

## Investment Basics XXX. EVA™: The Real Key to Creating Value!

"Performance system EVA™ takes off in SA", announced a headline recently in Business Day. What is EVA, how does it relate to the growth ethic prevalent in the corporate world, and why does it lead to increasing value for shareholders?

Growth, whether internally or externally generated, does not always add value to the firm. If new investments produce returns that are lower than their cost of capital, shareholder value will fall.

The measurement of a business's progress towards creating value for its shareholders lies at the heart of today's hottest financial idea – economic value added or EVA. Investors, it is now recognised, reward businesses for quality rather than mere size.

In essence EVA is a way of measuring the real profitability of a business after the total cost of its capital – both debt and equity – has been taken into account. Traditional measures only account for the cost of debt capital. In EVA, the often considerable cost of equity capital is also included.

Historically the approach to corporate performance measurement was based on return on equity (ROE) or return on assets (ROA). Firms' performance targets as well as management compensation have, in the past, been based largely on these accounting rates of return.

These ratios are attractive because they are single numbers which reflect both operating performance and asset management. They facilitate comparison amongst various business units and are generated directly from the firm's accounting system.

Major inadequacies inherent in the use of these ratios include flaws in the accounting system and the potential for manipulation, together with the fact that historical returns do not capture the very significant re-investment activity critical to creating or maintaining value.

The key principle of this "new idea" in corporate finance is that value is created when an investment exceeds a cost of capital that correctly reflects its investment risk.

All businesses have in common the three elements upon which value rests, namely:

- The amount of capital invested in the business;
- The cost of capital;
- The return on capital.

The total capital invested in a business is the sum of its debt and equity finance. The book value of the capital reflected in the annual financial statements should be increased by adding back to capital such items as the deferred tax reserve, LIFO inventory reserves and the capitalized value of R&D expenditures. This converts book value into economic book value which, it has been argued, is a truer measure of the cash which investors have put at risk, and upon which they expect their returns to accrue.

The cost of capital may be defined as the return required by the providers of capital. The cost of debt is measured by the after tax interest payments made by the firm. The cost of equity is not represented by an explicit payment by the firm, but is rather an opportunity cost. It is the return required by shareholders and is equal to the return available to them by invest-

ing in other, comparably risky companies. The cost of equity comprises both dividend payments and an expectation of capital gains (ie an increase in the value of the firm's shares). These capital costs are weighted in the proportions in which debt and equity are used by the firm, yielding a weighted cost of capital.

The net operating profit of the firm, expressed on an after-tax basis (NOPAT), is the cash flow stream that is available to compensate the suppliers of both debt and equity capital. The firm's overall return can thus be calculated by dividing NOPAT by the economic capital employed. Value is created if a business generates returns that are in excess of its cost of capital. Such firms could be expected to trade at a premium to the amount of capital they employ. The opposite will apply if the returns generated fall below the cost of capital.

In order to add value for its shareholders, a firm has three options open to it. It will either have to generate long-term sustainable returns in excess of the cost of capital on its existing business portfolio, undertake new ventures such that the returns they provide are greater than the cost of capital required to finance the ventures, and/or ensure that those parts of the business where the return being achieved is less than the cost of capital, are divested. Thus it may be appropriate to reduce the size of the firm in order to generate shareholder value.

The attached figure shows diagrammatically how the building blocks of capital, the returns generated by the firm (R) and the cost of capital (C) interact to generate value.

EVA is simply the economic capital used multiplied by the spread between R and C. EVA expected to be generated in the future is discounted to present value using the firm's cost of capital, thus recognising the time preference for money and the riskiness of the investment generating the EVA. The sum of the present values of these future EVA's gives the market's expected value to be added to the firm. The sum of the market value added (MVA) plus the economic capital invested in the firm gives an estimate of the total market value of the firm. The equity value may be determined by subtracting the market value of debt from the total value which emerges from the model.

In practice estimating cash flows for the expected life of the business requires setting up a series of discrete estimates of performance for the short term (say the next 5 to 8 years) and a single estimate of the average performance for the longer term. The focus in the entire analysis is on cash flows in order to avoid the inadequacies of accounting systems, as reflected in measures such as ROE.

In operationalising the EVA model, the following key determinants of cash flow must be estimated:

- 1) Operating profits before interest and tax
- 2) The tax rate
- 3) Growth in revenues
- 4) The required investment in working capital
- 5) The fixed capital investment
- 6) The life of the projected strategy

The determinants of the discount rate (or cost of capital) are:

- 1) The cost of equity capital
- 2) The cost of debt
- 3) Leverage

These factors, barring perhaps the cost of equity, are hardly more complex than the determinants of ROE as presented in

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the well known du Pont model, but they relate directly to shareholders value. EVA captures the dynamics of risk, operating efficiency, capital productivity, growth and time as they jointly affect shareholder value.

To be successfully implemented, the method of performance measurement in the firm must change so that the economic value added concept can be used as a guideline by management in both tactical and strategic decision making.

