



Market Value Addition As The Most Significant Measure Of Financial Performance

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ABSTRACT

The key players of the economy in India are the top companies of India. India's business world and business today have reported top 500 companies in India. The top 10 biggest financial companies have been selected for the study. Companies are ranked on the basis of various criteria including total income, net profit and others .

INTRODUCTION

The introduction of New Economic Policy in the Indian subcontinent has made the investors to be obsessed with the capital market instruments, especially equity shares. As a result of that several mutual fund institutions, fund management concerns, stock exchanges have sprung up. Adding to this development, the financial analysis advises on various investment avenues. Investors too have started searching for performing as well as outperforming companies using their own analysis. In this circumstance, value based measure emerged in the capital market. Among visual basis management (VBM), Market Value Added (MVA) has gained popularity for the evaluation of market performance of companies. Therefore, in the present case the researcher has made an attempt to evaluate the performance of the manufacturing companies using Market Value Added as a performance evaluation measure².

Much of the theory in corporate finance is based on the assumption that the goal of the firm should be to maximize the wealth of its current share holders. In a market based economy which recognizes the rights of private property, the only serious responsibility of business is to create value and do so legally and with integrity. The contribution to the society is increased by maximizing the value of the firm. Those who regard share holder wealth maximization as irrelevant or immoral, forgetting the share holders are not merely the beneficiary of a corporation's financial successes, but also the referee who determine the management's financial power, can't improve quickly.

Value maximization is the central theme in financial management. Owners of corporate securities will hold management responsible, if the fail to enhance value. While valuation was regarded as an abstruse academic subject in the past, now it is of considerable importance to managers.

In the past few years, many highly successful organizations have begun using Market Value Added as measures of financial performance. Market Value Added (MVA) measures managerial effectiveness since an organization's inception. As an indicator of corporate effectiveness in maximizing share holder wealth, Market Value Added is most appropriate for investor owned firms, though it can be applied to investor owned organizations capital.

The basic premise of the method is that, from a shareholder's perspective, the extra value created by the use of capital is one of the major measures of success for a company's managements. If a company does that, it is successful and the measures of its success are determined by subtracting the total amount of money invested from the total market value of the company. The total market value of a company is the value of its stock and debt³.

The basic problem with using these systems is that it doesn't: only

on a true market value but on a subjective market value. The development in the Indian capital market, both in depth and breadth along with the increased awareness among the shareholders has increased the pressure on the companies to consistently perform better, one of the indicators of such performance, is the market value added.

Despite the popularity of the concept very few studies have been undertaken to empirically test the ability of economic value added to reflect or proxy the market value added of Indian companies. Total invested capital (IC) includes all stock and debt offerings, retained earnings, bank loans and certain investments in future earnings, like research development, total market value (TMV) minus invested capital (IC) equals market value added.

The greater the difference, the more a company's management has succeeded⁴. A calculation shows the difference between the market value of a company and the capital contributed by investors (both bondholders and share holders). In other words, it is the sum of all capital claim held against the company plus the market value of debt and equity.

Calculated as

MVA = Company's Market value - invested capital

Market value added is the difference between the market value of a firm and the capital contributed by investors. A higher MVA indicates that a company has added more value than what has been contributed to it by shareholders, while a negative MVA indicates that the company has destroyed value.

The maximizing market value added should be the primary objective for any company that is concerned about its shareholders' welfare. Market Value Added represents the difference between the value of equity and net debt and the book value of capital employed with n

et debt often taken at its book value, the market value added becomes the difference between the market capitalization and the book value of shareholders' equity.

Market value added is expressed in currency units. Market value added is one of the market indicators of value creation. Market value added and particularity any change in market value added, constitutes a more relevance of value an just development in share price market value added assesses increase in value with regard to the capital invested.,

Market value added is one of the external indicators which gives satisfaction to the investors from the investors' point of view. Increase of the share price is always desirable. The most reliable measure of the management's long term success in adding value is known as

"Market value Added". Market value added is the difference between company's current market value as determined by its stock price and economic book value. Economic value of the company can be determined as the amount of capital that shareholders have committed to the firm throughout its existence including earnings that have been retained in the business.

