2GC Active Management

**2GC Limited**
Albany House
Market Street
Maidenhead
Berkshire, SL6 8BE, UK

Phone: +44 (0) 1628 421506
Fax: +44 (0) 1628 421507
www: www.2GC.co.uk
Email: Info@2GC.co.uk

# Combining EVA with the Balanced Scorecard to improve strategic focus and alignment

*2GC Discussion Paper*

**January 2001**

# EVA and Balanced Scorecard - Mutually supportive tools

This paper discusses the potential to combine use of EVA measures of organisational performance with the use of the Balanced Scorecard approach to managing strategic management behaviours. It briefly outlines how the two tools are defined, considers their strengths and weaknesses, and then considers one approach for using the two tools together. Concerning EVA, the paper notes that it has advantages over other, accounting based, measures of financial performance and is highly compatible with the Balanced Scorecard approach to performance measurement and reporting, but has limitations when used to promote strategic alignment. Concerning Balanced Scorecard, the paper notes the strength of the framework as a tool to support strategic or operational management activity, but highlights its dependence on effective measure selection. The paper concludes that when EVA is used in conjunction with the Balanced Scorecard approach, the resulting hybrid tool can be a powerful basis for encouraging organisational change and performance improvement.

## The tools defined

### EVA

Economic Value Added (EVA) is a composite measure of financial performance. Although the underlying concept has been discussed by economists for over a century (some suggest Alfred Marshall's theory of Economic Income[1] is an antecedent), it owes its current popularity to the commercial activities of US based consultancy Stern Stewart (who have registered EVA as a trade mark). It is only since the early 1990's that the concept has become widely used within business.

EVA measures the difference between the return on a company's capital and the cost of that capital. Crudely, a positive EVA indicates that the company's activities have generated 'shareholder value' over the period of measurement. Perhaps more importantly, activities that generated negative EVA values are considered to have lost shareholder value.

Exponents argue that EVA provides more useful information on the value of operations in prior periods than other accounting measures of performance (such as accounting profit, or less complex return on capital measures), and when EVA changes are linked to a reward mechanisms, acts to align employee interests with those of shareholders. E.g., from a recent paper:

> *'EVA is not a panacea and should never be viewed as an alternative to good management practice. What EVA can do is help senior managers put the proper incentive and monitoring systems in place to increase the chances that all managers will run the firm in a manner consistent with the creation of shareholder value.'*[2]

[1] Marshall, A. (1920) "Principles of Economics, eighth edition" (London, Macmillan).
[2] Young, David, (1997) "Economic value added: A primer for European managers" *European Management Journal*, Vol. 15, No. 4; pp.. 335-344

As with other financial measures, in theory it is possible to 'decompose' EVA calculations into subsidiary components that collectively 'add up' to the overall total figure. This feature allows the localisation of 'value generation' to specific groups of employees or to particular facilities – allowing for the 'fair' distribution of differential rewards within an organisation. Other possible applications include the use of forecast vs. actual EVA as a basis for post-hoc investment appraisal, and the use of components of the EVA calculation (e.g. cost data) as the basis of comparisons between or within organisations.

In practice the utility of EVA as an accurate measure of shareholder value generation is open to question. EVA results rely on supporting calculations and assumptions, the values for some of which are difficult to determine reliably in the 'real world'. For example, calculating the cost of capital that applies to a particular operation within a business requires information about the associated investment risk – values are notoriously difficult to estimate reliably.

To address these and other concerns, much work has been done by agencies that promote EVA to introduce 'adjustments' into the EVA calculation (one paper cites the existence of over 100 such recorded adjustments[3]). The number of such adjustments is itself indicative of the difficulty in obtaining 'accurate' EVA calculations. A recent academic paper concluded that EVA was, in practice, a no more useful to share holders than standard accounting reports.

> *'There is little evidence to support the Stern Stewart claim that EVA is superior to earnings in its association with stock returns or firm values. In no case does EVA significantly outperform EBEI in tests of relative information content. On the contrary, in most cases the evidence suggests that earnings outperform EVA'[4].*

EVA values are much more useful when used to measure relative performance improvement over time, or to compare operations within the same organisation – as inaccuracies introduced by the EVA calculations tend to cancel each other out. EVA values are also considered harder to 'massage' than traditional management accounting numbers.

## Balanced Scorecard

The Balanced Scorecard is an approach to performance measurement that combines traditional financial measures with non-financial measures to provide managers with richer and more relevant information about activities they are managing. Two common and important characteristics of Balanced Scorecard designs are the clustering of similar types of measures into groups (often called perspectives), and a focus on limiting the number of measures reported to improve clarity and utility. First introduced in the early 1990s, the Balanced Scorecard concept has become widely known, and various forms of it have been widely adopted around the world.

