**Economic Value Added (EVA)**

The goal of financial management 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, of which market value is the dominant part. The market value of share is influenced by number of factors, many of which may not be fully influenced by the management of firm.

However, one factor, which has a significant influence on the market value, is the expectation of the shareholders regarding the return on their investment. The share prices are influenced by the extent to which the management is able to meet the expectation of the shareholders. Various measures like return on capital employed, return on equity, earnings per share, net profit margin, operating profit margin have been used to evaluate the performance of the business.

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). 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 shareholders’ returns and the value of their companies.

The company creates shareholder value only if it generates returns in excess of its cost of capital. The excess of returns over cost of capital is simply termed as economic value added (EVA). EVA measures whether the operating profit is sufficient enough to cover cost of capital. Shareholders must earn sufficient returns for the risk they have taken in investing their money in company’s capital.

The return generated by the company for shareholders has to be more than the cost of capital to justify risk taken by the shareholders. If a company’s EVA is negative, the firm is destroying shareholders wealth even though it may be reporting positive and growing EPS or return on capital employed.

**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

While calculation of NOPAT, the non-operating items like dividend/interest on securities invested outside the business, non-operating expenses etc. will not be considered. The total capital employed is the sum of shareholders’ funds, as well as, loan funds. But this does not include investments outside the business.

In determining WACC, cost of debt is taken as after tax cost and cost of equity is measured on the basis of capital asset pricing model (CAPM). CAPM is traditionally used by the founders of EVA.

**Under CAPM, cost of equity (Kc) is given by the following:**

Ke = Rf + bi(Rm – Rf)

Where,

Rf = Risk free return

Rm = Expected market rate of return

Bi = Risk coefficient of particular investment

EVA is expressed in terms of rupee figure and not as a percentage i.e. EVA measures the absolute rupee value of wealth created. EVA calculation removes the distinction between the providers of capital because the total capital employed in the business is taken, whether provided by shareholders or creditors. The EVA figure measures the value added after the claims or expectations of each of the group of capital providers have been met.

#### Suggestions to Improve EVA:

EVA is just a refinement of residual income. Residual income is defined as the difference between profit and the cost of capital. It differs from EVA in the fact that profits and capital employed are book figures i. e. the same appearing in the financial statements. No adjustment to profit and capital employed figures as reported in profit and loss account and balance sheet are made unlike EVA.

**EVA can be improved in any of the following ways:**

(a) Increasing NOPAT with the same amount of capital.

(b) Reducing the capital employed without affecting the earnings i.e., discarding the unproduc­tive assets.

c) Investing in those projects that earn a return greater than the cost of capital.

(d) By reducing the cost of capital, which means employing more debt, as debt is cheaper than equity or preference capital.

The EVA concept is very closely related to the NPV concept. The present value of an investment’s annual EVA stream is the same as its NPV. NPV analysis is a one-time measure of the value added by an investment. EVA is a continuous annual value added measure.

#### Steps in Implementing EVA:

**The implementation of EVA is a 4-step process which includes:**

(a) Measurement,

(b) Management System,

(c) Motivation and,

(d) Mindset.

**(a) Measurement:**

Any company that wishes to implement EVA should institutionalize the process of measuring the metric, regularly. This measurement should be carried out after carrying out the prescribed accounting adjustments.

**(b) Management System:**

The company should be willing to align its management system to the EVA process. The EVA based management system is the basis on which the company should take decisions related to the choice of strategy, capital allocation, merger and acquisitions, divesting business and goal setting.

**(C) Motivation:**

The companies should decide to implement EVA only if they are prepared to implement the incentive plan that goes with it. An EVA based incentive system, however, encourages managers to operate in such a way as to maximize the EVA, not just of the operations they oversee but of the company as whole.

**(D) Mindset:**

The effective implementation of EVA necessitates a change in the culture and mindset of the company. All constituents of the organization need to be taught to focus on one objective – maximizing EVA. This singular focus leaves no room for ambiguity and also it is not difficult for employees to know just what actions of their will create EVA, and what will destroy it.

#### Superiority of EVA:

EVA is a superior measure of corporate performance and reflects all the dimensions by which management can increase value.

**It helps in creation of wealth on the following grounds:**

(a) EVA is most directly linked to the creation of shareholder’s wealth over time. The term ‘maximizing value’ in the EVA context, means maximizing long-term yield on share-holders investment and not just the absolute amount of earnings/profits.

(b) The mechanism of EVA forces management to expressly recognize its cost of equity in all its decisions from the board room to the shop floor. The inclusion of this element in overall cost of capital results into the goal congruence of the managers and owners.

(c) An EVA financial management system removes all the inconsistencies resulting from the use of different financial measures for different corporate functions under the typical tradi­tional financial management system.

(d) EVA compensation system ties management’s interest with those of shareholders.

(e) EVA captures the performance status of corporate system over a broader canvas i.e., to arrive at true profits, cost of borrowed capital as well as cost of equity capital should be deducted from net operating profits. Further to maximize earnings is not sufficient, at the same time consumption of capital should be minimum/optimum under an EVA based system.

(f) EVA framework provides a clear perception of underlying economics of a business and enables managers to make better decisions.

(g) A regular monitoring of EVA emphasizes on problem areas of a company and helps managers to take corrective actions.

(h) It is used to assess the likely impact of competing strategies on shareholder’s wealth and thus helps the management to select the one that will best serve shareholders.

**Illustration:**

Consider a firm that has existing assets in which it has capital invested of Rs. 100 crores. The after-tax operating income on assets-in-place is Rs. 15 crore. The return on capital employed of 15% is expected to be sustained to perpetuity, and company has a cost of capital of 10%. Estimate the present value of economic value added (EVA) of the firm from its assets-in-place.

**Solution**:

Economic value added = (ROCE – WACC) x Capital employed

Capital employed = Rs. 100 crores

After tax operating income on assets in place Rs. 15 crores

Return on capital employed (ROCE) = 15%

Weighted cost of capital (WACC) = 10%

EVA = (0.15 – 0.10) x Rs. 100 crores = Rs. 5 crores

Present value of EVA of the firm from its assets-in-place (at a cost of capital 10% in perpetuity)

= Rs. 5 crores/0.10 = Rs. 50 crores