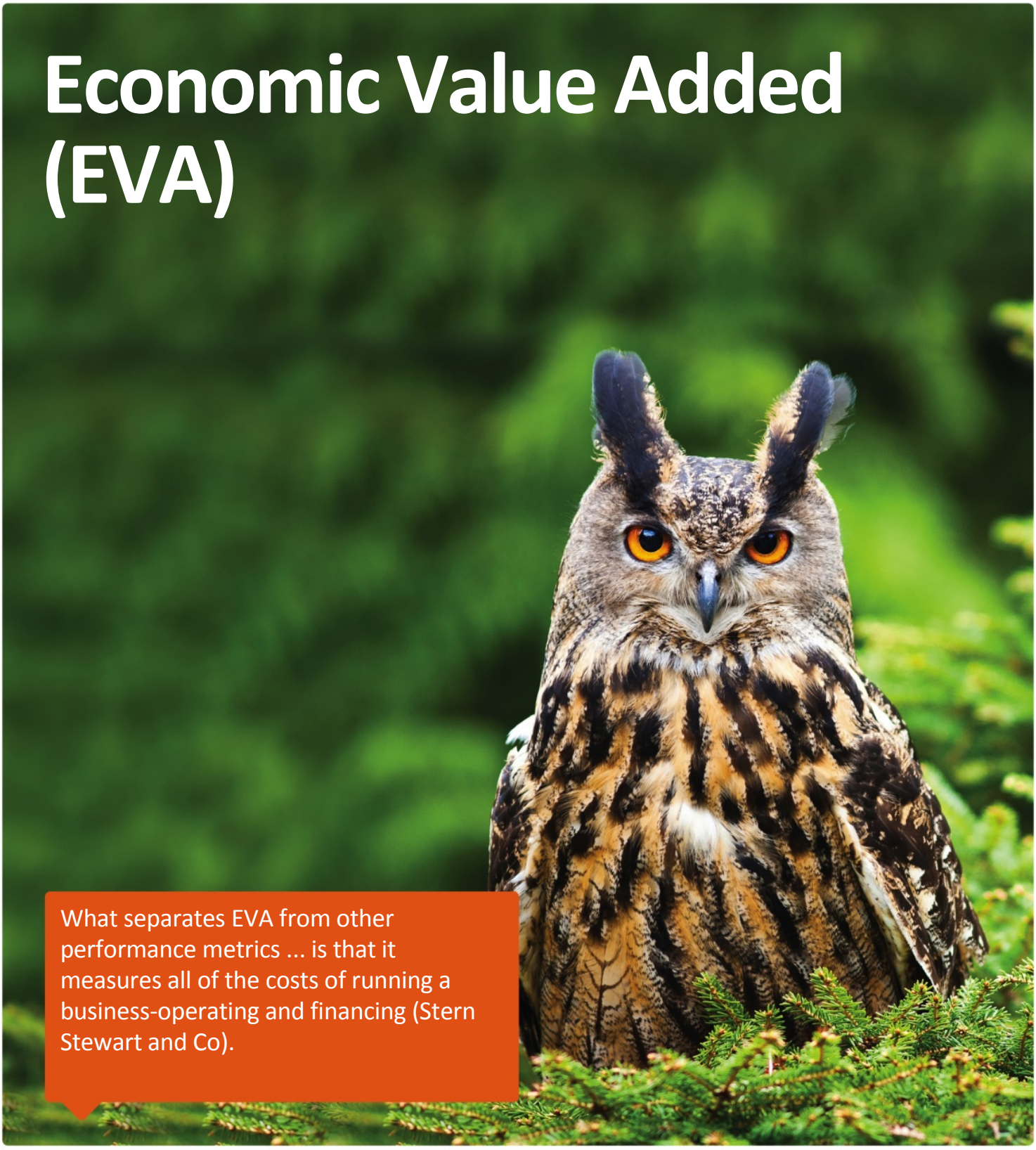
CIPS Procurement topic

Economic Value Added (EVA)



What separates EVA from other performance metrics ... is that it measures all of the costs of running a business-operating and financing (Stern Stewart and Co).

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Introduction

Economic Value Added (EVA) is a popular concept in finance - unlike other measures of returns it claims to capture the difference between the value of - fully-accounted - outputs and the value of - fully-accounted - inputs. EVA is the 'profit' calculation that takes the cost of capital, along with more commonly-noted costs, into account (Stewart, 1991).

