

CHAPTER 9

CONCLUSIONS AND RECOMMENDATIONS

9.1 INTRODUCTION

Today there is widespread agreement that maximizing shareholder wealth is the single, most important financial objective of a business enterprise. There are, however, widely divergent opinions as to how this value maximization can be accomplished most effectively. In order to manage the drivers of value, they need to be identified, measured, incentivised in terms of manager remuneration and, ultimately, optimised.

Over the last few years, there has been growing criticism of and dissatisfaction with the traditional accounting-based measures of performance. Statements that criticise earnings-based performance measures as having a conservative accounting bias, as well as having no influence on shareholder value, have been aired and reported. Groundbreaking work by Rappaport (1986), who focused on shareholder value and took into account the shortcomings of accounting measures, prepared the way for a value management approach.

The currently popular view is that the economic profit of a company, as expressed by its EVA, has the greatest influence on the external measure of performance, the MVA. Stewart (1991:153) and Stern (1993:36), working together in the firm Stern Stewart Consulting Company, are the main advocates of EVA and MVA and they have made a concerted effort to market these concepts worldwide.

This study has endeavoured to investigate the most recent research on EVA and MVA and to use companies listed on the JSE of South Africa to test the application of these concepts. A summary of the approach used to do this is given in the next section.

9.2 APPROACH FOLLOWED

Theoretical research focusing on the weaknesses of traditional accounting measures of performance and the superiority of EVA and MVA has laid the foundation for the empirical study done on the data of South African companies. A relative measure of internal performance, the spread (the EVA divided by the IC_{beg}), was used to rank local companies and to identify the best performers.

Then the financial strategy matrix model as defined by Hawawini and Viallet (1999:507) was used to place companies in a certain quadrant on the financial strategy matrix. It was indicated that the position of a specific company relative to the optimal quadrant would determine the financial strategies most appropriate for that company. This was followed by some statistical tests evaluating the strength of the financial strategy matrix model and some tests to identify the main drivers of EVA. The recommendations are based on the outcomes of the theoretical and empirical findings. The steps incorporated in the approach can be summarised as follows:

- theoretical research on accounting measures and EVA and MVA;
- empirical research on South African companies listed on the JSE;
- a ranking of companies in terms of spreads;
- the placement of companies on the financial strategy matrix;
- statistical tests to verify the strength of the financial strategy matrix model;
- statistical tests to identify the main drivers of EVA and to test the level of correlation between MVA and EVA, as well as MVA and the main drivers of EVA; and
- recommendations based on the outcomes of the steps above.

9.3 RESEARCH RESULTS

The research results are summarized in two categories, namely theoretical research and empirical research.

9.3.1 Theoretical research

The need to identify and measure the ability of a company to create shareholder value emerged clearly from this research. Furthermore, the widespread disillusionment with traditional accounting-based measures of performance with very little impact on market values is well documented. The alternatives to the accounting measures that have been suggested all account for the full cost of capital and are therefore all equivalent to economic profits. Of these, EVA is the best known.

Numerous authors including Stewart (1991:215) and Stern (1993:36) have provided evidence supporting EVA as having a stronger relationship with MVA than any of the other accounting measures tested. There has also been some criticism of EVA and authors such as Kramer and Pushner (1997:41) and Biddle *et al.* (1999:69) have provided evidence showing that EVA is not superior to some accounting-based measures. No doubt this debate regarding the purported superiority of EVA will continue for some time.

9.3.2 Empirical research

The calculation of spreads, which are relative measures of performance, allowed a comparison of the performance of companies of different sizes. The four companies that achieved the highest median spreads for the ten-year period from 1993 to 2002 were calculated to be MNet-Supersport, Pick'nPay, Oceana Fisheries and Shoprite. The four worst performers over the same period were Conafex, Highveld Steel, Rainbow Chickens and Spescom.

There was only one sub-sector that was represented by more than one company in the top ten rankings, namely the food and drug retailing sector. Another noteworthy feature that emerged from the results of the rankings is the fact that there was a distinct improvement in the median spreads achieved in the five-year period from 1998 to 2002 (4,6%), compared to the period from 1993 to 1997 (1,9%).

The results of the placement of individual companies and sub-sectors, as well as all companies for a given year, on the financial strategy matrix provided some valuable insights that can be used to improve the effectiveness of the model as a strategic tool. Three individual companies, namely Pick'nPay (representing "very good performance"), Ellerines (representing "average performance") and Conafex (representing "very poor performance"), were placed on the financial strategy matrix.

As far as performance in terms of spreads is concerned, the financial strategy matrix clearly indicated the consistent superior performance of Pick'nPay, the average performance of Ellerines and the weak performance of Conafex. However, for the sales growth minus the SGR percentage, the distinction between good and bad performance was not at all clear, because of the volatility and ambiguity of this measure. Even the results for Pick'nPay do not indicate that its sales growth rate was consistently kept below the SGR.

The placement of the median results of the sub-sectors showed that Sub-sector 21 (the food and drug retailing sector with only Pick'nPay and Shoprite) outperformed the other sub-sectors consistently and by a wide margin in terms of spreads over the ten-year period from 1993 to 2002. The placement of all 89 companies on the financial strategy matrix for each year from 1993 to 2002 showed a gradual improvement in spreads over time.

As far as the median sales growth minus the SGR percentage is concerned, the differential was negative for only three years and positive for seven years. This could be an indication that companies run the risk of accumulating cash shortages. However, as the SGR percentage is only reliable if some strict

assumptions are met, one is inclined to conclude that this criterion does not contribute much valuable decision-making information on a single-year basis.

