

Shareholders' Wealth Maximisation of Paper Industry in India

* Dr. K Balanaga Gurunathan

** Dr T. Viswanathan

* Professor, Alliance School of Business, Alliance University, Chikkahagade Cross, Chandapura - Anekal Main Road, Anekal, Bengaluru - 562106

** Assistant Professor, Alliance School of Business, Alliance University, Chikkahagade Cross, Chandapura - Anekal Main Road, Anekal, Bengaluru – 562 106

Abstract

Maximising shareholders wealth is considered as one of the fundamental goals of corporates across the world. Any organisation can increase shareholders wealth through effective implementation of strategies and business performance measurement systems. Traditionally, the yardstick used to measure the efficiency and profitability of a business organization were accounting based measures such as Return on Investment, Return on Capital Employed, Earning per share, Return on Net worth and other financial ratios. While these tools measure the profitability, it does not quantify the marginal efficiency of shareholders investment in a firm. Most businesses are implementing value based measures in addition to traditional financial measures. There are five major frameworks within Value Based Management; Economic Value Added, Cash Value Added, Cash Flow Return on Investments, and Shareholder Value Analysis and Market Value Added. This study deals with Economic and Market Value Added by companies representing paper Industry in India. It applies measures of value drivers, relative valuation multiples, DuPont analysis, Economic Value Added and Market Value added to a sample of 15 large scale companies to analyse the extent of shareholders' wealth maximisation.

Keywords: Shareholders' wealth maximisation, value drivers, EVA, MVA

1. Introduction

Shareholders' wealth maximisation is considered to be superior to the profit maximisation approach among investors. Maximizing shareholders value has become the new corporate standard of many business entities in India. Corporates across the world need to measure profitability and value added to the shareholders. Managers should create a framework that reflects both profitability and wealth maximisation measures. A new economic framework, Value Based Management frameworks that better reflects opportunities and pitfalls are therefore necessary. Economic Value Added (herein after referred to as "EVA") and Market Value Added (herein after referred to as "MVA") has become a popular and powerful tool for managers to measure performance and for guiding investment decisions. Several companies have adopted EVA and MVA as the metric for evaluating performance and they have been successful in enhancing the wealth of their shareholders.

EVA is an estimate of a firm's economic profit – being the value created in excess of the required return of the company's investors (being shareholders and debt holders). Market Value Added is a companion measure to EVA. MVA is the difference between total market value of capital and the actual capital invested by way of common equity, preferred stock and all forms of debt. This study deals with the analysis of financial performance and investigates the relationship between financial performance and valued addition to the shareholders.

2. Statement of the Problem

The Strategic purpose of a firm is to create value that meets shareholders expectations. Traditionally, the yardstick used to measure the efficiency and profitability of a business organization were accounting based measures like Return on Investment, Return on Capital Employed, Earnings per share, Return on Net worth and other financial ratios. Currently value added measures have emerged as a replacement of traditional accounting based measures. Value added analysis represents the wealth created by an enterprise during a specified period. There are number of value based management frameworks, shareholder value analysis Rapport (1986) and Economic Value Analysis developed by Stern Stewart (1990) are mostly used as a tool to measure value added to the shareholders.

Most companies use many array of measures to express financial goals and objectives. Strategic plans are assessed based on growth in revenues or market share. Business units may be evaluated in terms of return on assets or against a budgeted profit level. The feasibility of capital investments are measured in terms of Net present Value. The result of such varied measures does not provide EVA and MVA. These measures are only financial management system that provides a common language for employees, investors and stakeholders across all operating and staff functions. It allows all management decisions to be modelled, monitored, communicated, and compensated in a single and consistent way – always in terms of the valued added to shareholder investments.

3. Methodology

3.1 Objectives

The following are the objectives of the present study:

- 1) To analyze and investigate the trend and growth of shareholders' value in paper industry in terms of EVA, MVA, EPS and other financial ratios.
- 2) To examine the relationship between EVA and EPS, along with EPS and MVA
- 3) To make suggestions for the enhancement of shareholder wealth maximization

3.2 Sampling Plan and Sample Units

The study is based on a sample of 15 companies from Indian Paper industry. The sample companies are selected based on three major criteria.

