Research Paper Commerce

Economic Value Added

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ABSTRACT

The goal of all companies is to maximize the shareholder's value. The shareholder's wealth is measured by the returns they receive on their investment. Returns are in two parts, first is in the form of dividends and the second in the form of capital appreciation reflected in market value of shares.

Currently investors world are demanding shareholder's value than just high returns. In India, the concept of shareholder value is gaining ground, particularly after the liberalization on foreign holdings in Indian companies. Foreign institutional investors emphasized and demanded focus on shareholder's value then other parameters.

The shareholder's activism reached an unforeseen level in the United States in the 1980s. Investors in Europe have also increased the pressure on companies to maximize shareholder value .The New York based Financial advisory Stern Stewart and Co. postulated a concept of economic income in 1990 in the name of 'Economic Value Added'. EVA is a modified version of residual income concept. EVA has provided financial discipline in many U.S. companies and encouraged managers to act like owners and boosted shareholder's returns and the value of their companies. In the present article an attempt has been made to discuss the various aspects of Economic Value Added viz, Evolution of Economic Value Added, what is EVA, How to calculate EVA, difference between EVA and net income, when EVA increased and decreased, Limitations of EVA, Importance of EVA and Functions of EVA.

Keywords : EVA, Accounting, Shareholder's wealth

Introduction

Accounting is mainly concerned with external reporting i.e. reporting to stockholders' governments, creditors and other outside parties. The two basic financial statements which are required to be prepared by concerned under company's act 1956 are profit and loss account and balance sheet. Other supplementary financial statements are also prepared during an accounting year, which is required for investing and financial decisions.

Now a days maximizing shareholder values has always been the ultimate aim of every company but traditional performance measure like return on investment (ROI) and earning per share (EPS) have failed to indicate the shareholder creation. Hence, value based measures have received a lot of attention in the recent years. There are several value based measures such as cash flow return on investment (CFROI) developed by Boston Consulting Group, cash value added (CVA) by Holt Value Associates, shareholder value added (SVA) created by Alfred Rappot and LEAK/ALCAR consulting group, market value added (MVA) by Academicians in the field of Accounting and Economic Value Added (EVA) developed by Stem and Stewart Consulting Company. Among these 'EVA' is the most widely used and popular concept because it happens to be an easier concept compared to others and above all it is cost effective.

Therefore, in recent years another financial statement known as Economic Value Added Statement (EVA Statement) finds its place in the annual reports of many leading companies. Keeping in view the growing awareness of existing and perspective shareholders and emergence of EVA as performance indicator same corporate giants in our country like Infosys, BPL, Hindustan Lever Ltd., Colgate Palmolive (India) Ltd., Nestle (India) Ltd. And Godrege Consumer Products Ltd have started to present EVA statement voluntarily as supplementary statement in their annual reports in recent times.

Evolution of Economic Value Added Concept

EVA is not a new concept. The idea of EVA has been used around 400 years ago. To overcome the limitation of accounting based financial performance New York (US) based advisory firm Stem Stewart & Company introduced concept of economic income in 1990 in the name of economic value added and EVA is patent of the company. EVA eliminates many of ROIs inherent limitations.

EVA is one variation in accounting performance measure called Residual Income with necessary adjustment in capital and income. In 1890 Alfred Marshall mentioned residual income concept as Economic Profit. He defined economic profit as total net gain less the interest on capital invested at the current rate. The idea of residual income was introduced first in Accounting Literature by Church in 1917 and in 1924 by Scovell and appeared in Management accounting Literature in 1960s.

Till 1970 or earlier residual income did not get wide publicity and was not regarded as performance measure by corporate sector. Then after economic value added was marketed with a concept of market value added and it did offer theoretical sound like market valuations. EVA is a company's net operating profit after tax and cost of capital. It represents the value added to shareholders wealth by generating operating profits in excess of the cost of capital employed in the business. It is based on residual income after charging the cost of capital provided by leaders and shareholders.

If the capital cost is lower than the NOPAT – the firm is able to create value for over a period but if it higher than the NOPAT – the firm is not able to generate value for over the period but it can be said it has worked as value destroyed even though it may be reporting positive and growing EPS or Return on Capital Employed.