EVA gained widespread recognition in the 1990s. Many multinational corporations such as AT&T, Coca-Cola and GE have used EVA to gauge their performance (Brigham and Houston, 1998). Similarly, investment analysts study company EVA along with Earning per Share (EPS) and Price-Parnings (P/E) ratios. EVA can be applied to capital budgeting, valuation, management control, and to incentive compensation (Stewart, 1991).

The computation of EVA can for many firms be simple; for others, less so. It might be that the Net Operating Profit after Taxes (NOPAT) calculation – a figure that has no equivalence in the totals found on the typical Profit and Loss statement - requires some sophistication to capture the value remaining for investors. Similarly, the Cost of Capital estimate is sensitive to the changeable proportions of debt and equity on the balance sheet and to the changeable variance in the stock price (if, that is, analysing a firm quoted on a stock market). Small changes in these calculations can have significant effects on the Cost of Capital estimate which, in turn, alter the EVA estimate (Fama and French, 1999).

Definition

Economic Value Added (EVA) is the profit earned by the firm, less the cost of financing its capital (Stewart, 1991). It is also known as 'economic profit'. EVA captures the idea that value is created when the return on the company's capital employed is greater than the cost of that capital. It can be calculated by making adjustments to standard company accounts - potentially there are over one hundred adjustments to be made. For most firms, however, only a handful of alterations are material to the final estimate: EVA = Net Operating Profit after Taxes - Cost of Capital.

Successful Application

EVA has practical value whenever the measurement of financial performance is critical. This could be a corporation studying the performance of its business units or an investment analyst assessing the potential of various stocks. However, firms can experience a shifting balance of debt and equity. Similarly, the variance of company stock, required to calculate the cost of equity, itself varies over time. Hence the Weighted Average Cost of Capital (WACC) calculation entails data that is averaged over a period (typically a year). According to Stewart (1994): “In most cases, we find it necessary to address only some 20 to 25 issues in detail – and as few as 5 to 10 key adjustments are actually made in practice. We recommend that adjustments to the definition of EVA be made only in those cases that pass four tests below: Is it likely to have a material impact on EVA? Can the managers influence the outcome? Can the operating people readily grasp it? Is the required information relatively easy to track or derive?”

Steps to Successful Application

- Calculate the Net Operating Profit After Tax (NOPAT): This is derived from the profit and loss account.
- Calculate the Total Capital ("TC") employed in the business: This is the sum of both debt and equity capital.
- Establish a Weighted Average Cost of Capital (WACC%): If, for example, company capital is 75% debt at a cost of 10% a year, and 25% equity at a cost of 20% a year, then the WACC%=75%x10 + 25%x20, which gives 12.5%.
- Calculate: EVA = NOPAT – (WACC% x TC).

Grant (2002)

Hints and tips

- Consistency in how calculations are performed is critical to success in using EVA. For example, during 1995 Williams Holdings, the engineering conglomerate, had an EVA of minus £41m with capital of £2.3bln according to analysts at NatWest Markets. Yet only a few months before, Stern Stewart had calculated a positive EVA for Williams on capital of £1.4bln (Blair, 1997).
- EVA is well-suited to financial institutions, such as banks, needing top-down measures to help allocate capital under conditions of volatility (Uyemura et al, 1996).

Potential Advantages

- EVA distils into a single statistic the value created after meeting all capital costs (Kay, 1993).
- EVA gets managers thinking more like investors which can have beneficial effects on performance as equated with the creation of shareholder value (O'Byrne, 1996).
- Used operationally, EVA clarifies how value is created: invest more capital that offers returns above Weighted Average Cost of Capital (WACC); reduce the capital employed; improve returns by developing sales, slim expenses or reduce the cost of capital (Stewart, 1991).

Potential Disadvantages

- EVA suffers the failing of any historically-based single metric; it does not highlight the potential benefit of large investments for future profits (Damodaran, 1998).
- EVA metrics tend to converge to more traditional accounting measures and to market returns when analysed over the long-term, hence reducing the marginal benefit in their use (Biddle et al., 1997).
- Companies and investments are drowning under a weight of financial measures – of which EVA is yet another - all of which fail to answer the basic questions of long-term business credibility (Stern, 2010).

