups	Better quality information Temporary marketing influences	Better quality information & commitment	Better quality information
Perception and specific (internal) contribution of the VBM-approach in general		Clarifies the perception of underlying economics	Better alignment of internal organization & processes with strategy	Improving dialogue between different internal entities	Changing time-horizon and encouraging strategy development	Improving management productivity	More efficient analysis of firms' performance
Strategy development	General ideas	Overarching strategy & corresponding organizational structure	Bottom-up process Common framework Valuing strategies on profitable growth instead of growth	Decision making at all levels Focus on valuing strategies	Common framework corporate parent and business units 'Strategic thinking reconciled with financial thinking = Valuing strategies'	Strategic analysis at all levels based on combination of strategy formulation and strategy valuation	Strategy is induced by feedback from the stock market
	Mentioned references	Refer to • Porter and Treacy and Wiersema for strategy development • Duncan and Brickley, Smith and Zimmerman for organizational design	Proprietary strategy approach, based on Market economics & Competitive position, resembles ideas of Porter	Refer to • Porter • Coyne & Subramaniam • Proprietary Customer segmentation analysis • Competitive business system analysis	Briefly refer to Porter and Hamel & Prahalad for strategic thinking	Refer to • Porter for strategy formulation • Williams for the sustainability question Doubts about ideas of • Hammer & Champy • Hamel & Prahalad • Treacy & Wiersema	
Strategy deployment	General	Top down, decentralised	Bottom up, decentralised	Preference for bottom up	Top down and centralistic	Bottom-up with central guidance	Top
	Focus in strategy deployment	Increasing EVA as general objective	Profitable growth instead of growth per se	Profitable growth instead of growth per se	Maximization of shareholder value	Maximization of expected shareholder value added	
	Supporting tools	EVA value drivers, EVA is common language for all management decisions	Strategic value drivers of different business units, benchmarked with corporate management processes, EP is common language	Key value drivers and Key performance indicators defined separate for different organizational levels	Strategic value drivers are decomposed in financial value drivers and operational value drivers	Decomposition of the shareholder value network till de level of Key Value Drivers	
Preferred Metrics		• MVA (corporate) • EVA (corporate, business unit and product line)	• Equity Spread (corporate) • EP (corporate, business unit, customer and product line)	• Enterprise DCF (corporate, business unit) • EP (corporate, business unit, customer and product line)	• CFROI (corporate) • SVA (corporate, business unit) • FCF (corporate, business unit)	• SVA (corporate, operating level) • Change in residual income or change in EVA (operating level) • Leading indicators of value (operating level)	• CFROI (corporate) • Accounting-based measures (lower levels)
Investment decisions & resource allocation		Valuation of strategies based on EVA valuation	Focus on fulfilment of strategy requirements of the business unit Four principles for resource allocation	Focus on valuation-techniques: • DCF • Real option theory	Focus on maximisation of SHV and alignment with strategy	Focus on Market signals analysis combined with DCF and real options as valuation tools	DCF in two parts; existing assets versus future investments
Mergers and acquisitions		EVA analysis combined with strategic considerations	Develop an acquisition strategy	Discipline acquisition programme	Structured approach combined with common sense	Discipline acquisition process	CFROI analysis
Influence on collaboration		Dynamic discussions at steering committee Commonality across processes and measures	Creation of "managing for value" mindset	Aligning BU managers and employees around a common understanding of top priorities	Bridging corporate and frontline managers strategy and its implementation	Aligning managers with a common framework of analysis, a common goal & common language	Create common language, Continuous improvement through feedback system

Performance Management	Performance Management	Paramount objective is increasing EVA EVA is internalised through cross-functional teams Preference for EVA valuation model and free cash flow model Resemblance with the Shareholder Value Network of Rappaport	Suggested process consists of 3 activities: • Target setting • Monitoring performance • Examine difference 2 principles: • Plan driven targets • Performance contracts	Prescribed system contains 3 elements: • Value creation strategy for Bus • Alignment between targets and value drivers at every level • Structured performance review 4 Principles: • Tailor-made • Long- & short-term targets • Financial & operational targets • Leading indicators Resemblance with the Shareholder Value Network of Rappaport	Proposed system is based on 4 elements: • Target setting • Linking goals to value drivers on lower level • Define micro-divers • Value chain analysis Resemblance with the Shareholder Value Network of Rappaport	Focus on development of an organization wide "owner-oriented culture" Installation of more ownership-oriented perspective consists of 3 steps: • Overcome earnings myopia • Measure and reward long-term performance • Convey risks and rewards of ownership Performance measurement hierarchy hareholder Value Network	Focus on learning process (not elaborated) At lower levels switch to simpler accounting based tools.
	Target setting	EVA goals as basis for stretched targets	Proposed strategy is validated (projections of revenue growth, EP and Equity CF) and once approved it becomes the target	Iterative process (negotiation between different organizational levels)	Translate global targets to localised targets at operational level	Translate shareholder returns at corporate level to specific key value drivers on the lowest organizational level	CFROI goals (at higher levels) translated in more local targets
Reward System	Basis for rewarding	Link rewards with value creation	Link rewards to performance consistent with value creation	Link individuals behavior to overall value creating activities	Link rewards with value creation	Compensation based on superior performance (SSVA)	Compensation based on an empirical link to value
	General ideas	Putting executives at the same risk as stockholders Start with top management and gradually extend through the ranks of middle management	Alignment between top management and governing objective Focus on top management	Making managers think like owners All employees throughout the organization	Appropriate level of risk and reward All employees throughout the organization	Acquire experience and understanding with the shareholder value approach first, before linking to remuneration All employees throughout the organization	Acquire experience with the CFROI-model first, before linking to remuneration
	Key Elements	Results and not performance is rewarded Features of rewarding system(= Bonus bank): • Based on EVA-measure • Unambiguous Target • Uncapped bonuses • Based on improvement on corresponding level • Stretching horizon from short-term to longer-term Cash rewarding combined with internal rewarding Encourage employee stock ownership	Economic performance as basis Features of rewarding system: • First focus on the right strategies and organizational capabilities then on financial rewards • One corporate performance target, tailored targets for the BU based on its strategy • Targets are defined in contract • Compensation on one year results • Performance on corresponding level as basis for rewarding • Relative pay for relative performance • Linked short-and long-term targets Individual payment choice (cash or cash equivalents, options)	Individual behavior and performance as basis for rewarding Features of rewarding system: • Challenging fin & non-fin targets • Linked long-and short-term targets • Aversion against bonus caps • Corresponding performance • Targets tailored for different levels and linked to controllable KPIs • Visualise realised performance • Differentiate rewarding Financial incentives fulfilled with opportunities, values and beliefs form the reward package	Basis is economic performance Features of rewarding system: • Linked with strategy • Separate long & short-term targets • Depending on hierarchy-level • Related to responsibilities • Subscribe the idea of long term incentive plans	Exceeding the treshold standard for superior performance as basis Features of rewarding system: • Based on SVA-measure • Based on improvement on corresponding level • Linked short-and long-term targets • One corporate performance target, tailored targets for lower organizational levels • Aversion against bonus caps • Related to responsibilities • Compensation on rolling three-to-five year SVA plans • Subscribe bonus-bank approach • Relative pay for relative performance Indexed stock options Encouragement of stock ownership or stock options	
Training & education	General ideas	Changing the mindset Continuous communication with entire workforce Top-down	“learn by doing” Continuous reinforcement through top management communication Top-down to all levels	First, survey managers anonymously about beliefs and values, before changing beliefs and values Entire organization	Value transformation team educates management & BU’s Endorsement from top to all employees	Continuous education "Train the trainers" approach Shareholder Value Education Agenda Endorsement from top to all employees	

	Content	Focus on EVA	Focus on (developing & implementing strategies that) maximize governing objective	Emphasis on value creation	Focus on share price goal ~ shareholder value theme	Focus on superior total shareholder return (SSVA™)	
Facilitators for the implementation of the VBM approach		Installation of steering committee Commitment of CEO and CFO Formal implementation team Regular meeting with consulting firm to continue knowledge transfer	Chief executive as visible leader Top management champions to drive implementation	Visible top management commitment Extensive participation of BU managers in value driver analysis	CEO sponsorship, with support of senior management and board of directors Value transformation team, consisting of representatives off all levels	CEO commitment, with full support of the Board and management Various facilitating constructs	
Benchmarking	Corporate level	Compare sum of EVAs of Business Plans with market value of company	Compare key management processes	DCF	Cash flow performance compared with competing companies Broad definition of benchmarking	Relative total shareholder return or comparing company's total return with a group of comparable peers DCF when absence of true current market benchmark	Compare forecast patterns with historical information
	Business unit level	EVA drivers to compare internal	Identification of strategic value drivers	DCF combined with EP to benchmark	Business unit specific value driver	Business unit's operating plan Historical performance of the business unit Competitive performance of value drivers Market expectations for the whole company DCF when absence of true current market benchmark	NCR drivers

The comparison of the VBM systems used by these different consulting firms reveals some similarities between the approaches, but also demonstrates clear distinctions and different accents.

4.3.1 Management focus.

The six consulting companies that were taken up in our review, all subscribe and call attention to the imperative of maximizing shareholder value as the paramount performance objective.

The reason for shareholder value maximization is, however, not univocal. McKinsey & Co (Copeland et al., 2000), PwC (Black et al., 1998), L.E.K. Consulting (Rappaport, 1998) and HOLT Value Associates (Madden, 1999) refer to value-based management as a means to prosper in business. Stern Stewart & Co (Stewart, 1999; Ehrbar, 1998; Stern et al., 2001) considers the recognition of ownership as the ultimate reason to maximize shareholder value. And finally, for Marakon Associates (Mc Taggart et al., 1994; Mc Taggart and Kontes, 1993; Miller, 2000) the 'raison d' être' for VBM is the fact that it is deemed to be the best way to guarantee the going concern of the organization.

4.3.2 Perception of the different stakeholders.

There is clear unanimity with regard to the various stakeholder groups. All consulting companies in our assessment (Stewart, 1999; Ehrbar, 1998; Stern et al., 2001) (Mc Taggart and Gillis, 1998) (Copeland et al., 2000; Copeland, 1994) (Black et al., 1998; Read, 1997) (Rappaport, 1998) (Madden, 1999) agree that the interests of all stakeholder groups are best served when putting the shareholder first. Rappaport (1998: 7) refers thereby, as mentioned earlier, to the socially responsible behavior of companies.

4.3.3 Fundamentals for value creation.

Despite consensus on value creation and even value maximization, there is a difference in the proposed brass tacks. Four of the six consultants viz. Marakon Associates, HOLT Value Associates, Stern Stewart & Co and L.E.K. Consulting point at the importance of a well-founded strategy. One of this group; Marakon Associates, appears to focus predominantly on strategy. As indicated by McTaggart et al. (Mc Taggart et al., 1994) a coherent strategy should allow companies to overcome both the internal force of constraints in the organizational structure or culture and the external force of competition, in order to maximize shareholder value. Where HOLT Value Associates (Madden, 1999) combine strategy with metrics, Stern Stewart & Co (Stern et al., 2001) incorporate strategy, structure and metrics, and refer to the “Road Map to Value Creation” created by Briggs & Stratton.

Although L.E.K. Consulting (Rappaport, 1998) share the ideas of HOLT Value Associates, concerning the combination of strategy and metrics as the fundamentals for value creation, there is a difference in emphasis. L.E.K. Consulting are aware of the importance of the shareholder value network as metric framework, but stress that the shareholder value analysis is only as good as the strategic thinking behind it. Moreover, they not only recognise the importance of strategy, but they also put a considerable amount of effort on the education part in their holistic approach.

McKinsey & Co (Copeland et al., 2000) also mention metrics as one of the cornerstones of their system. Value metrics, together with a value mindset, which is denoted as the way management internalizes the idea of shareholder value creation, are the two dimensions in value thinking. Copeland et al. consider value thinking as a prerequisite for making value happen. PwC (Read, 1977) accentuates making the right structural decisions, and focuses on the challenge of streamlining the organization on the one hand and the expansion of the organization to serve customers worldwide, on the other hand.

4.3.4 Main elements of the consultants’ approaches.

The main elements of the approaches of all consultant companies, except for Stern Stewart & Co (Stern et al., 2001) and HOLT Value Associates (Madden, 1998), show clear similarities with the basic mechanisms of a management control system defined by Anthony and Govindarajan as culture, structure and systems (Anthony and Govindarajan, 2001). We found, however, in each of the four approaches, a distinctive accent.