What is EVA?

It is a performance metric that calculates the creation of shareholder value. It distinguishes itself from traditional financial performance metrics such as net profit and EPS: EVA

is the calculation of what profits remain after the costs of a company's capital - both debt and equity - are deducted from operating profit. The idea is simple but rigorous: true profit should account for the cost of capital.

Definition given by Stem Stewart
EVA is net operating profit minus an appropriate charge for the opportunity cost of all capital invested in an enterprise. As such, EVA is an estimated of true "economic" profit, or the amount by which earning exceed or fall short of the required minimum rate of return that shareholders and lenders could get by investing in other securities of comparable risk.

Difference between EVA and Net Income
To understand the difference between EVA and its older cousin, net income, let's use an example based on a hypothetical company, Ray's House of Crockery. Ray's earned 100,000 on a capital base of 10,00,000 thanks to big sales of stew pots. Traditional accounting metrics suggest that Ray is doing a good job. His company offers a return on capital of 10%. However, Ray's has only been operating for a year, and the market for stew pots still carries significant uncertainty and risk. Debt obligations plus the required return that investors demand for having their money locked up in an early-stage venture add up to an investment cost of capital of 13%. That means that, although Ray's is enjoying accounting profits, the company lost 3% last year for its shareholders.

Conversely, if Ray's capital is 100 million - including debt and shareholder equity - and the cost of using that capital (interest on debt and the cost of underwriting the equity) is 13 million a year, Ray will add economic value for his shareholders only when profits are more than 13 million a year. If Ray's earns 20 million, the company's EVA will be 7 million.

How to Calculate EVA?
EVA can be calculated as follows:

EVA = NOPAT - (TCE X WACC)

Where,

NOPAT = Net operating profit after tax

TCE = Total capital employed

WACC = Weighted average cost of capital

EVA calculation involves calculating three figures: NOPAT, TCE and WACC.

1. Calculation of NOPAT
It refers the quantum of net operating profit remained in the business after the payment of tax. It can be derived from the income statement. Its calculation based on accounting concept. The non-operating items like dividend/interest on securities invested outside the business, non-operating expenses etc. will not be considered.

Stem Stewart & Company has identified 164 adjustments that have to make. These because much complicated amongst these 10 to 15 adjustments are enough for calculation. Like written off R&D expenses, methods of valuing inventory LIFO, FIFO, Deferred taxes, excessive depreciation, certain marketing expenses, goodwill written off etc.

2. Calculation of TCE
The capital employed can be calculated through the assets side of the balance sheet or the liability side. From the assets side capital employed is the current assets less the non-interest bearing current liabilities i.e. the net working capital plus the net fixed assets. From the liability side it is the sum of interest bearing debt and net worth less any non-operating assets.

For calculating EVA use the beginning of the year capital employed as the capital available to the management to earn the returns and it helps in evaluating capital budgeting decisions. It is prudent to use the book value figure in the EVA calculations, as the amount that has been entrusted to the management to employ in the business. The market value of a firm is the investor's capital and it is not the same as the firm's capital. The capital employed that earns operating profits is the book value of net assets and not the market value of a firm's stock.

3. Calculation of Weighted Average Cost of Capital
WACC is the weighted average of the Cost of Debt, Cost of Equity and Cost of Preference Capital with weights equivalent to the proportion of each in the total capital.

- Cost of Debt is the average interest rate paid by the company on its Debts subjects to tax.
- Cost of Preference Capital can be taken as the fixed rate of dividend.
- Cost of Equity can be found out using the CAPM, which holds that a firm's equity cost of the composition is a risk-free rate of return for a stock market plus a risk premium representing the volatility of the share price. The formula for this is as follow:

Ke = Rf + B (Rm-Rf)

Where, Ke = Cost of Equity

Rf = Risk-Free Rate of Return

B = Beta is a measure of the risk of equity

Rm = Market Rate of Return.

Risk-Free Rate of Return (RF):
Risk-free rate of return is the rate of return on long-term government bonds. Bank rate can be taken.