The Harvard Business Review, in its 75th Anniversary issue, cites the Balanced Scorecard as being one of 15 most important management concepts to have been introduced via articles in the magazine. The original article by Robert Kaplan and David Norton in 1992 outlined a simple, "4 box" approach to performance measurement. In addition to financial measures, managers were encouraged to look at measures drawn from three other "perspectives" of the business. In later articles they also suggested that the selection of these measures should link to the organisation's strategic goals.

---

[3] Young, David, (1997) "Economic value added: A primer for European managers" *European Management Journal*, Vol. 15, No. 4; pp.. 335-344

[4] Biddle, Gary C; Bowen, Robert M; Wallace, James S; (1997) "Does EVA beat earnings? Evidence on associations with stock returns and firm values"
*Journal of Accounting & Economics*; Vol 24, No. 3, pp. 301-336, 1997;

Since its introduction, a significant development has been the realisation that the successful use of a Balanced Scorecard depends not only upon the approach used to select the measures it contains, but also upon adjusting management processes to allow the tool to be used.  These insights have resulted in the development of management frameworks based around the Balanced Scorecard or some similar tool.

The potential benefits of a Balanced Scorecard are dependent on what it is to be used for.  Simply having a Balanced Scorecard is not enough – the scorecard will only be useful if it is correctly applied.  There are two distinct applications for a Balanced Scorecard.  Although visually similar, these two applications require substantially different design and development processes, and provide different benefits.  The two applications are:

1. **Management Control** - Use of Balanced Scorecard to help managers monitor and control the delivery of a pre-defined set of activities – often with a view toward achieving "best practice" performance levels.  The Balanced Scorecard approach offers a holistic but focused view of performance measurement.  By requiring managers to identify a concise set of process measures across the four Balanced Scorecard perspectives they are challenged, for example, to find ways of reflecting the role of customer satisfaction and the impact of innovation and improvement activities on performance in addition to articulating more typical financial and operational measures.

   Balanced Scorecards developed for the purpose of Management Control tend to favour use of 'benchmark' data – both in terms of the measures selected and in terms of the targets set.  As processes can usually be defined fairly thoroughly, it is also not uncommon for some element of simulation or modelling to be used to 'calibrate' the measures and targets.

2. **Strategic Control** - Use of Balanced Scorecard to help managers monitor the performance of an organisation as it implements activities associated with the implementation of a strategic plan.  When used this way, the role of the Balanced Scorecard shifts from the tracking of performance of a process, to the monitoring of whether or not strategic objectives have been achieved, and the extent to which the actions required to achieve them have been undertaken and are working.  Management teams using this type of Balanced Scorecard use the information it provides to support decision making about what 'interventions' might be required to ensure that the organisation's strategic goals are successfully achieved.

   Balanced Scorecard development for the purpose of Strategic Control is underpinned by a methodology that enables managers to establish their strategic objectives across a holistic view of the business, and to identify relevant measures that allow them to control and monitor organisational performance against these objectives.  However, a crucial additional benefit is that having done this, the strategic Balanced Scorecard can support the articulation and communication of strategic requirements to the wider business.

The major weakness of Balanced Scorecard, almost by dint of its very simplistic definition in the original article[5] that introduced the concept, stems from, in almost equal measure, the negative impact of poorly thought through changes to the original design that regularly appear when it is implemented, and from use of ineffective processes to select the information that appears on the Balanced Scorecard (whatever its design).

[5] Kaplan, Robert S.; Norton, David P.; (1992) "The Balanced Scorecard - Measures That Drive Performance"; *Harvard Business Review*, Vol. 70, No. 1; pp. 71-80

There are sound reasons for adopting the same four 'perspectives' that were defined in the original articles on Balanced Scorecard, rather than using a design with either more or less perspectives, or with perspectives that are 'redefined' with different labels (a common such change is to re-label what Kaplan & Norton called the 'Learning & Growth' perspective as the 'People' perspective). The reason retaining the original design is ease with which the original four original perspectives support 'causality'. Because the original four perspectives are 'orthogonal' (it is impossible to deduce the likely contents of any other perspective given information about the contents of any one perspective) – the process of deciding what objectives in one perspective will deliver results in another requires a management team to be explicit about their understandings / beliefs about the reasons why: conversely a good challenge to a Balanced Scorecard design is to test the objectives in different perspectives to see if the implied causality is plausible. This use of causality can be a very powerful basis for a method for the selection of measures to include in each of the perspectives.