Case Studies

- Coca-Cola's stock price increased from US$3 to over US$60 when it first adopted EVA in the early 1980s (Brigham and Houston, 1998).
- European banks are on average 36% shareholder value inefficient (100% efficiency relates

to maximising EVA given the value of inputs and outputs); shareholder value efficiency is found to be the most important factor explaining value creation in European banking, whereas cost and profit efficiency only have a marginal influence (Fiordelisi, 2007).

- Between 1990 and 1998 the networking firm Cisco Systems had a 90% growth in its EVA (from US$9m to US$775m) and a 100% in its MVA. In 2000, however, the company's EVA turned negative (-US$365m) when its MVA was estimated at around US$272m. This data shows the benefits of complementary usage of financial characteristics (Grant, 2003).

Further Reading/References

CIPS Source Downloads

N/A

Web Resources

- Should a company tracking EVA? ://www.inc.com/jeff-haden/what-is-economic-value-added.html
- A simply-stated definition of EVA ://moneyterms.co.uk/eva/
- Detailed account of valuation calculations involving EVA ://w4.stern.nyu.edu/~adamodar/New_Home_Page/lectures/eva.html
- A brief overview of EVA definition and uses ://www.valuebasedmanagement.net/methods_eva.html
- An overview of EVA with a simple worked example ://www.balancesheetwalk.com/economic-value-added.htm

Books

- Fundamentals of Financial Management, Eugene Brigham, ISBN 978-0324597707
- Foundations of Economic Value Added, James L. Grant, ISBN 978-0471234838
- Foundations of Corporate Success, John Kay, ISBN 978-0198287810
- The EVA Challenge, Joel M. Stern, John S. Shiely & Irwin Ross, ISBN 978-0471478898
- The Quest for Value, G.Bennett Stewart, ISBN 978-0887304187

References

- Austin, L.M. (2005) Benchmarking to Economic Value Added: The Case of Airways Corporation of New Zealand Limited. Benchmarking: An International Journal, Vol. 12(2), pp. 138–150.
- 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, Vol. 24(3), pp. 301-336.
- Blair, A (1997) UK: EVA Fever. Management Today. Wednesday, 1 January.
- Brigham, E. and Houston, J. (1998) Fundamentals of Financial Management. (8th Ed.) Dryden.
- Damodaran, A. (1998) Value Creation and Enhancement: Back to the Future. Contemporary Finance Digest, Vol. 2(4), pp. 5-52.
- Fama, E.F. and French, K.R. (1999) The Corporate Cost of Capital and the Return on Corporate Investment. The Journal of Finance, Vol. 54(6), pp. 1939-1967.
- Fiordelisi, F. (2007) Shareholder Value Efficiency in European Banking. Journal of Banking and Finance, Vol. 31(7), July, pp. 2151-2171.

- Grant, J. (2003) Foundations of Economic Value Added. (2nd Ed.) John Wiley and Sons.
- Griffith, J.M. (2005) The True Value of EVA. Journal of Applied Finance, Vol. 14(2), Fall/Winter 2004.
- Kay, J. (1993) Foundations of Corporate Success. Oxford University Press. Oxford.
- Mittal, R.K. and Sinha, N. (2008) Challenges of Implementing Economic Value Added: A Case Study of Godrej Consumer Products Limited. Global Business Review, Vol. 9(2), pp. 287-298, August.
- Mwita, J.S. (2000) Performance Management Model: A Systems-based Approach to Public Service Quality. International Journal of Public Sector Management, Vol. 13(1), pp. 19–37.
- O'Byrne, S.F. (1996) EVA and Market Value. Journal of Applied Corporate Finance, Vol. 9(1), pp. 116-125.
- Stewart III, G.B. (1991) The Quest for Value. Harper Business, New York.
- Stewart III, G.B. (1994) EVA®: Fact or Fantasy. Journal of Applied Corporate Finance, Vol. 7, pp. 71-84, Summer.
- Stern, S. (2010) Investors Want You To Tell a Better Story. Financial Times, 31 May.
- Uyemura, D.G., Kantor, C.C. and Pettit, J.M. (1996) EVA for Banks: Value Creation, Risk Management, and Profitability Measurement. Journal of Applied Corporate Finance, Vol. 9(2), pp. 94-113.

Video

[MVA] Market Value Added & [EVA] Economic Value Added

://www.youtube.com/watch?feature=player_embedded&v=ZCaeMTSTWYs

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