1. Listed at National Stock Exchange at least 5 years 2013
2. Have their financial year between 1st April and 31st March
3. Have presented their financial information between the years 2009 and 2013

3.3 Sources of Data

The study is based on secondary data. The necessary data were collected from the corresponding companies' annual reports, auditors' reports and various databases.

3.4 Tools used for Study

For the enhancement of this research work, the following tools were used for study. The tools were selected based on study needs.

A. Value Drivers

- i. Operating Profit
- ii. Total Shareholders' Funds
- iii. Book Value per share

- iv. Earnings Per Share
- v. Operating profit margin
- vi. Market Price Per share (Closing price on the year)
- vii. Fixed Assets Turnover Ratio
- viii. Cost of Capital

B. Ratio of Relative Valuation

- i. Price Earning (P/E)
- ii. Price to Book Value (P/BV)
- iii. Price/Cash EPS (P/CEPS)
- iv. EV/EBIDTA
- v. Market Cap/Sales

C. Traditional Measure of Performance

- i. PBT/Net Sales
- ii. PAT/PBT
- iii. Net Sales/Total Assets
- iv. Total Assets/Net Worth
- v. Return on Equity
- vi. Earning Power

D. DuPont Analysis

- i. PBIDT/Sales (%)
 - ii. Sales/Net Assets
 - iii. PBDIT/Net Assets
 - iv. PAT/PBIDT (%)
- E. Value – Based Measures
- i. Economic Value Added.

4. Data Analysis and Interpretation

The financial performance of the sample companies are analysed with respect to the value drivers of wealth that include profitability ratios, relative valuation and Dupont Analysis. The financial performance of individual companies is compared with the industry average. Economic value added and Market Value added are calculated for all the sample companies. The consolidated results are applied to study the relationship between EPS and EVA. The framework of analysis for one of the sample company is listed in table 4.1.

Table No. 4.1: Financial Analysis of Ballarpur Industries Ltd for the period between 2009 and 2013

	Company					Industry Aggregate				
	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13
Value Drivers										
Net Sales (In Crores)	1,020.0	1,061.72	1,060.91	1,094.35	984.68	523.75	506.93	580.26	648.51	724.12
Operating Profit	263.51	213.82	180.84	128.43	161.22	97.97	86.61	97.38	91.01	84.06
Reported Net Profit	125.39	58.28	30.15	6.57	33.19	30.58	17.55	17.51	1.13	-3.96
Total Shareholders' Funds	1,349.8	1,651.3	1,618.6	1,587.1	1,597.3	331.04	363.44	373.07	381.94	380.85
Total Debt	889.64	862.08	982.89	750.75	873.65	395.77	411.66	434.84	473.87	517.82
Net Block	848.82	971.57	949.88	893.2	1,215.40	416.13	442.56	561.71	575.96	638.92
Total Assets	2,239.41	2,513.38	2,645.71	2,378.97	2,508.42	726.81	775.10	830.55	880.34	925.30
Book Value (in Rs.)	24.29	25.19	24.69	24.21	24.36	73.77	68.17	70.01	70.37	64.49
Earnings Per Share (In Rs.)	2.17	0.81	0.36	0.02	0.46	6.10	6.76	8.23	4.32	3.15
No. of Shares (in Crores)	57.78341	71.95062	83.75	328.5	72.15217	8.45	9.72	10.49	27.16	10.04
Market price (In Rs.)	38	29.7	43.8	39.75	28.6	60.66	66.40	94.91	92.89	85.12
Operating profit margin (%)	24.53	19.43	16.37	11.16	15.51	15.96	12.12	11.09	10.81	7.30
Cost of Capital	9.33%	10.82%	10.86%	10.33%	9.90%	9.40%	9.16%	10.19%	9.75%	8.79%
Fixed Assets Turnover Ratio	1.20	1.17	1.10	1.19	0.93	2.01	1.51	1.69	1.88	2.04

