AN EMPIRICAL STUDY ON ECONOMIC VALUE ADDED IN SELECTED INDIAN COMPANIES POST-CRASH PERIOD

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Abstract
Economic Value Added (EVA) is a modern corporate financial metric being used by companies to assess their financial performance and efficiency. The business continuity of a firm is purely based on its financial performance in terms of wealth creation to its shareholders. EVA is trademark of Stern Stewart Co, who conceptualized the term EVA. Their theory states that EVA captures true economic profit of the firm as against accounting profit shown in annual reports of the companies. EVA is the profit that remains after deducting the cost of capital invested to generate that profit, which was earlier ignored. This study has been made as an attempt to determine whether the six cement companies ACC, Ultratech, Shree, Grasim, Ramco and Ambuja cements listed on NSE are able to generate shareholder wealth or destroying shareholder wealth. The study is conducted using secondary data taken from the financial statements of the companies from respective annual reports for a period of 5 years 2010-2014. The Study clearly proves that the companies have created shareholder wealth post-crash period of 5 years.

Keywords: Economic Value Added, Eva, Performance Metric, Shareholder Wealth, Cost of Capital, Nopat, Wacc And Corporate Performance.

I. INTRODUCTION

The primary objective of a business earlier was, profit maximization. Later with globalization, corporates' have understood that in order to perform well they need to create value to its shareholders. This idea paved way to a new concept of Shareholder Value creation and it has now become the primary objective for the companies in place of profit maximization. In order to create value, the company has to maximize its total value which can be done through its various research and development and training and development activities. In measuring a company's performance and its efficiency many traditional and accounting measures were used earlier. These conventional measures measured only the historical performance and had limited relevance to anticipate future evolution of a firm's performance.

Economic Value Added (EVA) is a concept which is developed by Stern Stewart around 90's. It is a financial measure referred by economists as economic profit or residual income. EVA measures economic profit created by the business as against accounting profit which companies announce annually. Cost of equity share capital are the costs that are involved in issue of equity shares and cost of debt is the cost involved in procuring capital from any other source. These costs are not taken into account by the financial managers while computing the profit of the company earlier, hence a proper justification could not be found between Actual profit and Economic Profit. Economists do take all such costs including opportunity costs in order to compute a firm's earnings. Thus profits of a business differ in financial manager's view point and that of an economist's view point.

EVA, in general does not take into account if a company is making profit or loss. It takes into account only the earnings that remain after all costs from all resources are taken into account including opportunity cost of capital. Opportunity cost for equity capital means the cost that is incurred to compensate the equity shareholders at a market determined rate of return. After meeting this obligation if the company is still left with earnings then it means that it created a Positive EVA else it created a Negative EVA. This finally concludes the fact that business earnings are inadequate to compensate the equity capital at its required rate of return as determined by the market.

From EVA stand point, if a company is making profits it does not necessarily mean that it is creating positive EVA likewise if a company is making losses it neither means, creation of negative EVA. What can be surmised from such scenario is that, if the company is having negative EVA continuously then there is a chance that shareholders shift their funds elsewhere. This is because the company is failing to generate adequate returns to their investment either in short term or long term.

To understand this basic investor psyche and to retain them, the corporations needed a concept or a model for them to follow through. Thus, EVA concept gained ground to fill this void. As this was developed by Stern and Stewart around 90's foreign companies first followed it. They successfully implemented and fine-tuned the concept to best suit their operations. Later, many companies followed the concept and after over one-two decades, Indian companies accepted and imbibed this concept and started evolving to meet the global requirements.

Infosys was the first Indian company to follow EVA concept and created value to its shareholders and thus many companies have started following this concept. Many Indian companies in various sectors like IT, FMCG, Banks, Pharmaceuticals, etc have stood par excellence following this EVA concept .EVA concept helped them to find the lacunae in areas of operations, finance and management. They started working on these gaps through improvisation in each of its operations and also in internal management as a whole on, continual basis thus creating wealth to its shareholders by maximizing their value in global arena.

II. LITERATURE REVIEW

Stern (1991) examined 1000 companies and picked 613 US listed companies and concluded that the key operating measure of corporate performance is not popular accounting measures such as earnings, earnings growth, dividends, dividend growth, ROE, or even cash flows but in fact it is EVA. He showed that the explanatory power of EVA was found to be six times better than that of growth of EPS.