The processes that are required for effective Balanced Scorecard design are necessarily complex – despite the simplicity of the initial concept. In part this comes from the two distinct applications for Balanced Scorecard outlined above, and more generally from Balanced Scorecard's role as a tool to support a management process. Effective design of a Balanced Scorecard requires the inclusion of substantial information about the management team's task, and their collective understanding of how requirements of the team will be delivered. However such requirements demand inclusive participation in the design process from the majority of the management team, and demand sophisticated support and facilitation. Faced with such challenges, many management teams are persuaded to use less demanding design processes, with the result that perhaps a majority of Balanced Scorecards fail. An effective Balanced Scorecard needs to satisfy the requirement of managers for management support tools to provide *relevant* information.

In general Balanced Scorecard is viewed by academics as a favourable development:

> *"Like all management tools, however, the Balanced Scorecard is not a sufficient condition for success; it cannot do everything! For example, it should not be a tool supporting attempts at management-by-exception and management-from-a-distance. Neither is it a substitute for sound strategy, clear focus and strong alignment of energies within the firm. On the other hand, developing and using a Balanced Scorecard-type of system can help develop these conditions by forcing top management to articulate a strategy and Key Success Factors, and focusing managers' attention on the firm's progress on these elements."*[6]

# Combining EVA and the Balanced Scorecard

There is considerable scope to enhance the value of both tools by combining them in a single application, effectively by using the EVA calculation to drive the definition of categories of measures used in the Balanced Scorecard's financial perspective.

[6] Epstein, Marc J. (1997) "The balanced scorecard and tableau de bord: Translating strategy into action" *Management Accounting*, Vol. 79, No. 2; pp. 28-37

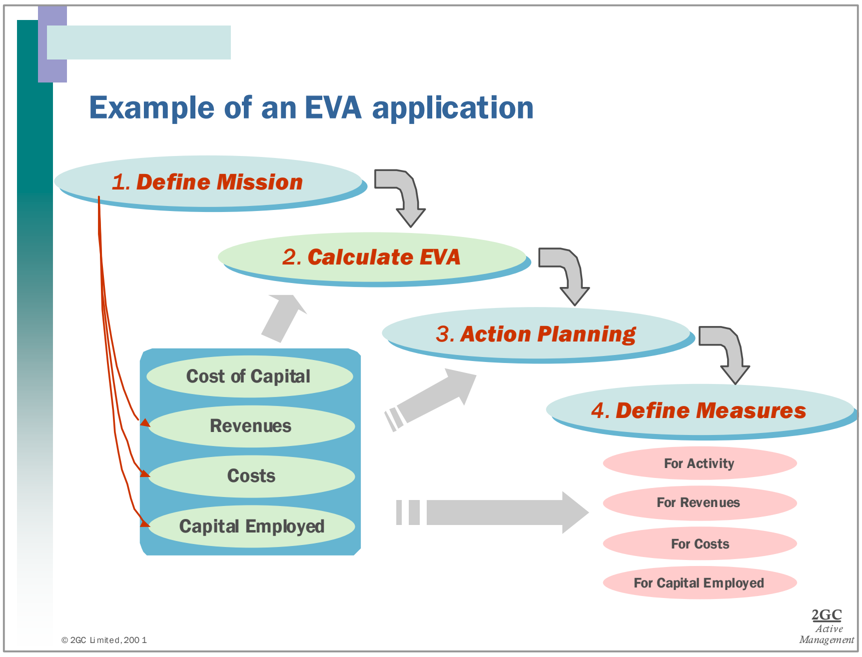

Figure 1: Example of an EVA application

Thus, while EVA might help suggest which financial indicators truly drives the development of long-term shareholder value, the development process used to create a Balanced Scorecard can be used to illustrate and test a management team's theories about how they are most likely to trigger the required reaction among customers and other external relations necessary to deliver the desired long-term financial results.

The structure of a typical EVA application is shown in Figure 1.

In the example, EVA value is calculated from elements related to income, costs, capital, and cost of capital. The definitions of the values used in the EVA calculation in turn are linked to 'Action Plans' designed to improve their value, and each of these action plans has associated measures of progress. Sometimes the measures used are similar to those originally found in the EVA calculation.