The decentralization of strategy development materializes the focus of Marakon Associates. The Marakon practitioners are first of all centred on belief systems, which imbue an organization with a sense of purpose and a basis for decision-making. The next element concerns the principles, defined as the knowledge and guidelines for decision-making. Within this framework of beliefs and principles, the institutional capability to manage effectively is provided by the processes. (Mc Taggart et al., 1994) The valuation framework of McKinsey & Co

(Copeland et al., 2000) is build on the same mechanisms but with a different focus. The McKinsey approach emphasizes corporate strategy and includes identifying and inventorying the value creation situation, acting on opportunities – that often involve reorganization or divestures & acquisitions – and implementing a value creation philosophy. Even more than McKinsey, HOLT's model of shareholder value management is concentrated on valuation and expressing the link between strategy deployment and the way stock markets value companies. HOLT Value Associates' approach, which is said to be comprehensive and complex (Reimann, 1991), includes an economic framework combined with notice for corporate vision and strategic business unit strategy.

According to PriceWaterhouseCoopers (Black et al., 1998), the shareholder value methodology is based on a triple transformation process. The first step is called analysis. It is the learning process of linking strategy to operations on the one hand and the effect of value drivers on both operations and strategy on the other hand. The second step defined as action, is the transformation of people, culture and other stakeholders in order to build long-term sustainable value. Finally, internal and external communication completes this three stages process. Black et al. suggest accomplishing this process with another three stages concept including value creation, value preservation and value realization. The attention for training and communication in both processes demonstrates their importance in the approach of PwC.

L.E.K. Consulting (Rappaport, 1998) distinguish in their implementation process of the shareholder value approach also three major phases. The first phase focuses on gaining commitment. The L.E.K. team underlines by this means the importance to create consensus on the need to change, not only on the senior level, but on a much broader organisational level. The second phase, introducing shareholder value, consists of creating an understanding of how to change, based on different techniques, viz. value audit, value driver assessment, strategy valuation and shareholder value education. Reinforcing shareholder value is the third and last phase in the L.E.K. approach and focuses on ensuring that the change is sustained. Performance measurement and incentives, shareholder value infrastructure and continuing education are the suggested management processes to keep shareholder value thinking alive.

As mentioned above, the approach of Stern Stewart & Co (Stern et al., 2001) differs noticeably from the frameworks of the other consulting firms. Its integrated EVA-program is basically oriented towards systems and consists of a measurement program, combined with a management system, an incentive compensation plan and training.

4.3.5 External communication.

None of the six consulting firms denies the importance and the impact of external communication with regard to value-based management. However, it seems they do not have the same opinion about the specific scope and purpose of external communication.

Stern Stewart & Co, as well as PwC, HOLT Value Associates and L.E.K. Consulting aim to provide the investment community with better quality information. Madden (Madden, 1999) thereby refers to the usefulness of this information for the decision-making process of the investors, on resource allocation and investment decisions. According to PriceWaterhouseCoopers, investor communication is essential to ensure that investors understand the company’s goals and strategies and that they are confident about the ability of management to implement and deliver those objectives. PwC is, just like Stern Stewart & Co as we will illustrate below, aware of the influence of this communication as a marketing tool, but PwC particularly underlines however that those influences are only temporary and difficult to sustain.

L.E.K. Consulting, is also very concerned about the alignment between the market evaluation and the company's strategic plans. This concern about providing investors with accurate information resulted in the publication of The Shareholder Scoreboard. This annual publication focuses on rate of return rankings for the one thousand largest companies in the United States. Rappaport, as mentioned above, starts out of the company's stock price as the clearest measure of market expectations. (Rappaport, 1987; Rappaport, Vol. V; Rappaport, 1998) Needless to say this consulting firm pays special attention to those market expectations. Through a Market Signals Analysis process L.E.K. Consulting tries to demystify the expectations or signals from buy and sell side analysts and consequently forms the basis for proactive initiatives regarding the communication with the market or valuation adjustments. (Kenney, Vol. IX) Since the approach of L.E.K. Consulting is completely built on superior total shareholder returns, this not only sends unambiguous signals to members of the organization but also to outside investors. After all, a focus on superior total shareholder returns assures the owners of a firm that management is totally committed to exceeding peer shareholder returns performance. (Rhoads and Raoth, Vol. X)

The EVA-framework is, according to Stern et al. (Stern et al., 2001) a superior instrument for investors who are interested in the reality behind the accounting numbers. Also G. Bennett Stewart and Young and O'Byrne (Stewart, 1999; Young and O'Byrne, 2001) are deceptively confident of the added value of EVA in the external communication. G. Bennett Stewart thereby underlines the importance of EVA in the communication with the most influential investors or lead steers. Stern Stewart & Co recognizes the impact of the announcement of the implementation of EVA on the perception of the lead steers. Not only the transmission of data, but also the announcement of implementation of EVA (Stern et al., 2001) can influence investors since this information is often seen as a way to create more confidence in the company's future performance.

Marakon Associates (Mc Taggart et al., 1994) advocate the importance of communicating nothing more or nothing less than the amount of wealth the company will create for its shareholders.

According to McKinsey & Co (Copeland et al., 2000), companies should apply the same communication strategy for internal and external communication. Copeland et al. suggest treating investors, investment community, customers and employees all with the same assiduousness.

4.3.6 Internal contribution of the VBM-approach.

The perception of the internal contribution of the VBM-approach seems to be closely linked with communication, since all six consulting firms denote in one way or another its influence on internal communication. Stern Stewart & Co (Ehrbar, 1998) define the EVA-framework as a new perspective that provides managers with a clearer perception of the underlying economics of the business. Madden (Madden, 1999) is on the same wavelength as Stern Stewart & Co in that he specifies a more efficient analysis of the firms' performance as one of the main contributions of value-based management.

Mc Taggart et al. stress the increase in alignment of the internal organization and processes with the (corporate) strategy. McKinsey & Co (Copeland et al., 2000) refer mainly to the improvement of the dialogue between corporate and business unit level. Read (Read, 1997), the global leader of the PwC's Financial & Cost Management team, is convinced that implementing VBM can change people's time-horizon and motivation to achieve the corporate goals. Rappaport (1998) summarises the internal contribution of implementing the shareholder value approach as an improvement of management productivity by facilitating more efficient and effective decision-making. Smith (Vol. XIV), a partner in L.E.K.'s London office, distinguishes thereby 3 categories of features. The first feature refers to the systematic way of collecting and evaluating operating measures that control and drive cash flow. Secondly, Smith emphasises that strategic decisions are made on the basis of a systematic analysis of potential value creation. The third feature gives attention to the fact that employees at all levels understand how their activities link to the creation of short and long-term cash flow. (Roath, Vol. XIV)

4.3.7 Strategy development.

There are some distinct differences in the recommended strategy development process of the various consultants. The approach of HOLT Value Associates (Madden, 1999) can thereby be considered as the outsider, since Madden states that strategy is induced by feedback from the stock market, due to early recognition of fundamental changes.

Stern Stewart & Co (Stern et al., 2001) have, notwithstanding the lack of an own strategy approach, a clear view on strategy development and admit that the existence of an EVA-framework is not sufficient to be successful. Stern et al. recognize the need of an overarching strategy combined with an organizational structure that supports the chosen strategy. The identification of the appropriate competitive position based on Porter's competitive advantage is seen as the basic principle in the strategy development process and the allocation of the key resources as described by Treacy & Wiersema, can be viewed as the most important strategic element. The approaches of Duncan and Brickley, Smith and Zimmerman are considered to be an excellent basis to resolve the questions related to structural design. Possibly due to Stewart's background as a corporate financier, Stern Stewart & Co also cultivate capital structure and deployment of capital (Young and O'Byrne, 2001) as a major element in the strategic process.

Marakon Associates (Mc Taggart et al., 1994) have developed a universal framework for strategy development. They envision this strategic planning process as primary decision-making tool. The Marakon framework is based on three characteristics. First of all, it needs to be value-based. Second, it is important that the process is consequential, which implies that the major business units and appropriate decisions determine short- and long-term performance. The third characteristic refers to continuity, where important issues are constantly under assessment and discussion. The strategy development process is a "bottom-up" process to assure an accurate appraisal of the various business units in the portfolio. The financial forecasts, developed by the business units, are hereby supposed to be underpinned by means of an extensive analysis of market economics and competitive position. This approach (Brown et al., 2000) as described by Mc Taggart et al., reveals great similarities with Porter's Industry Structure Analysis.[4]

Porter plays also a very important role in the strategy development approach of L.E.K. Consulting. This provider of financial planning services distinguishes two activities in the strategic analysis of any business. The first activity, defined as strategy formulation, entails analyzing the attractiveness of the industry and the position of the business vis-à-vis its competitors. The second activity, strategy valuation, involves an estimation of the shareholder value added by alternative strategies. (Rappaport, 1981; 1998; Rhoads and Roath, Vol. X) Rappaport (1998) takes a clear standpoint concerning the availability of systematic frameworks for strategy formulation, since he states that only the Five Forces Model of Porter and the Strenghts/Weakenesses/Opportunities/Threats analyses succeed in linking the investigation of industry attractiveness and the sources of competitive advantage with shareholder value. He continues his argue in favour of Porter by expressing his doubts on the approaches of Hammer & Champy, Hamel & Prahalad and Treacy & Wiersema, which, according to him, do not succeed in explaining how those recommended strategies will lead to significant increases in shareholder value. It is not only important to detect competitive advantages, but it is also important to sustain those advantages. Rappaport refers therefore to Williams and his classification of products and services into three categories, based on the sustainability of the competitive advantage, viz. slow cycle, standard cycle and fast cycle. The strategy development approach suggested by L.E.K. Consulting continues with a translation of those competitive dynamics into financial drivers. The alternative strategies for gaining competitive advantage form the basic inputs for the strategy valuation process, where Rappaport distinguishes two phases. The first phase focuses on establishing reasonable forecasts, where the second one evaluates the resulting valuations. (Rappaport, 1981; 1992; 1998)

Koller, (Koller, 1994) one of the partners of McKinsey & Co, is an adherent of decision-making at all levels, on condition that everyone is provided with accurate information and proper incentives. The business unit strategy is not viewed as part of the valuation process, but as prerequisite for effective business performance management. Not only Stern Stewart & Co,

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[4] Often referred to as the Five Forces Model

Marakon Associates and L.E.K. Consulting, but also McKinsey & Co, (Copeland et al., 2000) propose to use Porter's Five Forces Model as a means to develop the strategic perspective. Copeland et al. furthermore denote the customer segmentation analysis, the competitive business system analysis and the Coyne/Subramaniam Industry Model as useful analytical frameworks to underpin the strategic perspective. Another important element (Copeland et al., 2000) in the strategy development process of McKinsey & Co concerns scenario planning. Copeland et al. endorse that it is more appropriate to investigate different scenarios than to build only one most likely forecast.

Black et al. (1998) state that the adoption of shareholder value as standard creates a common framework. This framework provides better decision-making at all levels. The valuation of strategies does not only involve strategic thinking, based on the ideas of Porter and Hamel & Prahalad, but also incorporates financial consideration in the process.

4.3.8 Strategy deployment.

Increasing EVA is recommended (Stewart, 1999) as the overriding objective in the approach of Stern Stewart & Co and should therefore be considered as the basis for decision-making on every hierarchical level. Despite the need to standardize EVA when used on business unit level, the EVA financial management system provides a common language for everyone in the organization. Using this framework is supposed to minimize the subjective debates during the evaluation of alternative business strategies and financial structures. EVA value drivers (Young and O'Byrne, 2001) explain the creation or destruction of value and trace the sources back to individual financial and non-financial performance variables on corporate and business unit level.