Market value added is the best external performance indicator as it indicates the market assessment of the effectiveness with which companies' managers have used the scarce resources under their control. Hence it turns out to be very significant and important to analyze and identify the internal indicators that relate well with market value added.

Methodology:

In the present study an attempt has been made to examine the effect of select variables on MVA. The objective of the study is to know one of the internal measures, which can influence the MVA. Therefore MVA is taken as a dependent variable and the (eight) other variables are selected as independent variables for the present study of Top 10 companies which includes, Reliance industries limited, ONGC Limited, Indian Oil Corporation Limited, Tata Steel Company Limited, Bharath Petroleum Corporation Limited, Tata Motors Limited, Reliance Communications Limited, Infosys Technologies Limited, Maruthi Suzuki India Limited. For the purpose of analysis, MVA and other (six) elements are calculated for the year 2009-10. The independent variables chosen in this study are,

- Net profit ratio
- Operating Profit ratio
- Return on Capital employed
- Earnings per Share Ratio
- Price Earnings ratio
- Market value added

One year period has been taken i.e. from 2009-10, for computing the above variables and also for analysis. A brief description of each variable is discussed below.

Determination of MVA and other Independent variables

(a) Net Profit ratio :

The Net Profit ratio (NPR) expresses the relationship between net profit and sales. The net profit to sales margin indicates the management's ability to operate the business successfully. High NPR is preferred by investors. The formula is

$$\text{Net Profit Ratio} = (\text{Net Profit/Net Sales}) \times 100$$

(b) Operating Profit Ratio :

Operating Profit means profit earned by the concern from its business operation and not from the other sources. While calculating the net profit of the concern all incomes either they are not part of the business operation like rent from tenants, Interest on Investment etc. Operating profit ratio shows the relationship between operating profit and net sales.

$$\text{Operating Profit Ratio} = (\text{Operating Profit/Net Sales}) \times 100$$

(c) Return on Capital Employed :

This ratio shows the relationship between the profit earned before interest and tax and the Capital employed to earn such profit.

$$\text{Return on Capital employed} =$$

$$\frac{\text{Net Profit before interest, Tax and dividend}}{\text{Capital employed}} \times 100$$

$$\frac{\text{Net Profit before interest, Tax and dividend}}{\text{Capital employed}} \times 100$$

(d) Earnings per share ratio:

Earnings per share are calculated by dividing the net profit (after interest, tax and preference dividend) by the number of equity shares.

$$\text{Earnings per share} = \frac{\text{Net Profit after Interest, Tax and preference dividend}}{\text{No. of equity shares}}$$

$$\frac{\text{Net Profit after Interest, Tax and preference dividend}}{\text{No. of equity shares}}$$

(e) Price Earnings ratio:

Price Earnings ratio (P/E ratio) is the ratio between market price per equity share and earnings per share.

$$\text{Price Earnings Ratio} = \frac{\text{Market price per equity share}}{\text{Earnings per share}}$$

$$\frac{\text{Market price per equity share}}{\text{Earnings per share}}$$

(f) Market Value Added (MVA)

Market value added is derived by deducting the book value of the firm from its market Capitalization. The book value of the firm is equity share capital plus reserves and surplus, minus any revaluation reserve and miscellaneous expenses. Market value of the firm can be arrived at by dividing Earnings Before interest and taxes (EBIT) by overall cost of Capital.

$$\text{MVA} = \text{Market value of the firm} - \text{Book value of the firm}$$

$$\frac{\text{Market Value of the firm}}{\text{Ko}} = \frac{\text{EBIT}}{\text{Ko}}$$

