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ECONOMIC VALUE ADDED AS A MEASUREMENT TOOL OF FINANCIAL PERFORMANCE: A CASE STUDY OF SQUARE PHARMACEUTICALS LIMITED

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ABSTRACT

In modern business the concept of profit maximization has become an old-aged, wealth maximization is matured and value maximization is today's wisdom. One professedly recent innovation in this regard is a trademarked variant of residual income known as economic value added (EVA). EVA is an engineering management tool that helps enterprise leaders in creating shareholders value through cost structure development. As value based performance measures considers cost of capital in the calculation of financial performance, it is argued that EVA is superior to measure performance as compared to traditional accounting measures like return on capital employed (ROCE), return on asset (ROA), return on investment (ROI), earnings per share (EPS) etc. Therefore, an attempt has been made in this study to calculate the EVA of Square Pharmaceuticals Limited (SPL), one of the leading pharmaceutical companies in Bangladesh, to conclude whether the company has created wealth to the shareholders during 2003-04 to 2009-10. Attempt has also been made to show the extent to which ROCE, one of the conventional financial performance assessment tools, differ from the business overviewed from the perspective of EVA. The results of the study reveals that SPL has added value to the shareholders during the study period and it is the EVA that depicts the real financial and economic performance of the company over ROCE.

Key words: Economic value added, net operating profit after tax, return on capital employed, shareholders wealth.

INTRODUCTION

An accepted financial axiom is that the role of managers is to maximize the wealth of the shareholders by efficient allocation of resources. In order to operationalise this objective, shareholders wealth is traditionally proxied by either standard accounting magnitudes such as profits, earnings and cash flows from operations or financial statement ratios including ROCE, ROI, ROA, EPS etc. This financial information is used by managers, shareholders and other interested parties to assess current performance and is also used to predict future performance (Worthington and West 2001). But as we know from Shil (2009) accounting, more often produces historical data or distorted data; the financial statement may have no relation with the real status of the company. Again, traditional measurements took into account only interest on loan as cost of capital even though a company had reasonable mix of debt and equity in the capital structure. Therefore, accounting based measures came under attack and that is why investors and corporate managers have been seeking a timely and reliable measurement of shareholders wealth for years. With such a measure, investors could spot over or under priced stocks, lenders could gauge the securing of their loans and managers could monitor the profitability of their factories, divisions and firms.

Under this circumstances, several scholars suggested new performance measures. One of these new measures is EVA, introduced by US based consultants Stern Stewart and Company, New York in the year 1990. Stewart (1991) argued earnings, earnings per share and earnings growth rate are misleading measures of corporate performance and the best practical periodic performance measure is EVA. EVA is the financial performance measure that comes closer than any other in capturing the true economic profit of an

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enterprise. EVA also is the performance measure most directly linked to the creation of shareholders wealth over time. The EVA model of measuring business performance in addition to cost of borrowed capital takes into account own capital cost, which depend alternative investment made by investors, bearing the same risk. EVA is the difference between net operating profit after tax (NOPAT) and the required return of the financing of debt and equity capital i.e. cost of capital employed/weighted average cost of capital. If EVA is positive, then the firm has created value for the shareholders over the period and if EVA is negative, it connotes the firm is destroying shareholders wealth even though it may be reporting a positive and growing percentage of ROCE. As remarked by Peter Drucker (2008), until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources, until then it does not create wealth; it destroys it. Thus EVA is a useful tool because it focuses attention on the management of capital as well as management of profit. Therefore, an attempt has been made in this study to calculate EVA of SPL and to compare EVA with ROCE, one of the traditional measures of evaluating financial performance and appropriate conclusions are drawn. The main objective of the study is to measure corporate financial performance and the specific objectives are:

(i) To compute EVA for SPL.
(ii) To evaluate whether the SPL has added value to the shareholders during 2003-04 to 2009-10.
(iii) To compare EVA with ROCE.

MATERIALS AND METHODS

The research design was exploratory in nature. Case study method was used to measure the value added for SPL. The data were collected from secondary sources, namely, published annual reports, books, journals, magazines etc. It had been assumed that 3 year Bangladesh government investment bond yield i.e. 6.5% was the risk free rate of return in this study. To calculate beta, it had been considered Dhaka stock exchange (DSE) index return and SPL share price return and the result was 0.51. After coding and editing the collected data, a trend analysis method for the years 2003-04 to 2009-10 was used to interpret the data.

RESULTS AND DISCUSSION

In Table 1, Calculation of EVA of SPL with methodology adopted had been exposed. The result showed that SPL had added value to the shareholders during the study period. But the EVA growth rate was not consistent. The growth rate in 2004-05 and 2007-08 were negative as compared to the base year 2003-04. There was significant growth in EVA during the periods 2006-07, 2008-09 and 2009-10 indicating the good economic earning capacity of the company. A company that generated positive EVA connotes efficient management of shareholders invested funds and the company was in the right track. In this case, SPL had added wealth to the shareholders during the study period which revealed that shareholders funds were employed into productive way.