Marakon Associates (Mc Taggart et al., 1994; Armour and Mankins, 2001) descry great benefits in a grounded appraisal of business units, combined with a chief executive who is engaged in the approval of the strategies on the various levels. They consider the corporate level of the organization as the challenger and the founder, whereas the business units are seen as the entrepreneurs. This explains the opinion of Mc Taggart et al. (Mc Taggart et al., 1994) that companies need two separate, but related planning processes: one on corporate and one on business unit level. Strategic planning then becomes a bottom-up process, supported (Armour and Mankins, 2001) by a clear decision-making authority and explicit accountability for financial performance. Detailed financial and strategic information is essential to determine opportunities and fulfil the requirements on business unit level, and forms the basis for developing and evaluating strategic options. This strategic assessment is said to be very helpful to obtain the best information on the sources and drivers for value. It allows business units to identify the strategic value drivers controllable for that specific business unit and in this way contributes directly to the consolidation on corporate level. Marakon Associates distinguish three components in the strategic analysis on business unit level. The strategic and the financial characterization of different products and customer segments are the first two components, whereas the major influences of these characterizations on the major sources and drivers of value creation and destruction, under the current strategy of those units, forms the third one.

Not only Marakon Associates, but also Koller (Koller, 1994) believes that a top-down command and control structure is not the most appropriate way for strategy deployment, certainly not in large multi-business organizations. This view is in line with the perception of Copeland et al. (Copeland et al., 2000) that top-level decision-making requires extensive understanding of the elements in the day-to-day operations of the organization. McKinsey & Co (Koller, 1994; Copeland et al., 2000) entitle those variables key value drivers and state that they are useful on generic, business unit and operational level. The following step in the strategy deployment process concerns the definition of the key performance indicators (KPIs), the related metrics for the value drivers. In order to put enough stress on profitable growth, Copeland et al. advise to combine the use of value drivers with a growth horizon analysis to make sure that the company has a balanced view of the potential sources of value creation.

Smith (Vol. XIV) distinguishes also problems in a top-down approach for the strategy deployment, but his concern focuses on the creation of ownership. He states that, without underestimating the importance of corporate ownership and the support of the CEO, objectives developed at corporate level can cause a lot of buy-in problems on the lower business unit levels. To overcome the various potential problems with conventional planning, he suggests selecting either The Intensive Strategy Analysis or the Issue-Driven Strategic Planning for strategic planning on business unit level. However, this does not mean that corporate planning is only useful at corporate level. Roads and Goulding (Vol. XVII) summarise the different roles of corporate planning by saying that it is first of all used to conduct corporate level planning. Furthermore it can facilitate SBU level planning and align business function plans. They continue by uttering that corporate planning has a unique position to increase the value of cross-business synergies, align SBU planning efforts and business function plans with corporate objectives. According to them, it depends on the level of diversity and centralization on the businesses whether the planning function is more an active participant or either a facilitator to business unit planning. They prefer planning on group level when potential synergies between business units can be exploited. Notwithstanding the fact that each level has different strategic tasks, it remains important that they are all linked by the one common objective to create shareholder value. The shareholder value network, created by Rappaport, occupies a prominent position in the shareholder value approach of L.E.K. Consulting. This network depicts the essential link between the corporate objective of creating shareholder value and the basic valuation parameters or value drivers. Rappaport distinguishes 7 value drivers in his network. Each of those value drivers contributes to one of the three valuation components - cash flow from operations, discount rate and debt - that, on their turn, influence the corporate objective. Three of the seven value drivers, sales growth, operating profit margin and income tax rate are influenced by the operating decisions of management. Working capital investment and fixed capital investment, two other value drivers, are governed by the investment decisions of management. The financing decisions of management influence the sixth value driver, cost of capital. The value growth duration is the seventh and last value driver in the shareholder value network and is according to Rappaport management's best estimate of the number of years that investments can be expected to yield rates of return higher than the cost of capital. The Key value driver analysis, sometimes referred to as the value driver mapping process is furthermore recommended for the identification of the corresponding value drivers on the diverse organizational levels. (Rappaport, 1998; Schor, Vol. I)

Since PwC (Black et al., 1998) subscribes the vision that the different hierarchical levels make different kinds of decisions, it is not surprising that they stress the need to make everybody aware of the VBM-principles, with a focus on the maximization of shareholder value. The strategic matters, like market selection, are questions for the chairman, the CEO and the CFO. Capital expenditure and investment questions need to be addressed in the strategic business units. Finally, detailed planning and budgeting are concerns on operating unit level. Targets are deployed in a top-down mode. After the global target setting, based on the corporate analysis and the share price objectives, it is suggested to translate those targets in more localised and achievable goals on the operating level. Consequently the impacts of those operational targets on generic financial value drivers on the common planning platform are assessed. The final step is the determination of a clear link between the operational drivers, measured by business-specific measures and the financial value drivers.

Madden (Madden, 1999) refers to the advantages of the CFROI valuation map within the strategy development framework. This map allows identifying and locating the major value determinants and is primarily useful at corporate level. Managers at lower organizational levels are challenged to translate the accounting-based tools that help to improve business processes that drive these accounting results.

4.3.9 Preferred metrics.

As mentioned above, there is a wide range of measures available to establish the value of organizations or determine whether or not an organizational unit has contributed to the overall value-maximizing objective. Our research reveals that each of the considered professional service firms more or less has a tendency towards using specific value-based measures.

Stern Stewart & Co suggest combining the use of EVA and MVA. Stern et al., but also Young and O'Byrne (Stern et al., 2001; Young and O'Byrne, 2001) define the first measure as the prime indicator of shareholder value. This results, according to the firm, in an excellent measurement system, since it is not only very useful at corporate ranks but can be broken down to whatever level: the level of a division, a factory, a store or even a product line. The successful deployment of the EVA measure in the organization depends on three factors; (Stern et al., 2001) the commitment of the chief executive to support the use of EVA at lower levels in the company, the link with an incentive program and the degree to which measurement makes sense at the various levels. Ehrbar (1998) completes the list of alleged advantages with three other benefits. The first refers to the fact that EVA makes managers aware of the cost of capital and encourages them to reject investments with returns lower than the cost of capital. Subsequently Ehrbar also mentions the adjustments to conventional accounting as a benefit. The third advantage is the direct link of EVA with MVA. (Stewart, 1999)

SVA is, in the approach of L.E.K. Consulting, defined as the ultimate measure, not only at corporate level but also at operating level. Two other measures, viz. the change in EVA and the change in residual income bore the test as excellent alternatives. Although Rappaport (Rappaport, 1998; Vol. V) admits that only the multiplication with the cost of capital is the differentiating factor between SVA and the change in residual income or EVA, SVA stays for him the best estimate of change in value. (Roads and Roath, Vol. X) Only the difference in gaining acceptance and thus increasing the chances of successful implementation is, for him, an overriding factor to select the change in residual income or the change in EVA instead of SVA. However, the people of L.E.K. Consulting realize that these measures are not specific and accountable enough for operating management and therefore recommend companies to focus on the key value drivers at the corresponding operating levels. Those value drivers, at a specific operating level, have 2 characteristics. They are, first of all, those factors that have a significant value impact on that operating level and thus on the creation of value at corporate level. And second, those value drivers are controllable factors at the corresponding operating level. (Rappaport, 1998; Schor, Vol. I)

The preferred measures of Marakon Associates (Mc Taggart et al., 1994; Mc Taggart and Gillis, 1998) are equity spread, employed at company level and economic profit, not only applicable at corporate level, but also at business unit level, the level of a customer or a product. The fact that economic profit is a single monetary measure, easy to link to value creation and that it is an easy measure to understand for non-financial managers, are the two major advantages of economic profit cited by McTaggart et al. (Mc Taggart et al., 1994)

McKinsey & Co (Copeland et al., 2000) advise the economic profit model and the enterprise DCF model as frameworks to evaluate businesses and understand the drivers of value creation. The economic profit model is a single period metric, where the enterprise DCF model is defined as a CFROI-metric and valid for multi-business companies. Madden (Madden, 1999) focuses primarily on the measurement on corporate level, based on CFROI.

Finally, Black et al. (1998) foremost draw the attention to the assumption that all metrics are based on a common economic foundation. They agree however that each of the metrics can play a significant role in the value creation process. The business unit and corporate performance are best captured with the economic profit-metric. The CFROI-metric is suggested to evaluate the long-term strategy and the resource allocation. PwC, finally, advise using the free cash flow model to study the link between the strategic and operational objectives on the one hand and the goal of maximizing value on the other hand.

4.3.10 Investment decisions and resource allocation.

Closely related to the strategy development process is the matter of investment decision and resource allocation. It is therefore not surprising that none of the consultants avoid this topic during their description of the proposed strategy development process. In their analysis of the strategy development and strategy deployment process Stern Stewart & Co (Stewart, 1999; Ehrbar, 1998) mainly focus on EVA for decision-making and resource allocation. EVA is seen as the ideal instrument to create a common language and to avoid endless subjective discussions, based on the use of vague investment and resource allocation decision criteria. Comparing the EVA-results of alternative strategies is assumed to give managers the chance to identify the under performing variables and to look for improvements.

The policy of Marakon Associates (Mc Taggart et al., 1994) with regard to investments is based on the idea that capital resources are allocated to business units and not between them. Every business unit can obtain as much capital as needed, provided that the proposed strategies contribute to the corporate governing objective. The people of Marakon Associates establish four principles for resource allocation. The zero-based idea of resource allocation is the first principle. The second principle deals with the fact that management should fund strategies instead of projects. Zero-tolerance in case of non-productive resource usage and the assumption that there is no capital rationing, materialize the last 2 principles. Marakon Associates and PwC (Black et al., 1998) equally stress the need to execute only those investment decisions that are in harmony with the corporate strategy and the objective of shareholder maximization. Since these decisions are made on strategic business unit level, they emphasize again that a thorough understanding of the value creating elements is indispensable.

McKinsey & Co (Copeland et al., 2000) suggest 2 techniques for the valuation of investment decisions, viz. the traditional DCF methods and real options. They remark that the second valuation technique is preferable in situations with significant future flexibility.

The approach of L.E.K. Consulting concerning investment decisions and resource allocation integrates the main ideas of Marakon Associates, PwC and McKinsey & Co. The idea that operating managers need to assess the value creation potential of alternative strategies forms the prerequisite in this approach. Rappaport (1987; 1990) uses in several of his publications the statement of Marakon Associates that managers should invest in strategies and not in projects. Although the partners of L.E.K. Consulting are aware of the distinction between the corporate return and the shareholder return, they underline the importance of corporate return in the decision making process. Although L.E.K. Consulting notifies that it is key that the return on investments exceeds the cost of capital, they do not underestimate the importance of a return that exceeds the expectations of the shareholders, since they are convinced of the positive effects of an effective hurdle rate on management behavior. As a result, they support the establishment of a hurdle rate that takes into consideration the market expectations as well. (Rappaport, 1999) As described earlier, the market signals analysis is for them the most apt instrument to get some insight in the market expectations. Concerning the metrics, they share the opinion of McKinsey & Co when they express the importance of combining the standard DCF valuation with the most suitable real option approach. Another important point in their ideas on investment decisions and resource allocation is the recommendation to use not one company wide hurdle rate, but to link the hurdle rate with the specific characteristics of an investment.

The CFROI-model of HOLT Value Associates (Madden, 1999) is according to Madden a workable method for investment decisions since the Net Cash Return is separated in 2 parts, of which the first one is related to the existing assets and the second one refers to future investments. This approach gives decision-makers the chance to check on the value of future investments and allows them to make better resource allocation and investment decisions. The availability of the long-term series of CFROI's, together with a relative Wealth Index, gives managers the chance to make more accurate predictions of the returns on new investments.

4.3.11 Mergers & acquisitions.

Since the mergers & acquisitions issue can be considered as a specific kind of investment decisions, it is not surprising that the proposed approaches of the financial planning/ consulting firms towards this issue bear likeness with their ideas on investment decisions. Stern Stewart & Co and HOLT Value Associates call attention to their earlier described metrics-model. The EVA-framework (Stewart, 1999; Stern et al., 2001; Ehrbar, 1998) is again put forward by the people of Stern Stewart & Co. Ehrbar illustrates the fact that EVA is a powerful tool for strategic planning and decision-making with the example of an acquisition candidate. He describes how managers can value an acquisition candidate by evaluation of the contribution of this potential acquisition to EVA. Stern et al. endorse the perception of Ehrbar, but remark that an EVA-analysis does not take into account the non-financial implications of an acquisition. This shortcoming can be set off if the decision-makers consider also the strategic implications of the potential acquisitions. G. Bennett Stewart suggests using the value-driver model for the valuation of the acquisitions benefits. HOLT Value Associates (Madden, 1999) accentuates that their CFROI-model is suitable for every valuation issue, in which accuracy is essential. It is thus not surprising that they mention this model as the most suitable for acquisition pricing.