Lehn and Makhija (1996) in their study of 241 US listed companies over two periods (1987-1988 and 1992-1993) observed that both measures of firms performance EVA and MVA correlate positively with stock returns and that the correlation is slightly better with EVA than with other traditional measures ROA, ROE, etc.

Hall & Brummer (1999) compared various performance measures with EVA and MVA and concluded that high relationship exists between them. He suggested that if a firm wishes to increase its shareholder's wealth it is necessary for it to focus on its EVA.

Karam Pal Singh and Mahesh Garg (2004) examined the disclosure of EVA in Indian corporate. The study revealed that out of 50 companies, only 32 companies have generated positive EVA and 18 companies have destroyed their shareholders' wealth in 1998.

Nikhil Chandra Shil (2009) submitted a research paper enlisting the advantages and disadvantages of EVA and concluded that EVA is one of good financial measures if used along with other conventional measures in vogue.

Dr. N. Sakthivel (2011) conducted a study on "Shareholders' Value in Indian Pharmaceutical Industry: An Analysis". It is concluded that companies under pharmaceutical industry has succeeded to meet public expectations in terms of shareholders' value creation through EVA either by increasing Operating Income from assets in place through reducing cost of production or increasing sales, or reducing cost of capital by changing the financing mix in capital structure.

Ivanov I.S (2014) made a study on the firms which are currently making negative EVA to check if these companies are going to perform well in future. He used accounting variables like ROA and Market-to-Book (MTB), leverage and size along with EVA and found that firms with lower leverage ratio exhibit higher portfolio returns and are able to turn around and generate positive returns.

III. RESEARCH METHODOLOGY

The present study is mainly based on secondary data collected from the annual reports of the six companies from Cement Industry, listed on National Stock Exchange. The study is mainly done to analyse the trend and growth of value creation in terms of EVA in these six firms and check to see if these companies created or destroyed shareholders wealth.

3.1 Objectives of the Study

- Calculate Economic Value Added of six Indian Cement companies and evaluate if the companies created shareholder's wealth or destroyed it.

3.2 Variables Used in the Study: *Calculation of EVA*

EVA concept deals with cost of capital. It says that for a firm to be successful it should earn at least its cost of capital, as profits alone do not reflect the true performance of the firm. It is calculated as hereunder:

- Economic Value Added (EVA) = NOPAT – (WACC * Invested Capital).
- Net Operating profit after Taxes (NOPAT).
- Invested Capital (IC): Total Equity + Long Term Borrowings + Reserves
- Weighted Average Cost of capital (WACC): Weighted cost of Equity + Weighted cost of Debt

WACC can be calculated as: $WACC = E / CE \times Ke + LTB/CE \times Kd$. Where,

E = Equity Capital, CE = Capital Employed, LTB = Long Term Borrowings,
Ke = Cost Of Equity Capital, Kd = Cost Of Debt Capital

Cost of Equity (Ke): As suggested by Stern Stewart CAPM model is used in calculating Cost of Equity

$.Rj = Rf + \beta\,(Rm - Rf).$ Where,

Rj = Expected Return on Scrip j, Rf = Risk free rate of return, Rm = Expected stock market return. β = Beta representing the volatility of scrip j against market volatility.

Cost of Debt (Kd): It is the rate of interest payable on debt**.** When debt is used as source of finance, the firm saves a considerable amount in payment of tax as interest is allowed as deductible expense in computation of tax, which reduces the effective cost of debt.

$$\text{Cost of Debt (Kd)} = (\text{Interest Expense} / \text{Borrowings}) \times (1-t) \times 100$$

3.3 Design and Data

The data sample for the present study consists of six companies from Cement Industry which are listed on National Stock Exchange. The study is based on the secondary data which taken from financial statements of their respective annual reports for the last five years i.e. since 2009-10 to 2013-2014. Five years data is considered in sample so as to complete one business cycle for each company.

3.4 Results & Discussion

The empirical part of the work was developed using a sample of six companies which are listed on Indian National Stock Exchange for a period of five years. Since data on EVA is not published by Indian firms is in their annual reports, EVA was calculated using the various formulae discussed above. EVA is the actual economic profit as against accounting profit which is shown by the companies in their annual reports. To understand this aspect better the following tables and charts give us the details of the EVA and Profit (Profit after Tax) of each company separately.

Table 1 gives us a description of EVA earned by Ultratech Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also what can be understood from the table is that the company's EVA and Profit have declined in 2014 compared to earlier years. This company's EVA and Profit are declining year on year since 2011 onwards.