Beta (B):
Beta measures the percentage change in securities returns for one percentage change in the market returns. It can be calculated by Regressing the company's return e.g. Equity Rate (Y) against the SENSEX (X)

Equity Rate (ER) = Net Earnings available to shareholders X 100
Equity Capital
Y = a + bx where 'b' stands for Beta. It can be obtained by solving folloing to equations:

Ey = na + b Ex

$Exy = aEx + bEx^2$

Market Rate of Return (RM):
Marktet rate of return of marktet security. It can be calculated with the help of BSE Index Number. The formula for calculating it is as follow:

Market Rate = Current year's closing index-previous year's closing index
Previous year's closing index
Cosost of Debt (Kd):
For calculating this secured and unsecured loans excluding non-interesrt bearing liabilities should be considers. The formula is as follow:

Kd = Interest (1 – tax rate)
Total debts employed excluding non-interest bearing liabilities

WACC = Ke X Equity Capital + Kd X Total Debts

Equity Capital + Total Debts

When EVA will Increase OR Improved

- Operating profit can be made to grow without employing more capital, e.g. Greater Efficiency.
- Capital is curtailed in activities that don't cover the cost of capital, e.g. liquidate unproductive.
- Additional capital is invested in projects that returns more than the cost of obtaining a new capital e.g. profitable growth
- Reducing cost of capital, which means employing more of debts, as debts is cheaper than equity or preference capital, e.g. Cost Control.
- No ceiling on the amount that manager can take home as incentive pay.
- Managers think like, act like and are paid like owners.
- Target is set over a time horizon e.g. usually more than one year. Usually 3 to 5 years forcing a long term view into managerial decision-making.
- Cuts the capital cost and inculcates financial discipline among employees.
- Increasing EVA directly benefits the shareholder and has been found to have a positive influence on a company's stock price.
- Reducing the capital employed without affecting the earning.
- Increase NOPAT with the same amount of capital.

When EVA will decrease or negative

- Involves lot of complexity globally, Stem Stewart is said, in some cases, to make as many as 165 adjustments to work out the weight average capital cost of companies.
- Works better at the individual level than team level, unless goals are appropriately structured.
- Many make companies-adverse, new investments that look risky or difficult to quantify in terms of expected payback may never be made in use.

Ending the confusion of multiple goals

Most companies use a numbing array of measures to express financial goals and objectives. Strategic plans often are based on growth in revenues or market share. Companies may evaluate individual products or lines of business on the basis of gross margins or cash flow. Business units may be evaluated in terms of return on assets or against a budgeted profit level. Finance departments usually analyze capital investments in terms of net present value, but weigh prospective acquisitions against the likely contribution to earnings growth. And bonuses for line managers and business-unit heads typically are negotiated annually and are based on a profit plan. The result of the inconsistent standards, goals, and terminology usually is incohesive planning, operating strategy, and decision making.

Importance of EVA

EVA is the residual income after charging the company for the cost of capital provided by lenders and shareholders. It represents the value added to share holders by generating operating profits in excess of the cost of capital employed in the business. EVA indicated the impact on shareholder's wealth whereas the others traditional performance measures such as IRR, ROI, ROCE, ROA etc. indicate the rate of return. ROI and other traditional performance measures ignore the definite requirement that the rate of return should be at least as high as the cost of capital. Sometimes ROI ignores projects yielding more than the cost of capital just because the return happens to be less than their current return.

Functions of EVA

1. EVA as a performance measure

There is continuous endeavor to develop a single measure that captures the overall performance yet, which is easy to calculate and is also economic. In order to achieve goal congruence manager's compensation is often like with the performance of the firm. Investors decide whether to invest in a firm or to continue with the firm or to exit from it, only on the basis of overall performance of the firm. This is the only suitable solution to the above stated problems in EVA.

ROI, ROCE and ROA give us the rate of return earned by the firm with respect capital invested in the firm. The most important limitation of these measures is derived from limitations inherent in the measurement of accounting profit but these limitations are also associated with EVA. The difference lies only in the fact that the cost of equity is also factored to arrive at the residual income.