Marakon Associates (Mc Taggart et al., 1994) encourage companies to develop their own acquisition strategy. This strategy will guide management in their search for acquisition candidates who seem more valuable for their own shareholders than for the shareholders of the seller.

Copeland et al. (Copeland et al., 2000) have learned by experience to be careful with acquisitions, as they noticed that numerous corporate acquisitions had a negative influence on the acquiring shareholders. They developed a disciplined acquisition plan, based on the results of their research on the most common failures in acquisitions and the factors guaranteeing successful acquisitions. The disciplined acquisition plan consists of 5 steps; the first is a pre-acquisition phase, in which their own company and the industries are examined. This step is followed by the identification and screening of possible candidates. The assessment of high potential candidates forms the third step. After the negotiation and contract phase, the process ends with a carefully planned post-merger integration.

There are quite a lot of analogies between the ideas of McKinsey & Co and L.E.K. Consulting concerning mergers & acquisitions. In his article in Harvard Business Review in 1979, Rappaport drew already attention to the advantages of using a market signals analysis. He made a distinction between three phases in the process of analyzing acquisitions, viz. planning, search & screen and financial evaluation. The importance of a well-defined acquisition process was again emphasised in more recent publications of Rappaport himself and several other partners of L.E.K. Consulting (Rappaport, 1987; 1990; 1998; Kozin, Vol III) In "Creating Shareholder Value", Rappaport extended the three earlier mentioned stages with two additional ones. These stages are quite similar with those recognized by McKinsey. According to Rappaport (1998), one should start with a competitive analysis followed by a search & screen phase. After these steps, management should have a look at some strategy development issues completed with a financial evaluation, to conclude with the negotiating phase. Since mergers and acquisitions are seen as a specific sort of investment decisions by L.E.K. Consulting, just like most of the others, it is not surprising that they advice to take into account the earlier described recommendations.

Not only McKinsey & Co. and L.E.K. Consulting, but also PwC (Black et al., 1998) advise caution when acquisition-options are evaluated. This explains why they developed a framework for best practice in acquisitions. The link to shareholder value is the leitmotiv throughout their framework, defined as a simplified transaction map. This transaction map can be subdivided into 3 main groups: the determination of the initial value and the resources used, the detection of possible synergies, and the financial engineering aspect. The people of PwC are however aware of the restrictions of this structured approach, and therefore recommend using this transaction map in combination with common sense.

4.3.12 Influence on collaboration.

Closely related to the impact of value-based management on both external and internal communication, is the influence on collaboration. The famous statement by Stern Stewart & Co (Stewart, 1999): "Making managers into owners" immediately indicates their tendency in thinking towards collaboration. EVA is not only viewed as a measurement instrument but is also an appropriate instrument to align the interests of managers and stakeholders and to encourage everyone to work together to realize the objectives of the shareholders. (Stern et al., 2001) Using the EVA financial management system (Ehrbar, 1998) and thus focusing on EVA as the only measure to pursue value, reduces conflicts and confusion in the organization and simplifies decision-making. EVA (Stern et al., 2001) guides not only lower organizational levels, it is also an important instrument for the steering committee, when discussing the way of organizing the collaboration, in order to consolidate the presupposed EVA-targets. Rappaport (1998) also stresses the creation of commonality. Implementing the L.E.K. Consulting shareholder value approach provides organizations with a rigorous and consistent analysis framework while everybody shares a common framework for analysis, a common goal and a common language.

McKinsey & Co (Copeland et al., 2000) is noticeably of one mind, since they also stress the alignment of business unit managers and employees with the priorities defined at corporate level. The process of defining value drivers is hereby mentioned as one of the greatest boosters of this alignment. Likewise, PwC (Read, 1997) make notion of this positive influence on the creation of alignment in the company. Read refers to the importance of thoroughly explaining the principles of maximizing shareholder value throughout the organization. This process gives middle managers the opportunity to make frontline managers aware of the corporate strategy and implementation.

Armour and Mankins of Marakon Associates (Armour and Mankins, 2001) emphasize the need of a specific mindset, based on financial performance combined with clear decision-making guidelines. The latter is thought to be the best sign that companies are developing a “managing for value” culture. HOLT Value Associates (Madden, 1999) sees its CFROI-model as an instrument to create a common language in the communication about performance and valuation. But they are also convinced that the empirical feedback, provided by the model, constitutes the perfect basis for continuous improvement.

4.3.13 Performance management & target setting

4.3.13.1 Performance management.

Performance management and target setting transpire to be an important element in the value-based management process. The approaches of the six consultants concerning this topic are not univocal, but neither do they genuinely differ in our judgement. Mc Taggart et al. (Mc Taggart et al., 1994) subdivide the performance management process into three activities: target setting, monitoring performance, and responding to differences between budgeted and real results. They accentuate that, to maximize shareholder value, two principles of performance management should be fulfilled. First, it is essential to work with plan-driven targets. This means that top management only defines the overall strategic and financial goals and then asks the business units to achieve them. The second principle concerns the creation of process integrity, which means that performance contracts are crafted and honoured by both the chief executive and business unit. Marakon Associates take into account that every business unit should be unique when determining appropriate targets. Then again, the Marakon publicists remark that the financial measures for those targets should be set and monitored at general level.

For L.E.K. Consulting, performance management is built around the idea of developing an organization wide "owner-oriented culture". Kenney (Vol. II), the vice president in L.E.K.'s Chicago Office, mentions a Three Step Process to create this "owner-oriented culture" in a successful way. Since he is convinced that companies need to adopt a performance measurement approach based on economic value measures, it is not surprising that the first step concentrates on 'overcoming the earning myopia'. Instead of evaluating revenue and earning growth measures, Kenney and his colleagues at L.E.K. Consulting recommend companies to consider measures of economic improvement. The second step, 'measure and reward long-term performance' is established to avoid dysfunctional behaviour of managers regarding the interests of shareholders. In the opinion of this strategic and financial adviser, the creation of an ownership culture can only be successful when management is exposed to the long-term risks and rewards of ownership, which immediately explains the third and final step, 'convey risks and rewards of ownership'. As stated above, the ultimate goal of creating shareholder return is too aggregated to use at lower organizational levels. Rappaport (1998) therefore appeals to the performance measurement hierarchy, where he distinguishes total shareholder return as the preferred measure at corporate level. At operating unit level, he refers to SVA and leading indicators for the corresponding operating level. And last but not least, the specific key value drivers defined as the most appropriate measures on the lower organizational levels. To facilitate the identification of the most accurate value drivers, Shor (Vol. I) describes a three-step process. The development of the value driver map of the corresponding business forms thereby the first step, while the value driver sensitivities are tested in the second step. The third and last step concerns the test for controllability.

The performance management system advised by McKinsey & Co (Copeland et al., 2000) also consists of three elements. The first building block relates to the availability of a clearly defined value-creating strategy for business units. The importance of alignment between the targets and the specific value drivers on business unit level arises the second component. The structured performance reviews during which the results are discussed in relation to the KPI's are the third factor. Those KPIs or operating value drivers are, as mentioned above, useful at generic, business unit and front line level. McKinsey’s spokespersons additionally refer to comparable key principles like those of Marakon Associates. The first principle of McKinsey & Co states that performance measurement needs to be tailor-made for the corresponding level. The second principle refers to combination of short- and long-term targets, while the third one mentions the necessity of combining operational and financial performance measures. With regard to the fourth principle, Copeland et al. advise organizations to look for leading performance indicators. Clear objectives moreover, suppose to have a motivational impact to achieve them and save time and effort for managers. Copeland et al. hereby refer to the ideal situation, where custom-tailored scorecards are cascaded down in each business and every manager monitors those key value drivers that are important for him or her.

Target setting (Black et al., 1998) is mentioned as the first element in the performance management process of PwC, since they stress the importance of determining those targets, based on share prices goals, after the explanation of the corporate analysis. The next step consists of linking those goals with the value drivers on the lower levels, where they argue that relevant value-focused measures are indispensable. To solve the problem of seeing the relation between the 7 value drivers and the day-to day business of the company, PwC suggests using micro drivers and hereby refers to the vision of Copeland. The 7 value drivers mentioned by PwC are the same as those of Rappaport, notwithstanding the fact that PwC defines one of the value drivers, viz. value growth duration, as the competitive advantage period. After all, both value drivers are defined as the period of time a company has a positive net present value when discounted at the WACC. Economic business modelling can be very helpful in this process. Finally, they stress understanding and agreement on the value chain as a vital element.

Stern Stewart & Co (Stewart, 1999) refer, just like McKinsey & Co and PwC, to the shareholder value network of Rappaport. Increasing EVA, internalized through cross-functional teams, remains however the paramount objective in the performance management system of Stern Stewart & Co. G. Bennett Stewart detects six essential factors that influence the intrinsic value of the unit of analysis, also defined as EVA-drivers. This value driver model is not only applicable on corporate level, but also on business unit level and it can even be used for acquisition candidates. Management can, through policies and performance, influence four of those factors. The other two essential factors can only be affected by the market. The practical limitations of this value driver model, as the assumption of steady growth and steady returns from normalized values, explain why this model is only used to communicate the fundamentals of valuation in the organization. Stern Stewart & Co therefore advise to make use of the free cash flow model and the EVA valuation approach instead of the value driver model.

Madden (Madden, 1999) opposes the idea of a scorecard based on accounting and non-accounting variables. He tends to focus more on the learning process of internal performance measurement, due to the complex issues of the firm’s internal performance measurement.

4.3.13.2 Target setting.

Companies implementing value-based management counseled by Stern Stewart & Co (Ehrbar, 1998) are recommended to use the EVA goals in their target setting process. Those EVA goals are considered as an excellent way to determine stretch targets, in which the EVA driver analysis is seen as the instrument to evaluate the proposed plans for achieving those goals. The partners of Marakon Associates (Mc Taggart et al., 1994; Mc Taggart and Gilllis, 1998; Kissell, Vol. IV; Kontes, Vol. IV) are convinced of the added value of plan-driven target setting. Overloading business units with targets does not fit with their vision. Kissell recognizes that determining a single overarching performance standard combined with tailored goals and targets ought to be the best guarantee for successful target setting. Allowing business units to detect the most appropriate strategic alternatives in line with the proposed targets of economic growth is viewed as the most effective way to select those strategies that maximize economic profit over time.

McKinsey & Co advocate (Copeland et al., 2000), in contradiction with Marakon Associates and Stern Stewart & Co, an iterative target setting process. The McKinsey professionals view negotiation between the various organizational levels as a valuable instrument for managers to gain expertise about the internal processes. This process has furthermore an alleged constructive influence on the creation of internal commitment to achieve those targets.

Shareholder value maximization forms not only the basis of the overall PwC-performance management process (Black et al., 1998), it subsequently plays also a leading role in its target setting process. Black et al. state that these targets should be based on share price goals. Global targets need to be translated into targets on the lower organizational levels, more specifically the operational levels. The idea of translating the goals at higher levels, to more local targets is also supported by HOLT Value Associates and L.E.K. Consulting. (Madden, 1999; Kenney, Vol. IX) Where HOLT Value Associates start from the CFROI goals, shareholder return is the midpoint in the approach of L.E.K. Consulting. Since generating shareholder return is synonym with exceeding market expectations in the approach of the latter, it is vital for management to incorporate those expectations in the target setting process. (Rappaport, 1998) At the lower organizational levels, viz. the operating level and the front line level, the performance measurement hierarchy forms the point of departure. The targets are set against the value drivers of the various levels and businesses, without overlooking the relevant expectations of the market on those corresponding organizational levels. Rappaport (1998) enumerates four sources of information to develop those "market" expectations at business unit level, viz. the business unit's operating plan, the unit's historical performance, competitive performance of value drivers and market expectations for the whole company.

4.3.14 Reward system.

It is not unexpected that all of the six mentioned VBM-implementers give extensive attention to the rewarding issue, since the importance of the rewarding system on the behavior of people is largely accepted. Our analysis and comparison of the different approaches is subdivided into 3 paragraphs. The first section concentrates on the comparison of the different visions on the basis for rewarding, whereas the second focuses on the analysis of some general elements in the proposed compensation plan. The third and last paragraph deals with the key elements in each of their methodologies.