Ratio of Relative Valuation										
Price Earning (P/E)	9.24	38.7	91.39	1,037.50	28.8	3.88	7.51	11.34	80.46	8.97
Price to Book Value (P/BV)	0.83	1.24	1.33	0.86	0.54	0.37	1.25	0.77	0.62	0.52
Price/Cash EPS (P/CEPS)	5.64	15.09	20.01	14.94	7.84	2.69	3.30	30.19	5.12	1.32
EV/EBIDTA	7.56	13.26	17.29	16.32	10.7	5.26	5.44	6.88	6.99	12.29
Market Cap/Sales	1.04	1.87	1.95	1.18	0.84	0.22	0.42	0.49	0.38	0.27
Traditional Measure of Performance										
PBT/Net Sales	0.139	0.082	0.048	0.011	0.038	0.06	0.01	0.00	-0.01	-0.04
PAT/PBT	0.88	0.67	0.60	0.54	0.88	2.14	-2.80	1.20	1.43	-0.35
Net Sales/Total Assets	0.46	0.42	0.40	0.46	0.39	1.04	0.99	1.04	1.06	1.21
Total Assets/Net Worth	1.66	1.52	1.63	1.50	1.57	2.27	2.97	1.79	1.84	2.40
Return on Equity	0.093	0.035	0.019	0.004	0.021	9.07	5.53	5.89	-2.91	3.21
Earning Power	0.083	0.055	0.038	0.015	0.033	0.15	0.08	0.08	0.08	0.05
DuPont Analysis										
PBIDT/Sales (%)	24.53	19.43	16.37	11.16	15.51	15.35	11.75	10.78	10.56	7.03
Sales/Net Assets	0.48	0.44	0.42	0.48	0.41	1.09	1.02	1.07	1.09	1.28
PBDIT/Net Assets	0.12	0.09	0.07	0.05	0.06	0.15	0.09	0.09	0.08	0.06
PAT/PBIDT (%)	47.58	27.26	16.67	5.12	20.59	19.85	410.92	213.00	31.39	90.83
Net Assets/Net Worth	1.66	1.52	1.63	1.5	1.57	2.37	3.62	1.89	1.95	2.67
ROE (%)	9.58	3.88	1.84	0.41	2.08	9.70	5.78	6.01	-2.88	3.35

Table No. 4.2 Value-Based Measures of the Ballarpur Industries Ltd.,

(Rs. In Crores)										
	Company					Industry Aggregate				
	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13
Market Value Added	-43.64	-376.44	1066.75	10720.05	-407.3578	-395.1	-430.5	-210.1	432.43	-435.4
Economic Value Added	-24.50	-122.30	-155.83	-151.51	-131.80	-66.60	-75.28	-76.83	-81.27	-81.82

In the Table 4.1 and 4.2, it is concluded that industry sales is increasing over the year whereas the sales of Ballarpur industry Ltd. remain flat between 2009 and 2012. Average net profit of the Paper industry has declined considerably during the period of study. EPS of the industry is decreasing over the last two years whereas the company's EPS is decreasing over the period but increasing from the last year. The cost of capital of the industry as well as company is decreasing from the past two years.

In general, a high P/E suggests that investors are expecting higher earnings growth in the future compared to companies with a lower P/E. The P/E of the industry has increased from 2009 to 2012 but in 2013, it decreased at very high rate reflecting that investors are not expecting good returns from the industry. The P/E multiple of Ballarpur has also moved in line with the industry average. Price to book value ratio of the company has decreased during the period of study that shows decline in market value added to the shareholders.

Profit before tax of the Paper industry is in negative whereas the Company's PBT/Net sales are fluctuating. The Paper Industry's total assets turnover ratio is increasing over the years whereas the total assets turnover ratio of Ballarpur Ltd. is fluctuating over the period. The Return on Equity of the Paper industry is declining over the period and it was negative in accounting year 2012. The ROE of the Ballarpur Ltd., is also decreasing over the period. This means Ballarpur Ltd., is not generating enough profit for shareholders. The earning power of the industry is declining over the year whereas Ballarpur Ltd., Earning power is also decreasing over the year but it is increasing from last year.

The earning of the Ballarpur Ltd., is affected by interest and depreciation even the industry profit is affected by the same. Paper industry is adding their market value in the year 2012 but in 2013, the market value of industry is declining. Ballarpur Ltd., is adding their market value in 2011 and 2012 but in the year 2013, the market value is declining. Similarly, the industry as well as company is not adding economic value for the company and the shareholders.

