ECONOMIC VALUE ADDED

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A concept critical in evaluating the performance of any business is economic value added. In generic terms, value added refers to the additional or incremental value created by an activity or a business venture. It measures the economic rather than accounting profit created by a business after the cost of all resources including both debt and equity capital have been taken into account. Economic value added (EVA) is a financial measure of what economists sometimes refer to as economic profit or economic rent. The difference between economic profit and accounting profit is essentially the cost of equity capital – an accountant does not subtract a cost of equity capital from the computation of profit, so in fact an accountant's measure of income or profit is in essence the residual return to that equity capital since all other costs have been deducted from the revenue stream. In contrast, an economist charges for all resources in his computation of profit – including an opportunity cost for the equity capital invested in the

business – so an economist's definition and computation of the profit is net above the cost of all resources.

Corrective action to improve EVA

1. First, operating performance with respect to operating profit margins or asset turnover ratios could be improved to generate more revenue without using more capital.

2. Second, the capital invested in the business might be reduced by selling under-utilized assets

3. Third, redeploy the capital invested to projects and activities that have higher operating performance than the current projects or investments are exhibiting.

4. And fourth, if the business is not highly leveraged, change the capital structure by substituting lower cost debt for higher cost equity.

Advantages of EVA Analysis

1. In various cases, company pay bonuses to the employees on the basis of EVA generated.

2. Using EVA, company can evaluate the projects independently and hence decide on whether to execute the project or not.

3. It helps the company in monitoring the problematic areas and hence taking corrective actions to resolve those problems.

4. Unlike accounting profit, such as EBIT, Net Income and EPS, EVA is based on the idea that a business must cover both the operating costs as well as the capital costs

5. It also helps the owners of the company to identify the best person to run the company effectively and efficiently.

MARKET VALUE ADDED

Market value added is the difference between the company's market and book value of shares. According to Stern Stewart, if the total market value of a company is more than the amount of capital invested in it, the company has managed to create shareholder value. If the market value is less than capital invested, the company has destroyed shareholder value.

Market Value Added = Company's total Market Value – Capital Invested

With the simplifying assumption that market and book value of debt are equal, this is the same as

Market Value Added = Market Value of equity – Book value of equity

Book value of equity refers to all equity equivalent items like reserves, retained earnings and provisions.

In other words, in this context, all the items that are not debt (interest bearing or non-interest bearing) are classified as equity. Market value added (MVA) is identical in meaning with the market-to-book ratio. The difference is only that MVA is an absolute measure and market-to-book ratio is a relative measure. If MVA is positive, that means that market-to-book ratio is less than one. According to Stewart Market value added tells us how much value the company has added to, or subtracted from, its shareholders investment.

Market value of equity = Book value of equity + Present value of all future EVA

SHAREHOLDER VALUE ADDED (SVA)

Shareholder Value Added (SVA) represents the economic profits generated by a business above and beyond the minimum return required by all providers of capital. “Value” is added when the overall net economic cash flow of the business exceeds the economic cost of all the capital employed to produce the operating profit.

Benefits of Adopting SVA

The benefits of moving towards SVA include:

1. Overall, value-based performance measures will result in greater accountability for the investment of new capital, as well as for the use of existing investments.

2. Organization will have the opportunity to apply a meaningful private sector benchmark to evaluate performance.

3. Managers will be provided with an improved focus on maximizing shareholder value.

Drawbacks of Adopting SVA

1. A limitation in the use of SVA as a performance measure is that, by nature, it is an aggregate measure.

2. There may be certain enterprises which are subject to any degree of price regulation then it may not be possible for the management to adjust output prices to achieve a commercial return in response to upward movements in input prices.

3. Similarly, a reduction in direct Government funding would result in a decrease in SVA.

4. Combined with the use of traditional accounting measures, a thorough knowledge of the value drivers of the business will assist in determining the underlying causes of fluctuations in the value added measure.

5. The use of SVA is not a substitute for detailed analysis of business drivers, rather it is an additional measurement tool with an economic foundation.

1. Economic Value Added (EVA) is a measurement tool that provides a clear picture of whether a business is creating or destroying shareholder wealth.
2. EVA measures the firm's ability to earn more than the true cost of capital..

3. If a firm's earnings exceed the true cost of capital it is creating wealth for its shareholders.
4. The cost of capital is the rate of return required by the shareholders and lenders to finance the operation of the business.
5. This concept was devised by Stern, Stewart & Co.
6. EVA = Net Operating Profit - Taxes – Cost of Capital

1. Following information is given to you by NSZ Ltd.

EBIT	₹3,50,000
Capital Structure	
Equity Capital	₹4,25,000
Reserve & Surplus	₹3,25,000
10% Debentures	₹10,00,000
Dividend at the end of	₹35 per share
year (D_1)	₹1,400 per share
Market value of share	15%
Growth rate	30%
Income Tax Rate	

Calculate Economic Value added (EVA) with the help of above information.