4.3.14.1 Basis for rewarding.

Notwithstanding the fact that the basis for rewarding is viewed as a fundamental issue in the remuneration policy, there are some material differences between the various consultants. Stern Stewart & Co (Stewart, 1999; Ehrbar, 1998), Marakon Associates (Mc Taggart et al., 1994; Armour and Mankins, 2001) and PwC (Black et al., 1998) subscribe the idea of linking rewarding with the realized value creation. This is in contrast with McKinsey & Co, where the rewarding is based on the number of executed value creation activities. Madden (Madden, 1999) suggests to link the compensation not to the extent of realized value creation, but on an empirical comparison. The idea of the advisors of L.E.K. Consulting, to reward incentives on superior performance, defined as performance that equals or excels the performance of the company's peer group or market indexes, bears more resemblance to the rewarding policies of HOLT Value Associates, than to the other financial planning providers. (Rappaport, 1999; Kenney, Vol. II)

4.3.14.2 General elements of the compensation scheme.

The people of Stern Stewart & Co (Stewart, 1999) are utterly swayed by the idea of making managers into owners by means of a specific rewarding system. This viewpoint explains immediately why Stewart & Co keep harping on the idea that the company’s plans should be designed in such a way, that they expose executives and shareholders to the same risk. (Stern et al., 2001) The rewarding system proposed by Stern Stewart & Co starts with rewarding top management and is gradually extended towards the organizational levels. Despite the statement that EVA incentives work at all levels (Stern et al., 2001) on condition that the evaluation and rewarding is based exclusively on factors that can be influenced, the use of this incentive scheme at shop floor level is rather exceptional. Union resistance and the inability to understand the link between the proposed EVA incentives and the day-to day performance are the most cited reasons to exclude blue-collar workers from bonuses based on EVA. Even G. Bennett Stewart suggests limiting the rewarding component of the EVA Financial Management System to the management level, certainly in the first phases of its implementation. Marakon Associates (Mc Taggart et al., 1994) agree with Stern Stewart & Co and more in particular with the opinion of G. Bennett Stewart, since Marakon also focus on rewarding top management. Top management is here defined as the chief executive, the general managers of the business units and the most important shared-resources units together with all their direct reports. Mc Taggart views the alignment between top management and the governing objective as vital to support the further internal changes.

In spite of the fact that both consulting firms support the idea of deploying the rewarding policy throughout the organization, it appears as if they suggest concentrating on top levels first. This idea is in contrast with the perception of McKinsey & Co (Copeland et al., 2000) and PwC (Black et al., 1998), since these consulting firms advocate that rewarding systems should be fully implemented in the organization. The consultants of HOLT Value Associates are more prudent and (Madden, 1999) adhere to the idea of David Walker, the VP-finance at Procter & Gamble, who suggests waiting some time before linking the reward system to the outcome of the CFROI-model. He is convinced that it is advisable to get some experience with the CFROI-model, before evaluating and rewarding people based on those results. Rappaport (1998) shares in a certain way the opinion of Madden with regard to the introduction of new performance and incentive systems with the overall implementation of value-based management. Since Rappaport is aware of the fact that a premature introduction of performance measures can seriously compromise the entire shareholder value program, he suggests to wait with this link until management fully understands and accepts the measures that it is held accountable for. Smith, one of the partners in L.E.K.'s London Office, specifies their vision by explaining how valuable it is to gradually introduce those value-based incentives. (Smith, Vol. XIV) He is a strong advocate of starting with incentives that only track the most important performance indicators, since this will provide encouragement to achieve the collective goals in the overall mix of compensation.

On the other hand, there are more similarities with the viewpoint of Stern Stewart & Co and Marakon Associates, than with the opinion of HOLT Value Associates. The partners of L.E.K. Consulting, just like Stern Stewart & Co, underline the importance of putting executives at the same risks as shareholders. Kenney (Vol. II) draws attention to this when he lists the steps to create an "ownership-oriented culture". Another parallel between Stern Stewart & Co, Marakon Associates and L.E.K. Consulting is situated at the rewarding level. The advisors of Stern Stewart & Co and L.E.K. Consulting, both want to extend the reward system to all organizational levels, based on one overall performance goal; EVA in the approach of Stern Stewart & Co and shareholder return in the shareholder value approach of L.E.K. Consulting. And although both authorities are convinced that their suggested evaluation measure is applicable at all organizational levels, they are aware that those measures can be viewed as too aggregate and they therefore both suggest translating them into controllable value drivers on the corresponding levels.

4.3.14.3 Key elements in the rewarding policy

As mentioned above, each of the consulting firms, with exception of HOLT Value Associates, has developed a complete rewarding methodology, each with its own distinguishing features. Stern Stewart & Co is renowned for its bonus bank concept (Stern et al., 2001; Stern, 1999; Young and O'Byrne, 2001). Stern Stewart & Co consider their system the best alternative for putting managers at the same risk as the company-owners. One of the most important advantages of this system lies in the fact that the horizons of managers are stretched from short-term to longer term, since the exceptional part of the remuneration is banked forward, while the other, normal, component is paid out. Part of this exceptional bonus will then be distributed in the following years, depending on the results. There are 2 popular versions of the bonus bank, viz. the "threshold" and the "all-in" bank. The bonus bank-idea is characterized by uncapped or unlimited bonuses, in either positive or negative way, and the EVA-targets are determined by a formula instead of negotiations. It is important to be aware of the fact that negative bonuses are possible in this system. Despite the fact that the bonuses of everyone in the organization are best tied to improvements in EVA (Stern et al., 2001; Stewart, 1999; Young and O'Byrne, 2001), the

EVA-plan is preferably based on the results of the corresponding organizational level. This implies that the evaluation of top-level executives is based on the performance of the entire company, where the rewarding of managers is related to the performance of the corresponding unit or division. To encourage co-operation between various divisions, Stern Stewart & Co suggest splitting the compensation of chief divisional executives. Part of their compensation is then based on the corporate results, where the other part is founded on the divisional results. Stern et al. accentuate that specific "value drivers", as capital and equipment efficiency, are best incorporated when the EVA-plan is extended to the shop floor level. Stern Stewart & Co advise to extend the rewarding of top management with an additional incentive plan, based on leveraged stock options. It looks as if the rewarding policy of Stern Stewart & Co is exclusively based on financial determinants, but this is not true. Despite its emphasis on cash rewarding and other financial incentives (Stewart, 1999), Stewart recognize the impact of internal rewarding and subscribe the idea that the feeling of "ownership" is first of all a matter of attitude. Pride, sensible risk-taking and the acceptation of responsibility are necessary conditions to make managers into owners.

The impact of strategy is not only vital in the performance management process of Marakon Associates (Mc Taggart et al., 1994), but also plays a significant role in its rewarding methodology. Marakon Associates state that financial rewards need to be the result of the development of the most appropriate strategies. Mc Taggart et al. refer to the performance management process in which business unit managers sign a (performance) contract with the chief executive and engage themselves to fulfil the agreements. As mentioned above, this is, according to Marakon Associates, the best guarantee to align the business unit strategies with the corporate governing objective of maximizing shareholder value. This illustrates the suggestion of Mc Taggart et al. to use the performance contracts as the basis for the evaluation of general and business unit managers. The consultants of Marakon Associates share the opinion of Stern Stewart & Co in relation to the rewarding basis. Marakon Associates advise to use corporate results as point of reference for the compensation of top management. Compensation is preferably based on the performance on some internal financial indicators, applied to all organizational levels, combined with the results of the company's total shareholder returns, in comparison with similar companies. The financial and strategic targets on business unit level, resulting from the strategy development process, should be employed for evaluating business unit level performance.

"Relative pay for relative performance" is the credo of Marakon Associates. This implies that the compensation depends on their own performance compared with the results in similar companies. Another similarity in the approaches of Stern Stewart & Co (Stern et al., 2001) and Marakon Associates (Mc Taggart et al., 1994) lies in the fact that both suggest using single-year or single period-by period performance measures for the compensation. However, the two consultants do not share the same idea about the payout policy. The partners of Marakon Associates are not convinced of the advantages of the bonus bank system, since they prefer to disburse the complete bonus in cash. They state that the uncertainty about future bonuses should be limited to whether the targets will be achieved in the coming years. They consider stock options as a good alternative, but only in small or start-up companies. They furthermore subscribe, just like Stern Stewart & Co, that companies should support their managers to choose stock instead of cash.

McKinsey & Co (Copeland et al., 2000; Koller, 1994) stress the idea of linking the behavior and performance of individuals with value creating activities and rewarding. One of the most important elements in its approach is the establishment of challenging targets, which implies that the proposed targets are higher than the median in comparable companies. So far McKinsey can be considered to be on the same wavelength as Marakon. A distinguishing feature in their approach is the emphasis on the importance of differentiation in rewarding. They are convinced that, in particular for high performing executives, the differentiation in rewarding is much more important than the total pay. This idea is closely linked with their emphasis on the advantages of visualizing the realized performance.

The approach of McKinsey & Co shows, despite the differences, also more general similarities with the approaches of the previously described consultants. The partners of McKinsey & Co also subscribe the idea of linking the rewards with the performance of the corresponding organizational levels. They suggest linking the evaluation of individuals to the controllable KPIs for which they are responsible, in order to guarantee alignment between the targets on business unit level and the actions of individuals. The return to shareholders and economic profit are mentioned as appropriate measures for the evaluation of the CEO and the corporate staff. Business managers can be evaluated on the economic profit metric and the EBIT-

Capital utilisation. The last metric, combined with individual operating value drivers is suitable for the performance evaluation of functional managers. These individual operating value drivers are furthermore appropriate for the evaluation of the corporate staff and all other employees. McKinsey & Co hereby mention the requirement of frequent performance reviews. Another resemblance between the previously mentioned consultants is the idea that short-term targets are best linked with long-term ones. McKinsey & Co (Koller, 1994) and Stern Stewart & Co share moreover a comparable vision on the necessary elements in the reward package, since they are also convinced that monetary rewarding is only one element to motivate people. They recognize the importance of financial incentives and even subscribe the aversion for bonus caps, but advise companies to combine these financial incentives with career-opportunities and the creation of a culture, based on values and beliefs where people feel satisfied about their way of working.

The rewarding methodology of PwC (Black et al., 1998) shows numerous similarities with the previously described methodologies. The partners of Marakon Associates have already mentioned the importance of strategy in the rewarding system and yet again turn up in the rewarding policy of PwC. They stress the fact that the compensation system needs to be in line with the strategy. They share with Stern Stewart & Co the idea of long-term incentive plans. Economic performance, creating the groundwork for rewarding as mentioned in the approach of Stern Stewart & Co and Marakon Associates is here once more valid. Since PwC believe as do the 3 other consultants, that no one measure is suitable for all hierarchical levels, they suggest using different performance measures for different levels. These measures need to be controllable on the corresponding level and a combination of key macro and operating value drivers is preferred. One of the distinguishing characteristics in the approach of PwC is the use of timeframes with different lengths for different hierarchical levels, which means that incentives on a higher level are coupled to performance over a longer period of time.