Where

$$\text{EBIT} = \text{Earnings Before Interest and Taxes.}$$

$$\text{Ko} = \text{Weighted Average cost of Capital (WACC)}$$

$$\text{Book value of the firm} = (\text{Equity share capital} + \text{reserve and surplus}) -$$

$$(\text{Revaluation reserve} + \text{miscellaneous expenses})$$

Market value added OTHER INDEPENDENT VARIABLES FOR SELECT COMPANIES AS ON 2009 - 2010 (Rs. in Crores)

S. No	Items	Reliance Industries Ltd.,	Indian Oil Corporation Ltd.,	ONGC Ltd.,	Tata steel company Ltd.,	Tata motors Ltd.,
1.	NPR	11.99	3.62	29.34	-1.90	5.33
2.	OPR	20.50	6.70	66.02	34.88	22.71
3.	ROCE	13.29	13.44	19.58	-0.85	10.21
4.	EPS	53.25	12.23	72.75	64.69	28.71
5.	PER	0.05	0.04	0.07	0.10	0.04
6.	NPR	1.36	28.54	27.82	26.51	7.55
7.	OPR	4.04	61.90	65.62	39.45	13.59
8.	ROCE	6.74	6.60	7.87	28.79	21.81
9.	EPS	-24.50	-1.76	35.00	103.90	82.36
10.	PER	-0.05	-0.01	0.03	0.04	0.06

Source: Business World 2009-10

$$\text{NPR} = \text{Net Profit Ratio}$$

$$\text{OPR} = \text{Operating Profit Ratio}$$

$$\text{ROCE} = \text{Return on Capital Employed}$$

$$\text{EPS} = \text{Earnings Per share}$$

$$\text{PER} = \text{Price Earnings}$$

Net profit ratio :

Net profit ratio for the top 10 companies ONGC Limited with net profit of Rs.19420.23crores and net sales of Rs. 66,186 crores. It has the highest net profit ratio of 29.34% Reliance communication limited comes 2nd with net profit of Rs. 4,760 97 crores and net sales of Rs.16,680 crores. It has the net profit ratio of 28.54%.

Tata power company comes 3rd with net profit of Rs. 2154.89 crores and net sales of Rs. 40,390 crores. It has the net profit ratio of 27.82%. Infosys technologies limited comes 4th with net profit of Rs.5,946.00 crores and net sales of Rs. 22,426 crores.

It has the net profit ratio of 26.51% Reliance Industries Limited comes 5th with net profit of Rs.24417.36 crores and net sale of Rs.203627

crores. It has the net ratio of 11.99%. The lowest in the net profit ratio is obtained by into motors limited, Indian oil corporation Limited, Bharath Petroleum corporation Limited, Tata steel company Limited.

Operating Profit Ratio

Operating Profit ratio for the top 10 companies are as follows : ONGC Limited with operating profit of Rs.43,700 crores and net sale of Rs.66,186 crores. It has the highest operating profit ratio of 66.02%. Tata power company comes 2nd with operating profit of Rs. 4,885.83 crores and net sale of Rs. 7,445 crores. It has the operating profit ratio of 65.62%. Reliance communication limited comes 3rd with operating profit of Rs. 10,325.53 crores and net sale of Rs. 16,680 crores. It has the operating profit ratio of 61.90%.

Infosys Technologies Limited comes 4th with operating profit of Rs. 8,840.00 crores and net sales of Rs.22,426 crores. It has the operating profit ratio of 39.45%. Tata steel company limited comes 5th with operating profit of Rs. 9,783.73 crores and net sales of Rs. 28,046 crores. It has the operating profit 34.88%.

The lowest in the operating profit ratio is obtained by Bharath Petroleum Corporation Limited., Reliance Industries Limited, Indian Oil Corporation Limited.

Return on capital employed

Return on capital employed for the top 10 companies are as follows : Infosys technologies Limited with Return on capital employed of highest ratio of 28.79% Maruthi Suzuki India Limited comes 2nd with Return on capital employed ratio of 21.81%.