Ans. 43,750

2. Calculate Economic Value added (EVA) with the help of the following information of Hypothetical Ltd.

Financial leverage	1.4 times
Capital Structure	
Equity Capital	₹170 lakh
Reserve & Surplus	₹130 lakh
10% Debentures	₹400 lakh
Cost of Equity	17.5%
Income Tax Rate	30%

Ans. 17.5 lakhs

1. How the economic value added (EVA) is calculated?

a. It is the difference between the market value of the firm and the book value of equity.

b. It is the firm's net operating profit after tax (NOPAT) less cost of capital.

c. It is the net income of the firm less cost that equals the weighted average cost of capital multiplied by the book value of liabilities and equities.

d. None of the above is correct.

2. Economic value added measures –

a. The excess earning over P/E ratio.

b. The excess returns over cost of capital.

c. The excess returns over existing EPS

d. The excess earning over ROE

3. If a company's EVA is negative –

a. It is destroying shareholders wealth even though it may be reporting positive and growing EPS or return on capital employed.

b. It is destroying the overall cost of capital of the firm.

c. It is increasing the overall cost of capital of the firm causing low NPV.

d. It is increasing the overall cost of capital of the firm which can be adjusted by risk premium.

4. EVA =?

a. PAT - (Capital Employed × WACC)

b. NOPAT- (Capital Employed × K_e)

c. NOPAT - (Capital Employed ×WACC)

d. NOPAT – (Total Assets × K_e × K_d)

5. Which of the following is advantage of EVA?

a. The use of EVA is a substitute for detailed analysis of business drivers.

b. EVA improves the overall cost of capital.

c. In some cases, company pay bonuses to the employees on the basis of EVA generated. Thus, it promotes the employees for working hard for generating higher revenue.

d. EVA improves the skill of financial analyst.

6. _____ represent the economic profits generated by a business above and beyond the minimum return required by all providers of capital.

a. Shareholder Value Added (SVA)

b. Economist Value Added (EVA)

c. Market Makers Value Added (MMVA)

d. Debt holders Value Added (DVA)

7. NSZ Ltd. has equity of 15 Million and 10% debentures 20 Million. Cost of equity is 18% and pre-tax cost of debt is 10%. Company estimates its EBI for 7 Million Applicable tax rate is 30%. What is the Economic value added of NSZ Ltd.

a. 0.088 Million

b. 0.678 Million

c. 0.798 Million

d. 0.533 Million

8. H Ltd. β is 1.8025. Dividend paid by the company last year was ₹9 per share on face value of ₹30. The risk free rate is 0.61275. Risk premium is 0.0825. Calculate cost of equity capital.

a. 21%

b. 6.28%

c. 14.77%

d. 12%

9. Rao Ltd. earns profit after tax ₹3,96,000. Corporate tax is 0.4. Its capital structure consist of equity shares ₹9,60,000; 15% Term loan ₹4,80,000. Cost of equity is 0.12. Its economic value added is –

a. ₹2,66,400

b. ₹2,80,800

c. ₹2,08,800

d. ₹2,80,008

10. An analyst has calculated economic value added of ₹43,750 for Z Ltd. WACC of the company is 11.5% and applicable tax rate is 30%. The company paid interest of ₹1,00,000 during the year. Total assets of the company are ₹17,50,000. What is profit after tax (PAT) of the company?

a. ₹2,45,000

b. ₹1,45,000

c. ₹1,75,000

d. ₹3,15,000

11. . Ramola Ltd. report its NOPAT ₹25,00,000. Its capital employed and economic value added is ₹60,00,000 & ₹19,00,000 respectively. What is overall cost of capital of Ramola Ltd.

a. 10.9%

b. 11%

c. 10%

d. 9.8%

12. Compute the EVA with the help of following information:

	₹
Equity	15,00,000
Debt (10%)	7,00,000
Profit after tax	4,00,000

Risk – free rate of return is 7%. Beta (β) = 0.9, Market rate of return = 15%. Applicable tax rate is 40%.

a. ₹1,87,0201,

b. ₹1,78,020

c. ₹1,87,200

d. ₹1,85,20

Answer

1. (b)	2.(b)	3. (a)	4. (c)	5.(c)	6.(a)
7.(c)	8.(a)	9.(b)	10.(c)	11.(c)	12.(a)