Since exceeding the treshold standard for superior performance forms the basis of the VBM system of L.E.K. Consulting, it is not surprising that the SVA measure is determined as the benchmark in their reward system. (Roads and Roath, Vol. X)

Before dealing with the distinguishing features of L.E.K's rewarding methodology, we first deal with the analogies vis-à-vis the earlier described methodologies. Several partners of this consulting firm explicitly agree on the importance of consistency between short & long-term performance measures. The rewarding basis hierarchy consists of 2 aspects, viz. the performance measurement hierarchy and the determination of most appropriate goals on the corresponding echelons. Total shareholder return, suggested at corporate level is translated to SVA and other leading indicators of value for the operating managers. Those measures are on their turn translated to specific key value drivers at the lowest organizational levels. (Rappaport, 1998; 1999; Rhoads and Roath, Vol. X) To determine treshold standards on the various levels, Rappaport (1987; 1998) suggest using the market expectations analysis, an approach that completely fits with his 'pay for performance' vision. (Rappaport, 1999) The goals for the CEO and the corporate level executives will be based on exceeding a peer or the market index. The operating unit managers have the task to exceed the market expectations. Last but not least the operating unit employees, their goals will be based on the achievement of key value driver results. (Rappaport, 1998; 1999; Rhoads and Roath, Vol. X)

Kenney and the other advisors of L.E.K. Consulting (Kenney, Vol. II; Rappaport and Mauboussin, Vol. XVIII; Rappaport, 1998; 1999; Rhoads and Roath, Vol. X) clearly support the rewarding policy developed by Stern Stewart & Co as the bonus bank. First of all they defend the idea that incentives should be matched with the levers that can be influenced by the individual. Furthermore they agree on a rolling year performance period of three-to-five years and do not have any objections regarding the non-existence of caps or maximum (minimum) bonuses. Similar to the New-York-based financial planning advisor, L.E.K. Consulting argue that a three-to-five year performance period counters the problem of dysfunctional behavior, certainly in bad years and thus is a much more accurate solution than reducing the treshold performance targets in such a years. (Rappaport, 1998) Notwithstanding the fact their awareness of the limitations of rewarding people with stock options for the operating executives and the other employees deeper down in the organization, they do stress that stock options are very suitable as performance measure for the highest organizational level. (Rappaport, 1998)

The major distinction in the approach of the advisors of L.E.K. Consulting situates on their ideas about employee remuneration based on indexed options. (Rappaport and Mauboussin, Vol.XVIII) (Rhoads and Roath, Vol. X) In this way they want to avoid paying for suboptimal performance. An indexed option is based on the premise that the strike price of the option is indexed to a peer group average, also defined as the average of their competitors, or a market index. In the end, the choice between those two is much less important than the switch to establish such an index. (Rappaport, 1998; 1999) Various partners of L.E.K. Consulting mention advantages like being a fair measure and aligning the interests of managers with those of the shareholders. (Rappaport, 1999; Roads and Roath, Vol. X) They know however that it will be difficult to get those ideas accepted within the company and therefore recommend that those indexed options packages should be structured so that exceptional performers can earn greater returns than they could with conventional options. Therefore, two stimuli are best incorporated into the packages. Companies should first augment the number of options they grant to executives. And second, Rappaport advises to work with discounted indexed options, witch are options characterized by a lower exercise price (Rappaport, 1999)

4.3.15 Training & education

Extensive research on the key elements in the value-based management approach has revealed that changes in the mindset of the individuals and in the mindset and culture of the entire company are manifest and probably necessary for a successful VBM-implementation. It is therefore not surprising that all consulting firms, with exception of HOLT Value Associates, have developed their own training and education program to support the implementation and adoption of value-based management thinking.

The professionals of Stern Stewart & Co (Stern et al., 2001; Young and O'Byrne, 2001) are aware of the need to change the mindset of everyone in the organization. They make a clear distinction between the formal training, at the beginning of the VBM process, and the continuous communication after the implementation of the EVA-framework. The top-down training, in which all employees of whatever organizational level learn the basics of EVA, is typical. Stern et al. mention 2 training approaches. EVA becomes part of the strategic overhaul of the entire company in the first approach, whereas there is no strategic refocusing in the second approach. They furthermore stress that companies should continue the communication about EVA with the entire workforce after the training phase.

The partners of Marakon Associates (Kissell, Vol. IV; Mc Taggart et al., 1994) are on the same wavelength as the people of Stern Stewart & Co. Kissell is convinced that top management needs to take responsibility for continuous reinforcement of the VBM-ideas through their communication and decisions. The similarity with the idea of Stern Stewart & Co is clear, both choose top-down communication and both stress the importance of continuous communication. The focus in the content of their communication differs however. While Stern Stewart & Co tries to explain the EVA-concept throughout the organization, Mc Taggart et al. are more concerned about making everybody aware of the governing objective. Business unit managers need to understand that they have to concentrate on those strategies that maximize the governing objective.

Not only Marakon Associates and Stern Stewart & Co but also the professionals of L.E.K. Consulting acknowledge the importance of reinforcing the VBM ideas through education & training. Both Rappaport and Smith stress the importance of continuous communication. (Rappaport, Vol. V; Smith, Vol. XIV) Rappaport states that shareholder value is typically implemented in three broad phases. The first phase focuses on senior management, since it is first of all important that senior management is convinced of a genuine need for change. When senior management is won over, the appropriate details of change must be defined and properly introduced in the second phase. Subsequently, in the third phase, it is important to reinforce change to ensure that it is sustained. Smith also emphasises the need of persistent communication on all organizational levels. He suggests thereby tailor-made education and value enhancement workshops, because these are seen as helpful tools to demonstrate how the daily decisions of every individual, independent of the organizational level, influence the shareholder value. Education occupies a prominent position in the shareholder value approach of this advisor in financial planning since they developed a shareholder value education agenda. (Rappaport, 1998) Without claiming that this agenda will meet the needs of every organization, they are however convinced that some of the topics are unbearable in almost all programs. Another distinguishing feature is the " train the trainers" approach. This approach is according to them not only the perfect answer for the shortage in teaching resources, but guarantees furthermore a broader acceptance of 'ownership' for the ideas of shareholder value.

McKinsey (Copeland et al., 2000; Koller, 1994) suggest starting with a survey, since they think of the difficulties of immediately focusing on changing beliefs and values. A survey can help to get an idea of the beliefs of people, and the results form the perfect basis to start a discussion and work all together on the creation of a new mindset. Despite their different way of working, they also want to reach the entire organization. The communication is, according to them, best focused on value creating issues.

The training & communication plan of PwC (Black et al., 1998; Read, 1997) does not differ much from the plans of Stern Stewart & Co and Marakon Associates. They all three share the preference for top-down communication. PwC here see an important role for the CEO and the CFO, and are aware of the impact of endorsement from top management. Another element in their plan is the education of the entire workforce with regard to the shareholder value theme. Black et al. believe that the introduction of shareholder value programs, build around the share price goal simplifies the communication and have a positive influence on motivation.

4.3.16 Facilitators for the implementation

A well-founded training & education plan will not be sufficient for a successful implementation of value-based management. All the consultants recommend therefore facilitators that support the implementation process. The establishment of a formal implementation team (Young and O'Byrne, 2001; Stern et al., 2001) is one of the recommendations of Stern Stewart & Co. The team consists of representatives from finance & accounting and planning & operations and they have the role to report their findings to the steering committee. The firm's executive or the management committee, together with senior management, the CFO, the CEO and the head of the human resources department, forms this committee. Those people are charged with the most important policy decisions and the design and structure of EVA. The CFO and CEO, have besides their role in the steering committee, another important task viz. communicating their commitment towards the EVA-framework within the company. The implementation team is, in addition, recommended to keep in touch with the consultants to ensure the transfer of knowledge and to anticipate problems.

The partners of Marakon Associates (Mc Taggart et al., 1994; Armour and Mankins, 2001) too, assign an important role to the CEO and top management. They are seen as the champions to drive the implementation and are the best guarantee for the establishment and the sustainability of value creation as a core competence. They expect the chief executive to be the visible leader of the VBM-process. Since this need to be his highest priority, he is expected to be totally committed to a successful implementation and well informed about all the VBM principles.

McKinsey & Co (Copeland et al., 2000; Koller, 1994) share the idea of Marakon Associates about the important role of the CEO and top management as catalysts in a value-based management company. But they think the support of top management will not be sufficient. They therefore recommend an extensive participation of the business unit managers in the value driver analysis, since this will not only increase the insight of those managers in their value-based thinking but also influence their feeling of ownership.

Black et al. (1998) mention the need of sponsorship by the CEO. But again this will not be enough and they therefore advice that senior management and the board of directors contribute to the sponsorship-commission of the CEO. The consultants of PwC advice furthermore to develop a value transformation program where a value transformation team, consisting of representatives of the major departments, will have a positive influence on the internal ownership and the internal communication regarding the shareholder value approach. This team can then be involved in the education of every hierarchical level in relation to measuring and managing economic value.

Senior commitment is, according to various partners of L.E.K. Consulting, defined as the single most important factor to implement the shareholder value approach successful throughout the company. The CEO, the board and management need to be convinced of the usefulness of implementing the shareholder value approach, before the implementation has any chance to succeed. (Rappaport, 1998; Roth, Vol. IV; Smith, Vol. XIV) Even though L.E.K. Consulting does not explicitly stress the importance of establishing an implementation team, they are however aware of several facilitating elements. The timing of the implementation, the suggestion to begin with a committed CFO and the advice to tailor for operating managers are only a couple of the mentioned facilitators that increase the commitment of top management and thus indirectly contribute in the company-wide development of the shareholder value approach. Another important issue is the trade-off between a full-scale implementation or the implementation on a less broader scale. The extent of diversification and centralisation together with the degree of commitment of the CEO are potential determining factors. It is strongly recommend to follow an evolutionary path in highly decentralised companies, active in several industries where the CEO is not totally committed. (Rappaport, 1998)

4.3.17 Benchmarking

The issue of benchmarking is closely related with value-based metrics. Stern Stewart & Co (Ehrbar, 1998) proposes EVA as basis for benchmarking. The accuracy of the market value can be tested by comparing the market value of the company with the sum of the EVA’s of the different plans. Not only corporate performance, but also internal performance is measurable with

EVA. After EVA is disaggregated, with the use of EVA drivers, it is easy to detect which business units, product lines, etc. are satisfactory and which are not.

Benchmarking at corporate level is in the opinion of Marakon Associates (Mc Taggart et al., 1998) best based on the comparison of key management processes like strategic planning, resource allocation and so on. This exercise might reveal some competitive advantages. Besides the comparison based on the key performance processes, more and more companies compare their corporate results with market averages and with peer companies. Benchmarking on business unit level is best based on the identification and comparison of strategic value drivers.

McKinsey & Co (Koller, 1994) recommends DCF, together with economic profit for benchmarking activities on business unit level. Since this consulting firm states that DCF is the best metric to evaluate the performance of a company, it is not surprising that this metric is also named as the best one on corporate level. Copeland et al. (Copeland et al., 2000) indicate here that economic profit and market value do not measure the same thing. The first one measures the realised value creation, while the second-one measures short- and long-term future value creation expectations.

To understand the ideas of PwC (Black et al., 1998; Read, 1997) about benchmarking, it is important to take into account that they define benchmarking in a broader way, since they extend the interpretation of competitors. Regarding the emphasis of Read on the significance of the cash flow performance, it is not surprising that this consulting firm suggests corporate benchmarking based on the cash flow performance with companies competing for the same investment funds. The performance of the company can also be analysed by the 7 value drivers. The value drivers, defined on business unit level are furthermore the ideal instruments to review the performance on that organizational level. The CFROI-model is according to HOLT Value Associates (Madden, 1999) applicable to compare the current performance with the historical results or to compare the own company performance with other, domestic and foreign companies.

The partners of L.E.K. Consulting combine some of the ideas of the previous mentioned consultants. (Roads and Roath, Vol. X; Rappaport, 1998; Smith, Vol. XIV) Roads and Roath define relative total shareholder return or the comparison of the company's total return with a group of peer leaders as the single best measure. The preference for this measure is based on the fact that it is free from accounting distortions and that it is not biased by market expectations or industry specific price movements. Since DCF is after all the foundation for shareholder thinking and since valuations derived from DCF take into account all of the characteristics from the true market value, it is not astonishing that DCF is referred to as the best proxy in the absence of a true current benchmark. (Smith, Vol. XIV) DCF is then not only applicable for benchmarking at corporate level, but it can also be used at lower organizational levels. The sources of information for target setting on lower organizational levels, as specified by Rappaport (cfr. supra), can probably reveal very constructive information for benchmarking on those levels. (Rappaport, 1998)

5 CONCLUSION

Value-based management can be defined as an integrated management control system that measures, encourages and supports the creation of net worth. It appears that value creation and the maximization of shareholder wealth is a very fashionable topic these days, in practice as well as in the academic field. A number of conceptual reasons indicate that increasing shareholder value does not conflict with the long-run interests of other stakeholders. On the contrary, value-based management systems are specifically acknowledged to reduce lack of goal congruence between the owners of the firm and its constituents. Moreover, as an integrated management approach, VBM is said to tackle most of the perceived inefficiencies of traditional management accounting measures and systems.

We have argued that the shareholder focus and the stakeholder theory could be reconciled. Despite the fact that the objectives of the shareholder and the other stakeholder groups not always converge, it is recognized that working together to realize the mission of the firm is the most efficient way to achieve some of their own objectives. Furthermore, the maximization of shareholder value doesn’t have to conflict with the stakeholder approach if the value-based management process within the organization is combined with socially responsible behavior.

The essence of value maximization is to invest in projects that will produce a rate of return, which is higher than the cost of capital. A value-based management system induces managers to maximize the economic worth of an organization by allocating its assets to their best use. Capital is not for free; a certain cost must be calculated in to use it. The reason for this is scarcity. If a company gets the opportunity to invest capital, another company is denied the chance to use it. Earning the cost of capital is not just a financial matter, it is merely the market mandate. On account of the residual income theory, VBM gives organizations a yardstick to distinguish good growth from bad growth.