Table No.4.3 Correlations between EPS & EVA and EPS & MVA

Companies	Correlation EPS & EVA		Correlation EPS & MVA	
	Company	Industry	Company	Industry
Ballarpur Industry Ltd.,	0.98099	0.49983	-0.52110	-0.20918
Emami Paper Mills Ltd.,	0.60593	0.49983	-0.23201	-0.20918
Hindustan Newsprint Ltd.,	-0.07210	0.49983	0.00000	-0.20918
International Paper APPM Ltd.,	-0.56058	0.49983	-0.72782	-0.20918
JK Paper Ltd.,	0.89574	0.49983	0.70077	-0.20918
Mysore Paper Mills Ltd.,	0.95277	0.49983	-0.87126	-0.20918
Pudumjee Industries Ltd.,	0.67286	0.49983	0.04777	-0.20918
Pudumjee Pulp and paper mills Ltd.,	0.16239	0.49983	-0.88973	-0.20918
Seshasayee Paper and Boards Ltd.,	0.81136	0.49983	0.15380	-0.20918
Shree Rama Newsprint Ltd.,	0.98977	0.49983	-0.58834	-0.20918
Shreyans Industries Ltd.,	0.93052	0.49983	-0.29921	-0.20918
Sirpur Paper Mills Industry	0.00000	0.49983	0.00000	-0.20918
Star Paper Mills Ltd.,	0.95065	0.49983	-0.80589	-0.20918
Tamil Nadu Newsprint & paper Ltd.,	-0.01691	0.49983	0.16075	-0.20918
West Coast Paper Mills Ltd.,	-0.12721	0.49983	-0.48577	-0.20918

To test this hypothesis, Spearman correlation coefficient (r) between EVA & EPS and EMV & EPS is estimated and then Ho is tested. Here, hypotheses are tested separately for each Company.

From the Table No. 4.3, it is concluded that majority of company have positive correlation between EPS & EVA and EPS & MVA. It means there is a relationship between Traditional Method of measuring shareholder wealth maximization (EPS) and Modern method of Measuring Shareholder wealth maximization (EVA) and (MVA). Thus Null hypothesis should be selected.

Table No 4.4 Economic Value Added and Market Value Added analysis

	Economic Value Added					Market Value Added				
	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13	Mar'09	Mar'10	Mar'11	Mar'12	Mar'13
Paper Industry	-66.60	-75.28	-76.83	-81.27	-81.82	-395.08	-430.51	-210.16	432.43	-435.42
Ballarpur Industry Ltd.,	-24.51	-122.30	-155.83	-151.52	-131.80	-43.64	-376.45	1066.75	10720.05	-407.36
Emami Paper Mills Ltd.,	26.13	14.61	6.00	8.47	1.40	-632.62	-582.19	-77.41	-267.33	-456.10
Hindustan Newsprint Ltd.,	-248.18	-219.73	-193.32	-223.89	-256.11	NA	NA	NA	NA	NA
International Paper APPM Ltd.,	-891.25	-889.19	-899.31	-889.89	-836.93	-755.66	-619.30	243.17	718.24	600.36
JK Paper Ltd.,	39.54	76.43	68.98	-9.98	-27.17	-756.55	-607.76	-655.10	-1075.10	-1960.72
Mysore Paper Mills Ltd.,	7.48	-48.65	-43.88	-42.16	-29.86	-192.65	-64.97	-132.18	-79.92	-71.02
Pudumjee Industries Ltd.,	-3.05	-1.12	-6.89	-3.16	-2.42	-9.98	-58.66	-20.67	-50.39	-65.34
Pudumjee Pulp and paper mills Ltd.,	-2.23	1.42	-4.34	-1.22	0.65	-148.24	-65.42	-26.59	-112.85	-156.56
Seshasayee Paper and Boards Ltd.,	12.32	35.12	31.65	17.81	11.33	-321.48	-215.49	-358.85	-215.90	-455.41
Shree Rama Newsprint Ltd.,	-46.22	-51.46	-41.22	32.88	-38.41	-220.22	-136.25	-154.00	-274.29	-260.56
Shreyans Industries Ltd.,	17.09	4.57	-1.07	1.97	8.05	-78.01	-54.71	-36.80	-82.86	-80.93
Sirpur Paper Mills Industry	-13.36	-17.64	-22.27	-16.95	-62.72	-406.90	-427.40	-395.26	-407.08	-373.23
Star Paper Mills Ltd.,	13.85	-4.38	-21.41	-31.76	-19.89	-70.07	-73.65	-59.46	-58.82	-44.61
Tamil Nadu Newsprint & paper Ltd.,	108.63	95.12	102.24	90.86	101.12	-653.67	-1487.18	-1226.73	-1630.44	-1633.12
West Coast Paper Mills Ltd.,	4.83	-2.05	28.24	-0.59	55.50	-1241.39	-1257.78	-1109.10	-1129.22	-731.30

From the Table No. 5.32 Considering to the EVA, Very Few companies are adding their economic value. Companies which are effective to invest are Ballarpur Industry Ltd., Pudumjee Paper and Mills Ltd., Seshasayee Paper and Board Ltd., Shreyans Industry Ltd., Tamil Nadu Newsprint and Paper Ltd., and West Coast Paper Mills Ltd.,. Among these companies, Seshasayee Paper and Board Ltd., is the best one to go for investment.