ONGC Limited comes 3rd with return on capital employed ratio of 19.58% Indian oil corporation limited comes 4th with return on capital employed ratio of 13.47%. Reliance Industries Limited comes 5th with return on capital employed ratio of 13.29%.

The lowest in the return on capital employed is obtained by Bharath petroleum corporation limited, reliance communication limited, Tata power company, Tata steel company limited.

Earnings per share ratio

Earnings per share for the top 10 companies are as follows : Infosys technologies limited with earnings per share of highest ratio of 103.90%. Muruthi Suzuki India Limited comes 2nd with earnings per share ratio of 82.36%. ONGC Limited comes 3rd with earning per share ratio of 72.75% Tata steel company limited comes 4th with earnings per share ratio of 64.69% Reliance Industries Limited comes 5th with earnings per share ratio 53.25%. The lowest in the earning per share ratio is obtained by Indian oil corporation Limited. Bharath Petroleum Corporation Ltd., Tata Motors Ltd., Reliance Communication, Tata Power Company.

Price Earnings Ratio

The price earnings ratio for the top 10 companies are as follows: Tata steel company limited with EPS of Rs.64.69 and market price per share of Rs.632.05 has the highest price earnings ratio of 0.10%.

ONGC limited comes with EPS of Rs.72.75 crores and market price per share of Rs. 1,078.70 crores has the price earnings ratio of 0.07%. Muruthi Suzuki India Limited comes with EPS of 82.36 crores and market price per share of Rs. 1,392.15 crores has the price earnings ratio of 0.06%.

Reliance industries comes with EPS of 53.25 crores and market price per share of Rs.1074.25Crores has the price earnings ratio of 0.05%. Indian oil corporation Limited comes with EPS of 12.23 crores and market price per share of Rs. 295.75 crores has the price earnings ratio of 0.04%

The lowest in the price earnings ratio is obtained by Reliance communication, Tata power company, Infosys technologies limited. Bharath Petroleum, Tata Motors.

Market Value added performance in selected companies

S. No	Company	Market Value of the firm	Book Value of the firm	Market Value added
1.	Reliance Industries	3,28,899	1,19,562.07	2,09,336.93
2.	Infosys	1,23,247	22,036	1,01,211.00
3.	Tata Steel	40,747	37,168.75	3,578.25
4.	Tata motors	24,899	14,754.52	10,144.48
5.	Maruthi Suzuki	38,078	11,835.1	26,242.90
6.	Reliance Communication	47,190	50,498.89	3308.89
7.	Tata Power	28,821	10,532.36	18288.64
8.	Bharat Petroleum	2,36,425	86,441.29	149983.71
9.	ONGC	18,493	13,086.71	5406.29
10.	Indian Oil Corporation	70,426	50,534.66	19891.34

Source: Business world, Business today 2009-2010.

The Market value added is positive in the case of Reliance industries, Infosys technologies, Tata Steel, Tata motors, maruthi Suzuki, Tata power, Bharat petroleum, ONGC, Indian Oil. Therefore, the performance of these companies in terms of Market value added is good. It implies simple that these companies add value to the shareholders wealth. In the case of Reliance communication the Market value added is negative. It means that the performance of these companies is not satisfactory. In other words, these companies are destroying the wealth of the shareholders.

Conclusion

The performance of select financial companies in terms of profitability is improved through modernisation, cost reduction etc. market value addition is the most successful performance metric used by companies and their consultants. At the same time the government of India should play a pivotal role in extending financial support to the financial companies at concessional rates and should take suitable policy measures for its development.