We divided the value-based performance measures in two segments. If the value or the marginal change in the value of an organization can be measured by using the information on the stock market, we attribute the metric to the listed perspective. If the warranted value of the company is estimated indirectly using an alternative valuation model, we qualify the metric as containing to the not-listed perspective. We discussed a non-exhaustive collection of measures. It depends on the use and the specific business case whether residual income-type measures are preferred over discounted cash flow approaches or any other method of quantification. The same holds for single-period measures versus multi-period measures.

In the listed perspective we find total shareholder return and market value added. In order to determine both measures we rely on information from the capital markets. Total shareholder return is an appraisal of value creation or destruction based on incorporation of the overall rate of return of the investment without evaluating whether or not this return exceeds the cost of equity. Market value added is a cumulative formula that represents corporate performance. Apart from theoretical considerations, empirical research has revealed that MVA would be a more effective investment tool than other measures.

Evaluating not only the net worth of a company but also the value of business units and different product-market combinations requires metrics that not necessarily call for stock-market data. The not-listed perspective encompasses economic value added, equity spread approach, cash flow return on investment and shareholder value added.

EVA and its look-alikes are residual income-type metrics, which are being used by value-based management practitioners as measures of the excess value created by firms and managers. Economic value added is by far the number one metric in the popularity polls. EVA is regarded as a fairly simple but powerful yardstick both due to its hypothetical correspondence with market value added and due to its straightforward management objectives. Its popularity nevertheless should not conceal its shortcomings for example the ignorance for inflation or wrong periodization, the ambiguous empirical relation with MVA and so on.

The equity-spread approach is a return based single-period measure that uses the same variables as the market to book ratio, which is a well-known and broadly accepted yardstick among the financial community. Both Marakon Associates and HOLT Value Associates apply this Gordon-model based approach in their value-based management practice.

From a multi-period perspective we have selected two discounted cash flow based measures; cash flow return on investment and shareholder value added. CFROI is said to be very useful for valuation by both managers and security analysts of corporations. While it is a noteworthy metric from a conceptual point of view, CFROI is often depicted as a complex financial measure device. When cash flow return on investment, that gauges the internal rate of return of an entire company, is compared with its real cost of capital and then multiplied with the capital employed we calculate a residual income that Boston Consulting Group has branded cash value added. Shareholder value added has first been described by Alfred Rappaport who established a tremendous managerial step forward in the field of value-based management by breaking SVA down into a comprehensive model of seven key drivers of shareholder value.

From a conceptual point of view, we agree with Copeland et al. when they state that there is no perfect performance measure. Furthermore our review indicates that value-based management only by means of alignment and coherence of the organization's limited resources becomes a holistic, strategy oriented management technique that can produce a remarkable performance breakthrough. This paper concentrates on six consulting firms which developed frameworks that claim to bring value-based management to live; Stern Stewart & Co, Marakon Associates, McKinsey & Co, PriceWaterhouseCoopers, L.E.K. Consulting and HOLT Value Associates. Our comparison of the VBM systems from the selected consulting firms reveals some similarities between the approaches, but also demonstrates different accents and some clear distinctions.

With regard to management focus all six consulting firms call attention to the imperative of maximizing shareholder value as the principal performance objective. The same unanimity exists about the conviction that the interests of all stakeholder groups are best served when putting the shareholder first. There appears to be less consensus vis-à-vis the fundamentals for value creation; Marakon, Stern Stewart, L.E.K. and HOLT primarily refer to strategy while McKinsey mentions metrics as a cornerstone of the framework and PwC above all concentrates on organizational design.

Apart from Stern Stewart, L.E.K. Consulting and HOLT, the main elements of the approaches of the consultants reveal similarities with the basic mechanisms of a management control system as defined by Anthony & Govindarajan. Apart from their different accents, all three elements culture, structure, and systems are elaborated by Marakon, McKinsey and PwC. HOLT's VBM framework on the other hand is primarily a valuation system, L.E.K. Consulting builds its approach predominantly on culture and systems and Stern Stewart is basically oriented towards systems with a measurement program combined with a management system, an incentive compensation plan and training. None of the consulting firms denies the importance and the impact of external communication, which is mainly focused on the investment community at large. The approach with regard to internal contribution is more manièristic and has always a pedagogic undertone.

Since almost all consultants embed value-based management in a strategic process each of them refers to a more or less characteristic strategy development and deployment methodology. Marakon has a well-endowed and distinguishing framework for strategy formulation. All others, except for HOLT, that has the least articulated visioning process, refer to the well known strategy guru's like Porter, Treacy & Wiersema and so on. Although the elements of the strategy deployment technique differ, all professional service firms except for HOLT refer to a value driver model that resembles Rappaport's driver tree scheme.

With articles like 'Metric Wars' in the more popular press, it should be clear that metrics are used to establish a competitive advantage. All consultants thereby seem to offer concurrently a single and a multi-period measure. Stern Stewart is unambiguously most renown in the VBM field for its EVA- and MVA- system. Marakon promotes equity spread and economic profit. McKinsey also uses EP as a single period measure but refers to enterprise DCF in a multi-period interval. L.E.K. Consulting refers to the shareholder value network with SVA and marginal change in residual income. Cash flow return on investment positioned HOLT as a reference in the field. PwC appears to embrace multiple measures but has a predisposition for CFROI, SVA and a tailored free cash flow model.

Investment decisions are inextricably bound up with the strategy development process. All consultants, except Marakon, refer to specific discounted cash flow models to guide managers in the investment decision and resource allocation process. Stern Stewart and HOLT appear to be very attached to their proprietary models while McKinsey and L.E.K. Consulting refer to more recent developments in the field as there are real option techniques, market signal analysis and so on. By setting out broad-spectrum boundaries and describing more general principles and policies without stipulating an explicit model, Marakon Associates approaches investment decisions from a different angle. Since mergers and acquisitions can be considered as a specific kind of investment decision it is not surprising that the same holds for the M&A issue.

All professional services firms describe the impact of value-based management on collaboration. VBM is commonly regarded as an appropriate instrument to encourage everyone to work together and to align people's behavior with the interests of shareholders.

One of the most important elements in a value-based management process transpires to be performance management and target setting. The approaches of the six consultants towards this theme are not univocal but neither do they genuinely differ. Most striking is the clear focus on a single critical performance objective in casu maximization of shareholder value. None of them actually prescribes a performance management model like the balanced scorecard does but all consultants clearly depict essential elements and general principles. In order to give some guidance to managers Stern Stewart, McKinsey, L.E.K. Consulting and PwC refer to their proprietary adaptation of the Rappaport shareholder value network. Both Stern Stewart and HOLT stress the use of EVA goals respectively CFROI goals in the company's target setting process.

Since a proper reward system links both performance management and internal collaboration, it should be no surprise that Stern Stewart, Marakon, McKinsey, L.E.K. Consulting and PwC give extensive attention to the issue of remuneration. Only HOLT is rather reticent about linking its CFROI model to reward systems. All others in one way or another consider the remuneration scheme as a means to align management and the owners of the company. Stern Stewart more or less branded its EVA-based system of stretched and uncapped rewards as the 'bonus bank'. The aversion for capped bonuses is also a distinguishing feature of McKinsey's and L.E.K's approach but differs from the model of Stern Stewart in the way that performance targets are tailored for different levels and linked to controllable KPIs instead of generically being linked to EVA. Marakon recommends benchmarking the company's performance to its peers and therefore deliberately directs its remuneration scheme to top-management.

Although our review has revealed that the performance management systems of all VBM approaches were to some extent all-purpose and largely dependant on beliefs and principles, it should be clear that each consultant except HOLT calls attention to the prerequisite to have a specific mindset or culture in order to successfully implement value-based management. It is therefore not astounding that the other five developed their own training and education program to support the adoption of value-based thinking. The content, however, differs substantially. While Stern Stewart mainly focuses on EVA, Marakon, L.E.K. Consulting and McKinsey built a training and education curriculum on strategy development and implementing strategies that ensure value creation.

Finally, a well-founded training and education plan is not considered to be the only critical factor in a successful value-based management implementation. Each consultant company therefore, recommends the visible sponsorship of the program by top management and the installation of a formal implementation team.

REFERENCES

ANTHONY R. and GOVINDARAJAN V. (2001), *Management Control Systems*, International Edition, Chicago, Mc Graw-Hill Irwin, pp. 778.

ARNOLD G. (1998), *Corporate Financial Management*, Pitman Publishing, London, pp. 1050.

BLACK A., WRIGHT P., BACHMAN J. (1998), *In search of Shareholder Value*, Pitman Publishing, London, pp. 292.

BOULOS F., HASPESLAGH P. and NODA T. (2001), *Getting the value out of value-based management*, INSEAD survey, pp. 54.

BREALEY R. and MYERS S. (2000), *Principles of corporate finance*, Sixth Edition, New York, Mc Graw Hill-Irwin, pp. 1092.

COPELAND T.E., KOLLER T.M., MURRIN J. (2000), *Valuation, Measuring and managing the value of companies*, Third Edition, New York, John Wiley & Sons, pp. 550.

EHRBAR A. (1998), *EVA – The Real Key to Creating Wealth*, First Edition, New York, John Wiley & Sons, pp. 234.

EITEMAN D.K., STONEHILL A.I. and MOFFETT M.H. (1999), *Multinational Business Finance*, Eight Edition, Addison-Wesley, pp. 854.

GRANT R.M. (1998), *Contemporary Strategy Analysis*, Third Edition, Oxford, Blackwell, pp. 461.

KPMG consulting (1999), *Value Based Management The growing importance of shareholder value in Europe*, pp. 20.

MADDEN B.J. (1999), *CFROI Valuation (Cash Flow Return On Investment, A Total System Approach To Valuing The Firm)*, Great Britain, Butterworth-Heinemann Finance, pp. 352.

MARTIN J.D. and PETTY J.W. (2000), *Value Based Management – The corporate response to the shareholder revolution*, Harvard Business School Press, pp. 249.

MCTAGGART J.M., KONTES P.W. and MANKINS M. (1994), *The Value Imperative*, The Free Press, New York, pp. 367.

MERCHANT K.A. (1998), *Modern Management Control Systems Text and Cases*, Prentice Hall, pp. 851.

MORIN R. A. and JARRELL S. L. (2001), *Driving Shareholder Value Value-Building Techniques for Creating Shareholder Wealth*, Mc Graw-Hill, pp. 399.

O'HANLON J. and PEASNELL K. (2001), *Residual Income and Value Creation: The Missing Link*, Lancaster University, Department of Accounting and Finance, March 19, pp. 34.

PRATT S. P. (1998), *Cost of Capital, Estimation and Applications*, United States of America, John Wiley & Sons Inc., pp. 226.

PRICEWATERHOUSECOOPERS (2000), *Inside the Mind of the CEO in Belgium*, pp. 24.

RAPPAPORT A. (1986), *Creating Shareholder Value*, The Free Press, New York, pp. 270.

RAPPAPORT A. (1998), *Creating Shareholder Value*, The Free Press, New York, pp. 205.

READ C. (1999), *CFO Architect of the Corporation's Future*, United States of America, John Wiley & Sons Inc., pp. 300.

REIMANN B. C. (1987), *Managing for Value A Guide to Value-Based Strategic Management*, The Planning Forum, pp. 247.

STERN J.M., SHIELY J.S. and ROSS I. (2001), *The EVA Challenge Implementing Value-added Change in an Organization*, United States of America, John Wiley & Sons Inc., pp. 240.

STEWART G.B. (1999), *The Quest for Value*, Boston, Harper Business, pp. 781.

YOOK K.C. and MCCABE G.M. (2001), MVA and the Cross-Section of Expected Stock Returns, *The Journal of Portfolio Management*, Spring, pp. 75-87.

YOUNG D.S. and O'BYRNE S.F. (2001), *EVA® and Value-Based Management A Practical Guide to Implementation*, Mc Graw-Hill, pp. 493.

Periodical entries

ANONYMOUS (1998), Finance can inhibit shareholder value creation, *Management Accounting*, April, pp. 10-11.

ARGENTI J. (1997), Stakeholders: the Case Against, *Long Range Planning*, vol. 30, no. 3, pp. 442-445.

