



EVA for Middle-Market Companies

Adopting Economic Value Added (EVA) concepts by middle-market companies could help prevent unwise business decisions.

by William S. Hanneman

“Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that the business pays taxes as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources. Until then, it does not create wealth: it destroys it.”¹ Peter Drucker

In the nineties, value-based performance measures gained immense popularity. In particular, Economic Value Added, commonly known by its registered trademark, EVA², was adopted by many large companies as the guiding principle for their corporate policy.

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cerning the implementation of EVA in large companies, there is not much evidence of its use among smaller, middle-market-size businesses. Indeed, few of our clients have adopted the principles of EVA, mostly it seems, because it is perceived as too complex. That is unfortunate.

Over the years, we have observed that the management and financial practices of many privately held companies often lead otherwise smart managers to make unwise decisions. Adopting EVA concepts could remedy that.

EVA differs from traditional income statement measures by assessing a cost for all of the capital that is invested in an enterprise. Implemented correctly, EVA does more than

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just measure corporate performance; it is a framework that can be used to guide every management decision, from annual operating budgets to capital budgeting, strategic planning, and acquisitions and divestitures. It is also often used as a corporate performance measure to align the objectives of managers with the interests of shareholders.

FOUR STEPS TO CALCULATE EVA

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many cases, it is actually simpler than for larger businesses. Nearly all of the information needed to perform EVA calculations can be obtained from the company's income statements and balance sheets. Using this information, there are four steps to calculate EVA.

Step 1: Determine the Total Amount of Invested Capital

Invested Capital is all of the money invested

in a company by debt holders and equity investors. Invested Capital can be estimated by adding all of the interest bearing debt to the amount of the owner's equity or, alternatively, by subtracting all non-interest bearing liabilities from total assets.

Step 2: Determine the Company's Cost of Capital

The cost of capital represents the total return required by all of the suppliers of the Invested Capital. That cost depends upon the predictability of business performance, the size of the business, and the general level of interest rates. A common measure is the weighted average cost of capital (WACC). This figure (expressed as a percent) is then used to develop a capital charge (Invested Capital * WACC) over which the business must earn to create shareholder value.

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Step 3: Calculate the Net Operating Profit After Tax (NOPAT)

NOPAT is a measure of the company's ability to generate cash from recurring business activities, without regard to its capital structure. NOPAT may require certain adjustments to the GAAP profit-and-loss or cash-flow statements for such things as non-cash charges, the substitution of economic depreciation for book depreciation, or to reflect the multi-

¹ Drucker, Peter F., "The Information Executives Truly Need." Harvard Business Review, Volume 73, Number 1, pp 54-62.

² EVA is a registered trademark of Stern Stewart & Co.

period benefits from single-period expenses.

Step 4: Calculate Economic Value Added

Finally, EVA can be calculated by subtracting the capital charge from NOPAT. If the result is positive, value has been created for the owners; if negative, the owner's wealth has been reduced.

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AN EXAMPLE

As a practical example of an EVA calculation for a small manufacturing firm, we illustrate the methodology, using data from one of our clients. The financial data has been simplified to allow the reader to concentrate more on the calculations, rather than on the accounting details. A summary of the income statement and balance sheet is presented below.

Income Statement (000s)	
Revenues	\$ 50,000
Operating Profit	4,500
Interest Expense	(900)
Net Income before Taxes	3,600
Income Tax	(1,260)
Net Income	\$ 2,340

Balance Sheet (000s)			
Assets		Liabilities & Equity	
Receivables	\$ 7,500	Payables	\$ 6,000
Inventory	2,500	Accrued Liabilities	4,000
Net Fixed Assets	30,000	Debt	18,000
		Equity	12,000
Total Assets	\$ 40,000	Total Liabilities & Equity	\$ 40,000

Most managers would conclude that this is an attractive business, with a strong operating profit and margin (\$4.5 million and

9%, respectively), and a net return on assets of 5.9%.

Let's see how these conclusions stand up under the application of EVA metrics. The following tables show the calculations for each of the four steps outlined above.

Table 1 shows the calculation of the amount of Invested Capital.

Table 1 An Estimation of Invested Capital	
Total Assets	\$ 40,000
Less: Payable	(6,000)
Accruals	(4,000)
Invested Capital	\$ 30,000

The firm's estimated after-tax Weighted Average Cost of Capital is based on the book balances of debt and equity in the capital structure. This calculation is shown in Table 2. A more sophisticated adjustment would measure the market values of this capital and would more precisely estimate the cost of equity as a function of the expected variability of the cash flows.

Table 2 An Estimation of Invested Capital				
	\$000's	%	A-T Cost (%)	Weighted Average (%)
Debt	\$ 18,000	60%	3.25%	1.95%
Equity	12,000	40%	25.00%	10.00%
Total	\$ 30,000	100%		11.95%

The product of the Invested Capital and the WACC is the Capital Charge, the amount or hurdle over which the business must perform to create value for its shareholders.

Assuming that book depreciation is equivalent to economic depreciation, Table 3 shows an estimate of NOPAT for the period.

Deducting the Capital Charge from the firm's performance (NOPAT), demonstrates that this "attractive" business actually deteriorated shareholder value by \$660,000 during the period as shown in Table 4.

As might be obvious from this example, this business could generate value for its shareholders either by improving its profitability, by reducing the amount of Invested Capital, or both.

Table 3 An Estimation of Net Operating Profit After Tax (NOPAT)	
Net income after tax	\$ 2,340
Interest Expense	900
Interest tax-shield	(315)
NOPAT	\$ 2,925

Table 4 Economic Value Added	
EVA	= NOPAT - [INVESTED CAPITAL * WACC]
EVA	= NOPAT - [CAPITAL CHARGE]
\$(660)	= \$2,925 - [\$30,000 x .1195]

SUMMARY

EVA's capital charge causes managers to consider the effect of all decisions on the balance sheet, as well as the income statement, and it provides a clear, objective basis for weighing tradeoffs between the two. For example, production managers could use EVA to optimize the tradeoff between long production runs and the higher inventories that long runs require. Salesmen can learn that generous payment terms can actually eliminate the economic profit in a sale. If implemented correctly, an EVA mentality can turn managers into genuine owners, causing them to lengthen their horizons and constantly seek out sustainable competitive advantages.

The unique challenges facing middle-market size firms do not change the economic principle that, in order to prosper and grow successfully, a company must generate average returns that are consistently higher than its capital costs. Implementing EVA in middle-market companies can be a powerful step in that direction. ♦



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ABOUT ZACHARY SCOTT

Zachary Scott is an investment banking and financial advisory firm founded in 1991 to serve the needs of privately held, middle-market companies. The firm offers a unique combination of in-depth knowledge of the capital markets and industry competitive dynamics, sophisticated analytical capabilities, and proven expertise in structuring and negotiating complex transactions. For more information on Zachary Scott, please go to ZacharyScott.com.

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