REFERENCES

- Askren, B.J., Bannister, J.W., & Pavlik, E.L., 1994, The Impact of Performance Plan | Adoption on Value Added and Earnings, *Managerial Finance*, 20, 9: 27-43. | Bannister, J.W. & Riahi-Belkaoui, A., 1991, Value Added and Corporate Control in the U.S., | *Journal of International Financial Management and Accounting*, 3, 3: 241-257. | Bao, B.H., & Bao, D.H., 1996, The Time Series Behaviour and Predictive Ability Results of | Annual Value Added Data, *Journal of Business Finance and Accounting*, 23, 3: 449-460. | Bao, B.H., & Bao, D.H., 1998, Usefulness of Value Added and Abnormal Economic | Earnings: An Empirical Examination, *Journal of Business Finance and Accounting*, 25, 1- | 2: 251-265. | Bell, L.W.W., 1998, Economic Profit: An Old Concept Gains New Significance, *Journal of Business Strategy*, 19, 5: 13-15. *Asian Review of Accounting* 20 | Biddle, G.C., 1998, Economic Value Added: Some Empirical Evidence, *Managerial | Finance*, 24, 11: 60-70. | Biddle, G.C., Bowen G.S., & Wallace, J.S., 1997, Does EVA beat Earnings? Evidence on Associations with Stock Returns and Firm Values, *Journal of Accounting and Economics*, 24, 3: 301-336. | Brown, S., Lo K., & Lys, T., 1999, Use of R2 in Accounting Research: Measuring Changes in Value Relevance over the Last Four Decades, *Journal of Accounting and Economics*, 28, 1: 83-115. | Burllett, G.D., & Hedley, T.P., 1997, The Truth about Economic Value Added, *The CPA Journal*, July: 46-55. | Chen, S., & Dodd, J.L., 1997, Economic Value Added (EVA): An Empirical Examination of a New Corporate Performance Measure, *Journal of Managerial Issues*, 9, 3: 318-333. | Cheng, C.S., Hopwood, W., & McKeown, J.C., 1992, Non-Linearity and Specification Problems in Unexpected Earnings Response Regression Model, *The Accounting Review*, 67, 3: 579-598. | Clinton, B.D., & Chen, S., 1998, Do New Performance Measures Measure Up?, *Management Accounting*, 80, 4: 38-44. | Das, S., & Lev, B., 1994, Nonlinearity in the Returns-Earnings Relation: Tests of Alternative Specifications and Explanations, *Contemporary Accounting Research*, 11, 1: 353-379 | De Villiers, J., 1997, The Distortions in Economic Value Added (EVA) Caused by Inflation, *Journal of Economics and Business*, 49: 285-300. | Dechow, P.M., Hutton A.P., & Sloan, R.G., 1999, An Empirical Assessment of the Residual Income Valuation Model, *Journal of Accounting and Economics*, 26, 1: 1-34. | Drucker, P., 1998, The Information Executives Truly Need to Know, in *Harvard Business Review on Measuring Corporate Performance*, Boston: Harvard Business School Press. | Evraert, S., 1998, Usefulness of Value Added Reporting: A Review and Synthesis of the Literature, *Managerial Finance*, 24, 11: 1-15. | Ferguson, A., 1997, Australia's Best Value in Chief Executives, *Business Review Weekly*, 24 November: 57-61. | Ferguson, R., & Leistikow, D., 1998, Search for the Best Financial Performance Measure: Basics are Better, *Financial Analysts Journal*, January/February: 81-85. | Freeman, R.N., & Tse, S.Y., 1992, A Nonlinear Model of Security Price Responses to Unexpected Earnings, *Journal of Accounting Research*, 30, 2: 185-209. | Herzberg, M.M., 1998, Implementing EBO/EVA Analysis in Stock Selection, *Journal of Investing*, Spring: 45-53. | *Management Accounting - S.N.Maheswari | Journal of Management - Eugene F. Brigham Michael C. Ehrhardt | Financial Management S.N.Maheswari | The Management Accountant January 2007 | Business Today January 2009 - 2010. | Business World 2009 - 2010. |*