ARMITAGE H.M. and FOG V. (1996), Economic value creation: What every management accountant should know, *CMA Magazine*, October, pp. 21-24.

ARMOUR E. and MANKINS M.C. (2001), Back to the future, *Journal of Business Strategy*, July / August, pp. 22-27.

BACIDORE J.M., BOQUIST J.A., MILBOURN T.T. and THAKOR A.V. (1997), The Search for the Best Financial Performance Measure, *Financial Analysts Journal*, May / June, pp. 11-20.

BANNISTER R.J. and JESUTHASAN R. (1997), Is Your Company Ready for Value-Based Management?, *Journal of Business Strategy*, March / April, pp. 12-15.

BIDDLE G.C., BOWEN R.M. and WALLACE J.S. (1997), Does EVA® beat earnings? Evidence on associations with stock returns and firm values, *Journal of Accounting and Economics*, December, vol. 24, no. 3, pp. 301-336.

BREWER P., CHANDRA G. and HOCK C. (1999), Economic Value Added (EVA): Its Uses and Limitations, *SAM Advanced Management Journal*, vol. 64, iss. 2, Spring, pp. 4-11.

BROMWICH M. and WALKER M. (1998), Residual income past and future, *Management Accounting Research*, September, pp. 391-419.

BROMWICH M. (1998), Value based financial management systems, *Management Accounting Research*, September, pp. 387-389.

BROWN J., MACASKILL D. and OWEN H. (2000), The Stern Stewart and Marakon Shareholder Value Added Metrics: A comparative study with implications for the management accountant, Napier University Business School, paper presented at the BAA (Scotland) Conference in September 2000, pp. 37.

CAMPBELL A. (1997), Stakeholders: the Case in Favour, *Long Range Planning*, vol. 30, no. 3, pp. 446-449.

CHRISTOPHER M. and RYALS L. (1999), Supply chain strategy: Its impact on shareholder value, *International Journal of Logistics Management*, vol. 10, no. 1, pp. 1-10.

CLARKE T. (1998), The Stakeholder Corporation: Introduction to the Special Issues, *Long Range Planning*, vol. 31, no. 2, pp. 181-194.

CLARKSON M.B.E. (1995), A stakeholder framework for analyzing and evaluating corporate social performance, *Academy of Management Review*, vol. 20, no. 1, pp. 92-117.

CONDON J. and GOLDSTEIN J. (1998), Value based management – the only way to manage for value, *Accountancy Ireland*, October, pp. 10-12.

COPELAND T.E. (1994), Why value value?, *The McKinsey Quarterly*, no. 4, pp. 97-109.

DECHOW P.M., HUTTON A.P. and SLOAN R.G. (1999), An empirical assessment of the residual income valuation model, *Journal of Accounting & Economics*, January, pp. 1-34

DODD J.L. and CHEN S. (1996), EVA: A new Panacea?, *Business and Economic Review*, July / September, vol. 42, pp. 26-28.

DONALDSON T. and PRESTON L.E. (1995), The stakeholder theory of the Corporation: concepts, evidence, and implications, *Academy of Management Review*, vol. 20 no. 1, pp. 65-91.

EISENHARDT K. (1989), Agency Theory: An Assessment and Review, *Academy of Management Review*, vol. 14, pp. 57-74.

ENGLAND J.D. (1992), Don't Be Afraid of Phantom Stock, *Compensation & Benefits Review*, September-October, pp. 39-46.

FAMA E.F. (1980), Agency Problems and the Theory of the Firm, *The Journal of Political Economy*, vol. 88, pp. 288-307.

FERA N. (1997), Using Shareholder Value to Evaluate Strategic Choices, *Management Accounting*, November, pp. 47-51.

GÜNTHER T., LANDROCK B. AND MUCHE T. (1999), Profit versus Value Based Performance Measures, Dresden University, working paper as yet unpublished, pp. 27.

GÜNTHER T. (1997), Value-based performance measures for decentral organizational units, Dresden University, paper presented at the European Accounting Association Meeting in Graz, pp. 24.

HASPESLAGH P., NODA T. and BOULOS F. (2001), Managing for Value: It's Not Just About the Numbers, *Harvard Business Review*, July / August, pp. 62-74.

HILLMAN A.J. and KEIM G.D. (2001), Shareholder value, stakeholder management, and social issues: what's the bottom line?, *Strategic Management Journal*, vol. 22, pp. 125-139.

ITTNER C.D. and LARCKER D.F. (1998), Are Nonfinancial Measures Leading Indicators of Financial Performance? An Analysis of Customer Satisfaction, *Journal of Accounting Research*, Vol. 36, pp.1-35

INSTITUTE OF MANAGEMENT ACCOUNTANTS (1997), Measuring and Managing Shareholder Value Creation, Statement Nr 4AA, Institute of Management Accountants, Montuale, N.J., March 31.

KENNEY C., Creating an Ownership-Oriented Culture, *Shareholder Value Added*, Vol. II, pp. 8.

KENNEY C., Market Signals Analysis: A vital tool for Managing Market expectations, *Shareholder Value Added*, Vol. IX, pp. 8.

KENNEY C., Buying Trouble: Avoiding the Acquisition Pitfalls, *Shareholder Value Added*, Vol. XIX, pp. 8.

KISSEL M., A Passion for Value, *Marakon Commentary*, Marakon Associates, vol. IV, iss. 3, pp. 8.

KOLLER T. (1994), What is value-based management, *The McKinsey Quarterly*, no. 3, pp. 87-101.

KONTES P., Strategy Happens, *Marakon Commentary*, Marakon Associates, vol. IV, iss. 1, pp. 8.

KOSLOWSKI P. (2000), The Limits of Shareholder Value, *Journal of Business Ethics*, vol. 27, pp. 137-148.

KOTTER J.P. (1995), Leading change: why transformation efforts fail, *Harvard Business Review On Point*, March / April, pp. 59-67.

KOZIN M., Using shareholder Value Analysis for Acquisitions, *Shareholder Value Added*, Vol. III, pp. 8.

LEAHY T. (2000), Making their Mark, *Business of Finance*, June

LEHN K. and MAKHIJA A.K. (1996), EVA & MVA as Performance Measures and Signals for Strategic Change, *Strategy & Leadership*, May / June, pp. 34-38.

LEHN K. and MAKHIJA A.K. (1997), EVA, Accounting Profits and CEO Turnover: An empirical Examination. 1985-1994, *Journal of Applied Corporate Finance*, Vol. 10, no. 2, summer, pp. 90-97.

MADDEN B.J. (1998), The CFROI Valuation Model, *The Journal of Investing*, Spring, pp. 31-43.

MARSH D.G. (1999), Making or breaking value, *New Zealand Management*, March, pp. 58-59.

MC LAREN J. (1999), A strategic perspective on economic value added, *Management Accounting*, April, pp. 30-32.

MC LAREN J. (2000), EVA® for Planning and Control: Some Preliminary Evidence from New Zealand, Exeter, BAA Annual Conference, April, pp. 32.

MC TAGGART J. and KONTES P.W. (1993), The Governing Corporate Objective: Shareholders versus Stakeholders, *Marakon Commentary*, Marakon Associates, June, pp. 26.

MC TAGGART J. and GILLIS S. (1998), Setting targets to maximize shareholder value, *Strategy & Leadership*, vol. 26, iss. 2, March / April, pp. 18-21.

MILLER K. (2000), The business of knowing, *Information World Review*, April, pp. 22-23.

MILLS R. and PRINT C. (1995), Strategic value analysis, *Management Accounting*, February, pp. 35-37.

MILLS R., ROWBOTHAM S. and ROBERTSON J. (1998), Using Economic Profit in Assessing Business Performance, *Management Accounting UK*, November, pp. 34-38.

MILLS R. and WEINSTEIN B. (2000), Beyond Shareholder Value – Reconciling the Shareholder and Stakeholder Perspectives, *Journal of General Management*, vol. 25, no. 3, Spring, pp. 79-93.

MINCHINGTON C. and FRANCIS G. (2000), Divisional performance measures: EVA® as a proxy for shareholder wealth, *International Journal Business Performance Management*, vol. 2, nos. 1/2/3, pp. 98-107.

MYERS R. (1996), Metric Wars – Marketing battles erupt as Stern Stewart and rivals seek your hearts, minds & dollars, *CFO*, October, pp. 41-50.

NODINE T., Making Real Decisions with Real Options, *Shareholder Value Added*, Vol. XVI, pp. 8.

O'BYRNE S.F.(1996), EVA® and Market Value, *Journal of Applied Corporate Finance,* vol. 9, no. 1, Spring, pp.116-125.

O'HANLON J. and PEASNELL K. (1998), Wall Street's contribution to management accounting: the Stern Stewart EVA® financial management system, *Management Accounting Research*, vol. 9, pp. 421-444.

OTTOSSEN E. and WEISSENRIEDER F. (1996), Cash Value Added – a framework for Value Based Management, *Ekonomi & Styrning*, Sweden, May.

PLENDER J. (1998), Giving People a Stake in the Future, *Long Range Planning*, vol. 31, no. 2, pp. 211-217.

PRUZAN P. (1998), From control to Values-Based Management and Accountability, *Journal of Business Ethics*, no. 17, pp. 1379-1394.

RAPPAPORT A. (1978), Executive Incentives vs. Corporate growth, *Harvard Business Review*, July / August, pp. 81-87.

RAPPAPORT A. (1979), Strategic Analysis for More Profitable Acquisitions, *Harvard Business Review*, July / August, pp. 99-109.

RAPPAPORT A. (1981), Selecting Strategies That Create Shareholder Value, *Harvard Business Review*, May / June, pp. 139-149.

RAPPAPORT A. (1987), Stock Market Signals to Managers, *Harvard Business Review*, November / December, pp. 57-62.

RAPPAPORT A. (1990), The Staying Power of the Public Corporation, *Harvard Business Review*, January / February, pp. 2-9.

RAPPAPORT A. (1992), CFO and Strategists: Forging a common Framework, *Harvard Business Review*, May / June, pp. 84-90.

RAPPAPORT A. (1999), New thinking on how to link executive pay with performance, *Harvard Business Review*, March / April, pp. 91-101.

RAPPAPORT A., Excerpts form: *Creating Shareholder Value: A Guide for Managers and Investors*, *Shareholder Value Added*, Vol. V, pp. 8.

RAPPAPORT A. and MAUBOUSSIN M., Using *Expectations Investing* to Develop and Communicate Strategy, *Shareholder Value Added*, Vol. XVIII, pp. 8.

REIMANN B. C. (1991), Shareholder Value and Executive Compensation, *Planning Review*, May/June, pp. 41-48.

ROADS D., Managing for Superior Total Shareholder Returns, *Shareholder Value Added*, Vol. X, pp. 8.

ROADS D. and GOULDING P., Successful Strategic Planning Processes, *Shareholder Value Added*, Vol. XVII, pp. 8.

ROATH R., CFO Perspectives: Shareholder Value Added, *Shareholder Value Added*, Vol. IV, pp. 8.

RONTE H. (1998), Value based management, *Management Accounting*, January, pp. 38.

SCHOR L., Identifying and Managing Key Value Drivers, *Shareholder Value Added*, Vol. I, pp. 6.

SHANKMAN N.A. (1999), Reframing the Debate Between Agency and Stakeholder Theories of the Firm, *Journal of Business Ethics*, no. 19, pp. 319-334.

SIMMS J. (2001), Marketing for value, *Marketing*, June 28, pp. 34-35.

SLATER S.F. and OLSON E.M. (1996), A Value-Based Management System, *Business Horizons*, September / October, pp. 48-52.

SMITH C., Optimizing Price to Build Shareholder Value, *Shareholder Value Added*, Vol. XII, pp. 8.

SMITH L.J. (1997), Consultants battle for SAM (Share of Acronym Market), *Best's Review*, April, pp. 43.

SMITH P., Shareholder Value Implementation: Turning Promise into Reality, *Shareholder Value Added*, Vol. XIV, pp. 8.

STAINER A. and STAINER L. (1998), Business Performance – a stakeholder approach, *International Journal of Business Performance Management*, vol. 1, no. 1, pp. 2-12.

STERN STEWART (1999), ABC, The Balanced Scorecard and EVA®, *EVAluation*, vol. 1, iss. 2, April, pp. 5.

STEWART T.A. (1998), Marakon Runners, *Fortune*, September 28, pp. 153-154.