

NAfMA Submission Report (Attachment C)



Economic Value Added (EVA^{TM*}) or also known as Economic Profit

INTRODUCTION

Economic Value Added is a method of determining the extent to which a company earns profits in excess of its cost of capital, or said differently, generates returns greater than that found in a comparably risky portfolio of debt and equity.

Four critical components to successful implementation of an Economic Value Added model are:

1. Determination of the capital allocated to a subject business;
2. Determination of the subject business' cost of capital; and
3. Determination of the subject business' economic profit (that is, reported profit adjusted to eliminate accounting distortion).
4. Annual measurement of changes in Economic Value Added. It is the year-over-year growth in Economic Value Added that is most important.

CALCULATION

$$\text{Economic Value Added} = \text{Net Operating Profit After Taxes (NOPAT)} \text{ minus a Capital Charge}$$

NOPAT = Operating profit adjusted for one time charges or gains and other accounting items that distort a company's reported profitability.

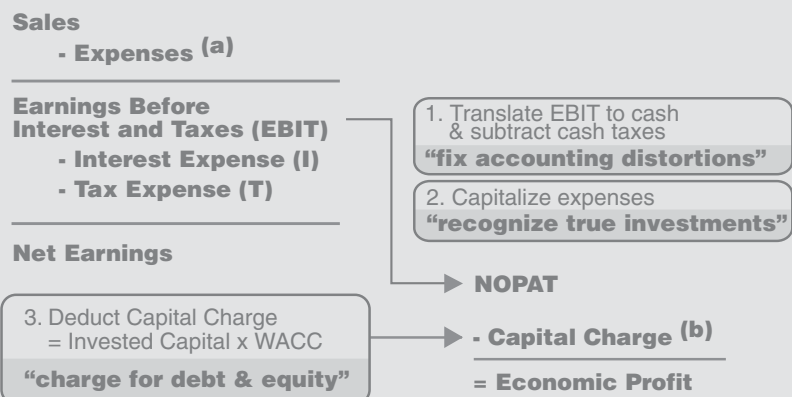
Capital Charge = Total Capital x Cost of Capital.

Total Capital = Total Debt + Shareholders' Equity (from the beginning of the year).

Cost of Capital = Weighted Average After-Tax Cost of a Firm's Debt and Equity (WACC).

Cost of Equity is built-up using historic stock market return data (risk free rate plus equity risk premium). Cost of debt is after tax cost of debt for subject company's borrowing costs.

The figure below illustrates economic profit



(a) Includes cost of goods sold (COGS), operating expenses and depreciation.

(b) Capital Charge = Weighted average cost of capital (WACC) x Invested Capital.

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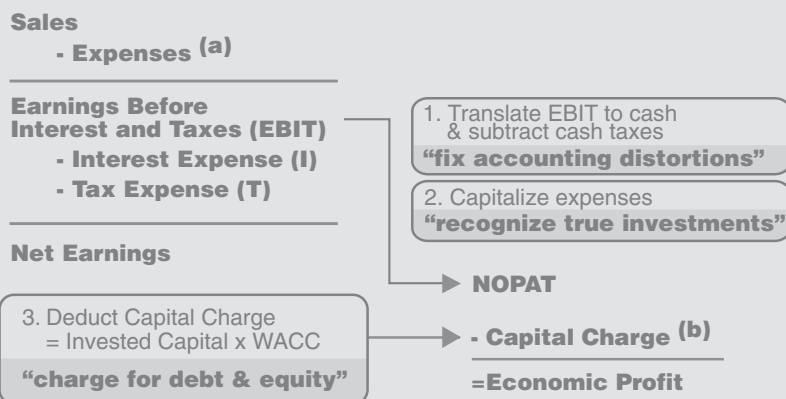
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National Award

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■ ■ ■ CALCULATION continued

The calculation starts with earnings before interest and taxes (EBIT), which is a pure income-statement (accounting-based) measure. First, several adjustments are made to move the measure nearer to representing actual cash flow.

Second, certain expense items (i.e. money spent in the current accounting period) are identified as economically really being investments. That is, they are truly meant to create a long-term asset of some sort. Those expenses are then reclassified onto the balance sheet.

Those first two steps produce net operating profits after taxes (NOPAT). The idea behind NOPAT is to get a cash-based measure of operating performance. By the way, if you are looking for the exact analog of NOPAT on the income statement, you won't find it. The nearest figure is something we might call "earnings before interest but after taxes" (EBIAT).

Finally, because NOPAT represents profits before the cost of debt service and the cost of equity capital, our next step is to deduct a capital charge. The capital charge is what investors, as a group in total, will need to make their investment exactly worthwhile; it could also be called "economic rent". If NOPAT equals the capital charge, then the company just barely met its "rent obligations" of investors - but, in doing so, produced no economic or excess profits. Any NOPAT profits above the capital charge are truly in excess and are called economic profits or value added.

SOURCE: This tutorial can be found at: <http://www.investopedia.com/university/EVA/>

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