This structured consideration of the drivers of shareholder value is not unlike the 'financial objectives' of a typical (non-EVA based) Balanced Scorecard (see Figure 2 overleaf). By comparing Figures 1 & 2, the similarity is clear. In fact there is quite possible that this type of EVA break down could be used as a defined basis for the selection of Financial Objectives and Measures in a Balanced Scorecard. The increased 'authenticity' of the structure of the EVA calculation would add credibility to any discussion concerning the basis for financial measure selection. Further, use of EVA in this way facilitates its use as the basis for variable incentive rewards within an organisation.

But the financial perspective is only one-fourth part of a classically structured Balanced Scorecard. By combining EVA with Balanced Scorecard in this way, it is important to consider what additional benefit might arise from the inclusion of the remaining three perspectives. In large part the value stems from these perspectives role in conveying ideas of 'causality'.

The concept of causality was introduced earlier, and describes the formation or articulation of simple cause-and-effect hypotheses by managers to explain to themselves and others how the financial targets appearing at the 'top' of a classic Balanced Scorecard would be achieved. For example, the financial goal may be to grow sales revenue, perhaps by increasing the average value of each purchase transaction. But it is also important to know how the managers involved believe they will induce this change in purchasing behaviour. Possibly they would institute some

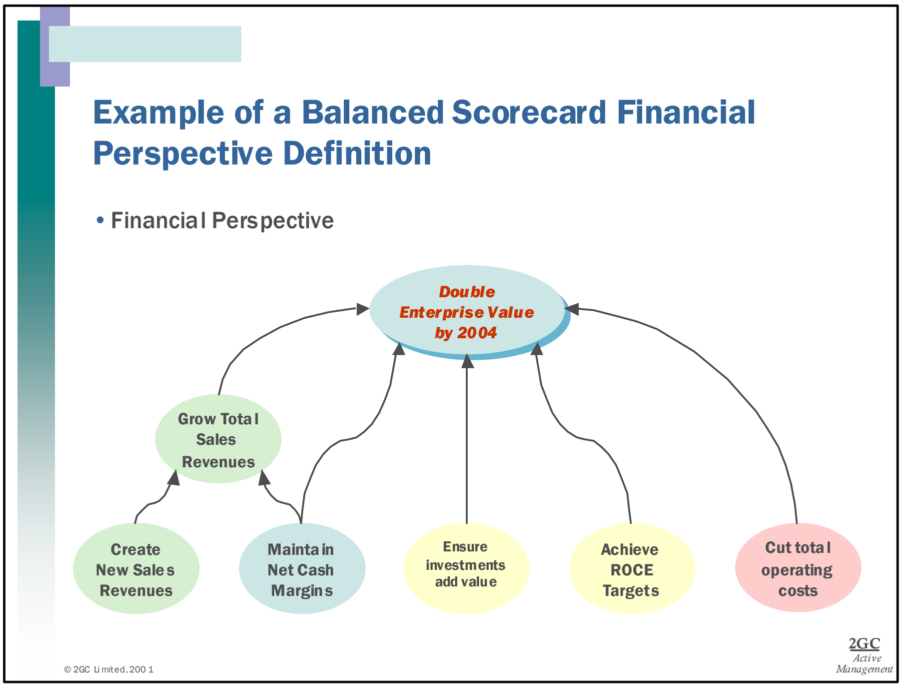


Figure 2: Example of a Balanced Scorecard Financial Perspective

new activity (for example improving the quality of the product) that will allow them to raise the price of the product (so increasing average purchase value). But equally they could introduce penalty charges to discourage the placing of small value orders. Both actions would lead to an increase in average purchase value, but only one the consequent increase in total revenue. By requiring managers to articulate in advance how they think their actions might lead to the financial outcomes demanded (it is needed if the measures for the remaining three perspectives are to be identified), the Balanced Scorecard development process triggers a formal articulation of the high level strategic plans that it is believed are required.

**By defining measure and targets for key elements of strategic plans, the Balanced Scorecard begins to offer to managers (and their supervisors) mechanisms to evaluate the effectiveness of strategic hypotheses as they are being applied – rather than waiting for the retrospective results of an EVA calculation at the end of a period.**

Combinations of EVA type calculations and Balanced Scorecard are not new – 2GC is aware that combinations of this type have been developed by AT&T (using EVA) in the USA and by Boots plc in the UK (using other Shareholder Value measures).

# Conclusion

EVA and Balanced Scorecard are both tools that have become popular during the 1990's, and both have valuable application potential as tools to help managers to focus more effectively on the creation of shareholder value. However while EVA is efficient at tracking the relative value generating performance of an organisation and its components, Balanced Scorecard is a powerful complementary tool useful to guide the management of strategic and operational plans intended to trigger the sought value generating improvements.