Considering to the MVA, International Paper APPM Ltd., is the best one to invest because its market value addition is good compared to other companies.

5. Findings

1. To test the hypothesis, Spearman correlation coefficient (r) between EVA & EPS and EMV & EPS is estimated and then H₀ is tested. Here, hypotheses are tested separately for each Company. Results are given in table 5.16 it is concluded that majority of company have positive correlation between EPS & EVA and EPS & MVA. It means there is a relationship between Traditional Method of measuring shareholder wealth maximization (EPS) and Modern method of Measuring Shareholder wealth maximization (EVA) and (MVA). Thus, Null hypothesis should be selected.

2. Sales of the paper industry are continuously increasing but very few companies are maximizing the wealth of shareholder. Profit of the industry is decreasing over the period and in the year 2013, industry is in loss. Very Few Companies are making profit. Now the paper industry is not effective industry to invest except Few companies like Ballarpur Industries Ltd, Emami Paper Mills Ltd, Pudumjee Pulp and Paper Mills Ltd, Seshasayee Paper & Board Ltd and Shreyans Industries Ltd.

3. Very Few companies are adding their economic value over the year but almost no companies are adding the market value. Industry EVA is negative and it is negatively increasing. It means industry is not much effective. MVA of the industry is also in negative and negatively increasing. MVA of Industry was positive in the year 2012 and except 2012, every year, MVA is in negative.

6. Recommendations

1. Investor can invest in the companies of paper industry like Ballarpur Industries Ltd, Emami Paper Mills Ltd, Pudumjee Pulp and Paper Mills Ltd, Seshasayee Paper & Board Ltd and Shreyans Industries Ltd. Because somehow these Companies are making profit and increasing the wealth of shareholder

2. Considering to the EVA, Very Few companies are adding their economic value. Companies like very effective to invest are Ballarpur Industry Ltd, Pudumjee Paper and Mills Ltd, Seshasayee Paper and Board Ltd, Shreyans Industry Ltd, Tamil Nadu Newsprint and Paper Ltd and West Coast Paper Mills Ltd.,

3. In aggregate, the Paper industry is not effectively running because profit of the industry is decreasing negatively over the year

4. All the companies should try to reduce their cost so that profit can be maximized and also the shareholder wealth can be maximized

5. Industry should also consider the demand and supply so that companies can produce in proper quantity of paper and loss can be minimized and thus profit can be generated

6. Companies, which are effective to invest are Ballarpur Industry Ltd, Pudumjee Paper and Mills Ltd, Seshasayee Paper and Board Ltd, Shreyans Industry Ltd, Tamil Nadu Newsprint and Paper Ltd and West Coast Paper Mills ltd. Among these companies, Seshasayee Paper and Board Ltd is the best one to go for investment.

7. Considering to the MVA, International Paper APPM Ltd is the best one to invest because their market value addition is good compared to other companies.
8. Very Few Companies are making profit. Now the paper industry is not effective industry to invest except few companies like Ballarpur Industries Ltd, Emami Paper Mills Ltd, Pudumjee Pulp and Paper Mills Ltd, Seshasayee Paper & Board Ltd and Shreyans Industries Ltd.
9. Those companies are not comfortable for EVA and MVA, they should go for merger and acquisition route. This will helpful to them to boost the investors' confidence.
10. A firm can improve its EVA and MVA in three ways, they are
 - a. With the same capital base, rate of return can be increased. In other words, operating profits are increased without increasing of capital.
 - b. More capital is invested in business whose rate of return is more than the cost of capital. It also means that investment with positive Net Present Value one should be accepted.
 - c. For existing firms / business, capital is withdrawn or unprofitable assets are sold so as to give a greater return than the cost of capital.

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