EVA emphasizes that in order to justify investments in the long run they have to produce at least a return that covers the cost of capital as otherwise the share holders would better off investing else where. This approach included that the organization tries to operate without excess capital, while accountant are familiar with the cost of residual values, its application in economical value measurement as a means of evaluating underlining business performance is nothing short of an overhaul of traditional accounting concepts.

2. EVA as a Corporate Philosophy

EVA when implemented at every level of managerial decision-making process encourages managers to deploy resources only on value enhancing activities and to align the interest of shareholders with managers. This involves two things one likes managerial compensation package with EVA and second is to inculcate the culture of evaluation every action from the view point that it should generate EVA. The ultimate outcome should be in enhancement in the shareholder's wealth measured by the capital market.

The simplicity of EVA in communicating the very fundamental principle that only the generation of surplus over cost of capital can enhance shareholders wealth makes it a management technique superior to other planning and control techniques.

Use of EVA to improve financial corporate governance in the sense that it motivates the managers to get rid of value destructive activities and invest only in those projects those are expected to enhance shareholder's value. Using EVA or residual income measures for incentive compensation leads to:

1. Improvement in operation efficiency by increasing asset turnover.
2. Disposal of selected assets, which have fail in earning adequate returns.
3. Reduction of new investments, which will have inadequate returns as compared to the overall cost of capital.
4. More share repurchases.

Teitelbaum observed that EVA has moved from buzzword to financial phenomenon. A performance measure, as an analytic tool and as a management discipline, EVA is cropping up all over.

Benefits by EVA

There are so many benefits of EVA. Some of the benefits are mentioned below in brief.

Management:Improvements in capital efficiency.

- Greater focus on tax optimization.
- Greater focus on optimal capital structure.
- Improved strategic and scenario planning.
- More robust acquisition analysis tools.

Motivation:

- Long term focus

* Greater alignment between shareholder and employ interest.

Limitations of EVA

Economic value added has become a popular management concept, which is still involving. There are many limitations that need to be reckoned before going all out for this concept.

1. While individual projects are selected on the basis of positive NPVs and their economic life, the sum total of projects may result in a negative present value in some total of earlier depending on the nature of the projects. This may be more pronounced in the case of companies that growing large scale with massive addition of assets.

2. Even when NPV is positive acquisition of assets can result in a deduction of EVA for a company. Now suppose the firm could acquire a new equipment at a cost of Rs. 1,50,000. This machine is estimated to produce expenditure saving of Rs. 40,500 a year for 5 years. Assuming that the cost of capital is 10%, the investment will be considered attractive since the NPV is positive.

3. Depending on the method of depreciation used, the company may report a positive or a negative EVA.

4. Managers may be motivated to take assets on lease of owning them to report a positive EVA.

5. In the computation of NOPAT other income is considered when the contribution from this head is high. Manages may be motivated to strip assets to report a positive EVA.

6. The cost of equity is considered to be more that debt. But if company raise equity to pay of debt, the risk complexion of the company only reduces with the results the investors required rate of return is lower. Such factors are not considered in the computation of EVA.

7. The cost of capital is related to the risk of the firm and increases if the risk increases while the poor performance only increases the risking. There is no way have reducing the cost of capital consequent to increase the risk due to degrease in NOPAT. It is vicious circle and a company whose performance in the initial year has been poor will find it difficult to report a positive EVA.

Ways to improve EVA

There are basically two parts of EVA i.e. efficiency and growth. EVA is the difference between the percent rate of return and the percent rate of cost of capital, or what we call the return spread times the capital. To increase EVA a company can improve its efficiency, reduce its cost of capital or increase its capital. It is an issue of both quality and qunai8ty. Eva as a measure, points out that growth without efficiency is bad, and also that efficiency without growth is not good. The following strategies can be recommended for improve EVA.

1. Generating more operating profit without investing any more capital in the business.
2. Investing additional capital in the businesses that earn more than the cost of capital.
3. Withdrawing or liquidating capital from businesses that failed to earn return greater than the cost of capital.

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