The statistical tests on the strength of the financial strategy matrix model were aimed at testing the impact of the two criteria, namely spreads and the sales growth minus the SGR percentage, relative to market value. Although some positive correlation was found between spreads and the indicators of market value, the results were not conclusive enough to prove that higher positive spreads have a greater impact on market value than lower positive spreads. Very little correlation was found between the sales growth minus the SGR percentage and market value, again underlining the need to change or replace this measure in order to improve the effectiveness of the model.

Another series of statistical tests tested the relationship between MVA and two other adjusted versions of MVA relative to EVA and the main drivers of EVA. As far as the relationship between MVA and EVA was concerned, the results showed weak correlations when the data of the dependent and independent variables were compared on a year-on-year basis. Perhaps this low correlation can be attributed to the great fluctuations in MVA caused by external factors from one year to the next. However, when the median MVA and median EVA were used for each company over the ten-year period from 1993 to 2002, there was excellent correlation, with an r^2 of 75%. This supports the contention that in the long run, EVA is the best internal driver of MVA.

The tests on the strength of the relationships between MVA (and the other two versions of MVA) relative to the main drivers of EVA revealed very low correlation coefficients in general on a year-on-year basis. The only significant correlations that were economically plausible (had the correct sign) were a strong relationship between MVA and IC_{beg} and between MVA/IC_{beg} and $Sales/IC_{beg}$. This leads to the conclusion that IC seems to be the one driver of EVA with the single greatest impact on market value.

9.4 RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH

It has become clear from this study that popular financial earnings-based measures of performance do not serve the purposes of shareholder value maximization. One of the main reasons for this is that they do not reflect the opportunity cost of own (equity) capital used in a business. EVA, which is similar to residual income or economic profits, is currently considered to be the best internal driver of value and the results of this study support that view.

However, in comparing the performance of a number of companies, a straightforward comparison of the absolute amounts of EVA would be unfair, because the IC employed to earn the EVA differs from company to company. The first recommendation of this study is that a relative adjusted version of EVA must be used when EVA performance is compared.

This relative measure of performance is the “performance spread”, or, in short, the “spread” of the company. Expressing the EVA for a given year as a percentage of the IC at the beginning of the year will yield the spread. It can also be determined by simply subtracting the WACC from the ROIC. If the internal value creation is the only evaluation criterion and a number of companies are involved, then ranking according to spreads will be appropriate.

The financial strategy matrix model by Hawawini and Viallet (1999:507) was used to place companies and sectors on a financial strategy matrix and to determine appropriate strategies based on positions on the graph. The model has great appeal because of its simplicity and the fact that it incorporates internal value creation and cash flow management. However, it is suggested that some changes are made to improve the model.

After placing some companies and sectors on the financial strategy matrix and some statistical testing, it was concluded that the spreads plotted on the y-axis must remain unchanged. The study has shown that the measure used to monitor cash management, namely sales growth minus the SGR percentage, yields widely fluctuating, unreliable results.

It is therefore recommended that this measure of cash management be replaced with a more reliable indicator of the company's ability to manage its cash flow, like the cash available from operating activities (CAOA) (Koen and Oberholster 2002:24). In order to transform this absolute value into a relative value, the CAOA can be divided by the IC_{beg} . The financial strategy matrix would then plot spreads on the y-axis and $CAOA/IC_{beg}$ (as a percentage) on the x-axis.

Furthermore, it is recommended that evaluations of performance based on single-year plots on the financial strategy matrix be avoided because of the dangers of basing decisions on once-off results that do not reflect the trend or the norm. It is suggested that the data of a company or sector be plotted and analysed over a period of, say, five or ten years, so that the most recent performance can be weighed up against the trend.

It is also recommended that the performance of individual companies be compared to the results of the sector in which the company operates and perhaps also against the average or median results of all listed companies. This should provide a more comprehensive picture of the relative performance of a company and lay the foundation for balanced strategic decision-making.

Further areas of study could include investigating other appropriate measures of cash flow management (other than sales growth minus the SGR percentage and $CAOA/IC_{beg}$ as recommended above). Further research could also endeavour to add more variables to the financial strategy matrix model so that the financial component of the "balanced scorecard" is a "balanced scorecard" in its own right. Having more than two variables would unfortunately preclude plotting the data on a two-dimensional graph.

Recent research by Copeland (2002:53) and Rappaport and Mauboussin (2001:69) use expectations theory to develop optimal financial strategies. It is suggested that further research could focus on the link between EVA, MVA and expectations theory in order to fine-tune and improve the current best-practices model even further.

9.5 CONCLUSION

The search for one financial performance measure that satisfies the requirements of theoretical soundness, economic reality, reliability and shareholder value maximization has continued for many years and still continues. Most of the popular financial accounting indicators have glaring weaknesses that render them inappropriate as reliable measures of performance. EVA overcomes most of these limitations and represents an internal measure of performance that takes into account the full cost of capital.

This study has analysed South African companies listed on the JSE and illustrated how a relative measure of internal performance, spreads, can be used to rank companies in terms of value creation. Furthermore, individual companies and sectors were placed on a financial strategy matrix, which evaluated companies according to spreads and cash flow management, indicated by the sales growth minus the SGR percentage. Positions on the financial strategy matrix determined the appropriate financial strategies available to companies in order to improve their value most effectively.

The study has tested the impact of the two variables evaluated by the model on shareholder value and has suggested some adjustments in order to improve the relevance and efficiency of the model. These suggestions were also aimed at expanding the single-year model to a periodic model that reflects changes over time and facilitates comparisons with sector averages and the average results of all companies. These adjustments will hopefully allow analysts to judge better not only the level, but also the consistency and sustainability of a company's performance.