In Table 2, an attempt had been made to compare EVA with one of the traditional methods of evaluating financial performance namely ROCE. From the table it was found that, SPL depicted a steady picture in terms of ROCE. On an average during the study period ROCE was 16.66% i.e. for every Taka 100 investment, the return was Taka 16.66, whereas average EVA as percentage of capital employed was 6.08% i.e. for every Taka 100 investment, the company had added value of Taka 6.08. This comparison showed the divergence existed between the financial performance results given by the traditional method and EVA. The traditional measures did not reflect the real value addition to the shareholders wealth and thus EVA should be measured to have a true idea about the shareholders value addition.

Table 1. EVA Trends: 2003-04 to 2009-10.

(Taka in crore)

Particulars	Years						
	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10
1. Shareholders' equity*	459.01	556.87	640.20	733.32	841.70	994.93	1155.43
2. Long-term loans*	3.65	38.91	60.23	49.25	60.25	44.97	103.26
3. Capital employed (1+2)	462.66	595.78	700.43	782.57	901.95	1039.90	1258.69
4. Cost of equity (%)	10.38	10.38	10.38	10.38	10.38	10.38	10.38
5. Cost of debt (%)	8.70	8.70	8.70	8.70	8.70	8.70	8.70
6. Weighted average cost of capital (%)	10.36	10.27	10.23	10.27	10.26	10.30	10.24

Table 1. contd.

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7. Cost of capital employed (3) × (6)	47.93	61.18	71.65	80.36	92.54	107.10	128.88
8. Net operating profit after tax (NOPAT)*	89.11	96.98	114.56	132.36	123.92	171.71	194.99
9. Cost of capital employed (COCE)	47.93	61.18	71.65	80.36	92.54	107.10	128.88
10. EVA (8) – (9)	41.18	35.80	42.91	52.00	31.38	64.61	66.11
11. Growth in EVA(%)	--	(13.06)	4.20	26.27	(23.79)	56.89	60.53

*Source: SPL annual reports: 2003-04 to 2009-10.

Methodology applied for calculating EVA:

(i) EVA = NOPAT – COCE

(ii) NOPAT = Operating profit × (1 - t), where t = tax rate

(iii) COCE = Capital employed × Weighted average cost of capital (WACC)

(iv) WACC = = k1.Kd + k2.Ke + ...
where, K1,2 = Weights of individual sources in the capital structure, Kd = Cost of debt, Ke = Cost of equity

(v) Cost of debt (Kd) = I × (1-t), where I = Interest rate, t = tax rate

(vi) Cost of equity is the return expected by the investors to compensate them for the variability in return caused by fluctuating earnings and prices.
Cost of equity (Using capital asset pricing model):

$$= R_f + (R_m - R_f) \times \beta$$
$$= 6.5\% + (14.12\%-6.5\%) \times 0.51$$
$$= 10.38\%$$

(vii) Interest rate is taken as 12% per annum.

(viii) Tax rate is taken as 27.5% as SPL is a publicly traded company.

Table 2. Comparison on EVA and ROCE.

Years	Capital employed (Taka in crores)*	EVA (Taka in crores)	ROCE (%)	EVA as % of capital employed
2003-04	462.66	41.18	19.39	8.90
2004-05	595.78	35.80	16.27	6.00
2005-06	700.43	42.91	16.35	6.12
2006-07	782.57	52.00	17.09	6.64
2007-08	901.95	31.38	14.12	3.47
2008-09	1039.90	64.61	17.14	6.21
2009-10	1258.69	66.11	16.27	5.25

*Source: SPL annual reports: 2003-04 to 2009-10. ROCE = $\frac{\text{NOPAT} + \text{interest}}{\text{Capital employed}} \times 100$

CONCLUSIONS

SPL has taken all the necessary steps to ensure effective use of invested funds by taking priority to increase wealth of shareholders. SPL can disclose a statement on EVA with financial statements as additional disclosure so that shareholders would be better informed which would contribute in attracting new investors and the reduction of additional debts.

Following are the findings based on the study:

(i) SPL has added value to the shareholders during the study period. The company has taken shareholders wealth creation as the top priority in managing business.

(ii) ROCE is not perfect enough to reflect the real financial performance. It is EVA, the economic profit that is the best in measuring managerial efficiency.

The study, therefore, recommended that decisions relating to the choice of strategy, capital allocation, merger and acquisitions, divesting business and goal setting should be taken on the basis of EVA based performance measurement system.

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