

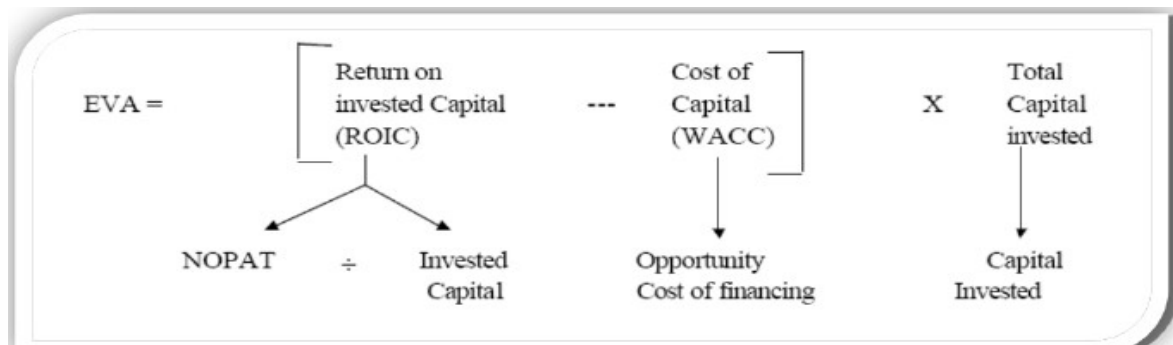
Value Based Management (VBM)

Creating value for shareholders is of utmost importance and most widely accepted as one of the dominant corporate objectives. To help companies create value for their shareholders, the concept of VBM has been developed. The concept of VBM combines finance and strategy, thereby giving the shareholders and companies, a holistic view of value creation at the organisational level.

Economic Value Added

Traditional measures ignore the definite requirement that the rate of return should be at least as high as the cost of capital. Conceptually EVA is superior to accounting profit as a measure of value creation because it recognizes the cost of capital and hence, the riskiness of a firm's operations.

EVA is Economic Value Added, a measure of economic profit. It is the maximum amount which the business is capable of distributing to its shareholders while remaining in the same position at the end of the period as it was at the beginning with fair practices. It is calculated as the difference between the Net Operating Profit after Tax and the opportunity cost of invested Capital. This opportunity cost is determined by the weighted average cost of Debt and Equity Capital (WACC) and the amount of Capital employed.



EVA is based on the principle that since a company's management employs equity capital to earn profits; it must pay for the use of this equity capital. Including a cost for the use of equity capital sets EVA apart from more popular measures of company's performance, such as return on assets (ROA), return on equity (ROE) and the efficiency ratio, which do not consider the cost of equity capital employed.

As a result, these measures may suggest a company is performing well, when in fact it may be diminishing its value to its shareholders. A positive EVA reflects that the company is increasing its value to its shareholders, whereas a negative EVA reflects that it is diminishing its value to its shareholders.

Strategies to improve / enhance EVA-

- ❖ Set targets to Improve ROCE.
- ❖ Invest capital only when return exceeds the cost of the capital.
- ❖ Divest capital when returns are less than cost of capital.
- ❖ Increase the return on existing project.
- ❖ Invest in new projects that have a return greater than the cost of capital.
- ❖ Use less capital to achieve the same return.
- ❖ Reduce the cost of capital.
- ❖ Curtail further investment in sub-standard operations, where inadequate returns are being earned.

Capital Asset Pricing Model (CAPM) –

For the purpose of arriving at EVA, cost of equity is computed using the CAPM formula given as under –

$$K_e = R_f + \beta (R_m - R_f)$$

Where,

K_e = Cost of equity;

R_f = Risk-free rate of return;

R_m = Rate of return on market portfolio

β = Beta coefficient

Net Operating Profit after Tax (NOPAT) = PBIT – Interest – Taxes

Market Value Added (MVA)

Market value added is the market value of the capital employed in the firm less the book value of equity capital employed. It is arrived by summation of paid up value of equity capital and preference capital, retained profits, short term and long term debt and deducting this from total market value of equity and debt. The formula is given as below –

- Market Value Added (MVA) = Market value of firm's equity – Equity Capital.**
- Market Value Added (MVA) = Total Market Value of Firm's Securities – (Equity Shareholders' Funds + Preference Share Capital + Debentures)**

The concept of MVA is applied to firms having market price of shares are available. Hence, it cannot be used widely or all types of companies. It is subject to fluctuations in the capital market of the country. Despite its limited applicability, the concept of MVA is popular and is of great relevance to equity shareholders, preference shareholders and debenture holders, especially in western countries like US and UK.

Problem 1: Calculate EVA by using below mentioned data for Reprographics India Ltd for the year ended 31st March 2013.

Particulars	Amt (Rs.Crs)
Average Debt	30
Average Equity Capital	270
Profit After Tax	145
Interest After Tax	0.5
Cost of Debt (Post Tax)	7.50%
Cost of Equity	15%

Problem 2: Following balance sheet of ABC Ltd is the given below. You are required to calculate the EVA for ABC Ltd based on the Balance Sheet and additional details.

Liabilities	Rs (Lakhs)	Assets	Rs (Lakhs)
Share Capital	1,000	Fixed Assets	2,250
Reserves and Surplus	1,300	Current Assets	750
Long Term Debt	200		
Creditors	500		
	3,000		3,000

Additional Details -

- Profit Before Interest and Tax is Rs.2,000 lakhs
- Interest paid Rs.30 lakhs
- Tax Rate 30%
- Risk Free Rate 11%

5. Long term Market Rate = 12%
6. Beta Coefficient = 1.62

Problem 3: Income Statement and Balance Sheet are provided below.

	Rs (Lakhs)	Rs (Lakhs)
Sales	500	
Interest on investments	10	
Profit on sale of fixed assets	5	
Total Income		515
Less		
Manufacturing Expenses	180	
Admin Cost	60	
Selling & Distribution Cost	50	
Depreciation	30	
Loss on Sale of Old Machinery	5	325
EBIT		190
Less: Interest		20
EBT		170
Less: Tax 30%		51
Profit After Tax (PAT)		119
EPS		Rs.23.8
PE Ratio		2

Balance Sheet Rs (Lakhs)			
Liabilities	Rs	Assets	Rs
Equity Capital (Rs.10 Per Share)	50	Buildings	80
Reserves	40	Machinery	70
Long Term Bank Loan	60	Inventory	10
Creditors	13	Debtors	12
Provisions	15	Bank	6
	178		178

Cost of Equity and cost of debt is 10% and 12% respectively. Tax Rate is 30%. Calculate EVA and MVA (on the basis of market value of equity capital)

Problem 4- Following details of Godrej Consumer Products Ltd (GCPL) are given, calculate EVA based on given details for the company.

Details	2001-02 (Rs. Crores)
Earnings before interest and tax	65.7
Interest	2.5
Earnings before tax	63.2
Provision for tax	15.4
Profits after tax	47.8

Beta Coefficient	0.63
Market Risk Premium	10%
Equity Risk Premium	6.3%
Risk free rate of return	11.5%
Pre-tax cost of borrowing	14%
Tax Rate	35%
Average Equity (Rs.Crores)	102.768
Average Debt (Rs.Crores)	4.282