This is mainly because of slow growth, investor diffidence and foreign exchange fluctuations which the global and local markets have witnessed recently. At home front the company faced high commodity prices, high inflation, rupee depreciation, power outages and poor monsoon factors as the company claims in its annual report. But by 2015 company is confident of growing its production capacity by 120% from existing 53.90 million tons.

Table 1: EVA and Profit (PAT) of Ultratech Cement Company

Company	**ULTRATECH**				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	2188	2694	2484	1437	1124
Profit	2464	2865	2670	1677	1211

Chart 1: EVA and Profit (PAT) of

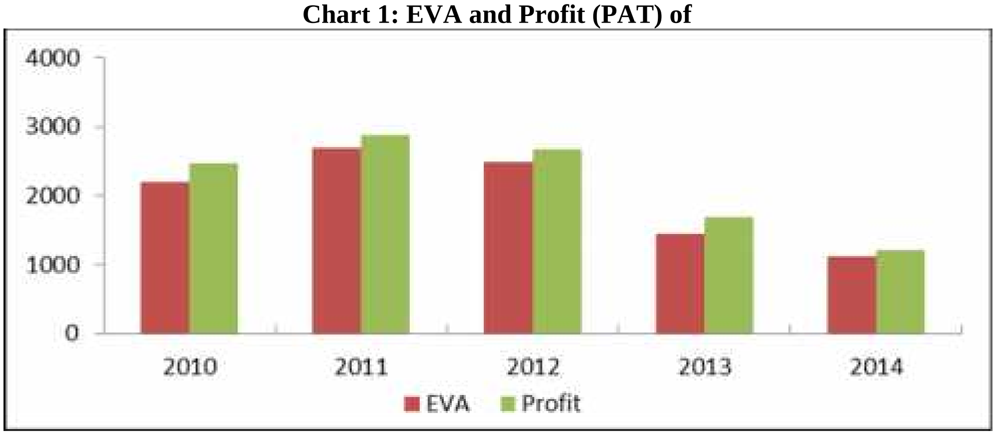

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Table 2 gives us a description of EVA earned by ACC Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also it can be seen from the table is that the company's EVA and profit have declined in 2012 compared to earlier years and started increasing slowly from 2013 onwards.

This decline is attributed by the company to the change in their method of calculating depreciation from straight line method to written down value in its captive power units. In the same year 2012 company instituted a program called "Institutionalizing Excellence" to enhance performance levels and for overall excellence in its various processes and projects.

Table - 2: EVA and Profit (PAT) of ACC Cement Company

Company	**ACC**				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	1058	1176	941	951	1063
Profit	1120	1325	1061	1096	1168

Chart 2: EVA and Profit (PAT) of ACC Cement Company

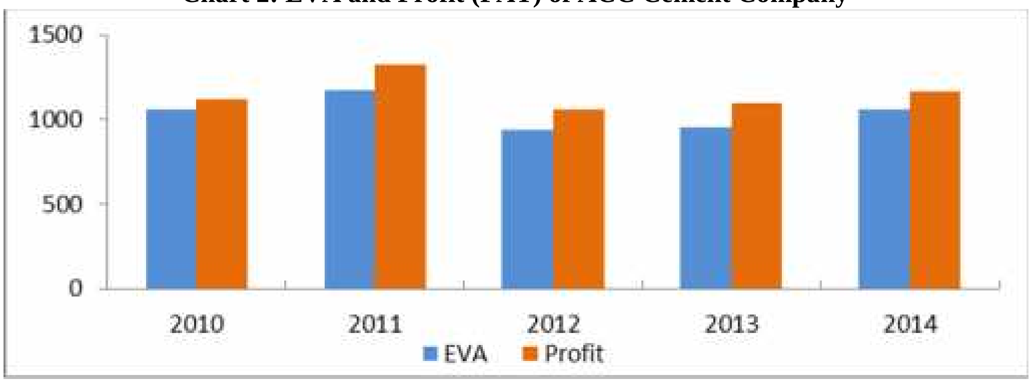

Table 3 gives us a description of EVA earned by Ambuja Cement Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also it can be seen from the table is that the company's EVA and profit have been steadily rising over the five year term period. The company claims in 2013 in its annual report that it saved costs, speeded up its production and improved their product.

Table - 3, EVA and Profit (PAT) of Ambuja Cement Company

Company	**AMBUJA**				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	1292	1246	1354	1301	1485
Profit	1313	1266	1373	1359	1560

Chart 3: EVA and Profit (PAT) of Ambuja Cement Company

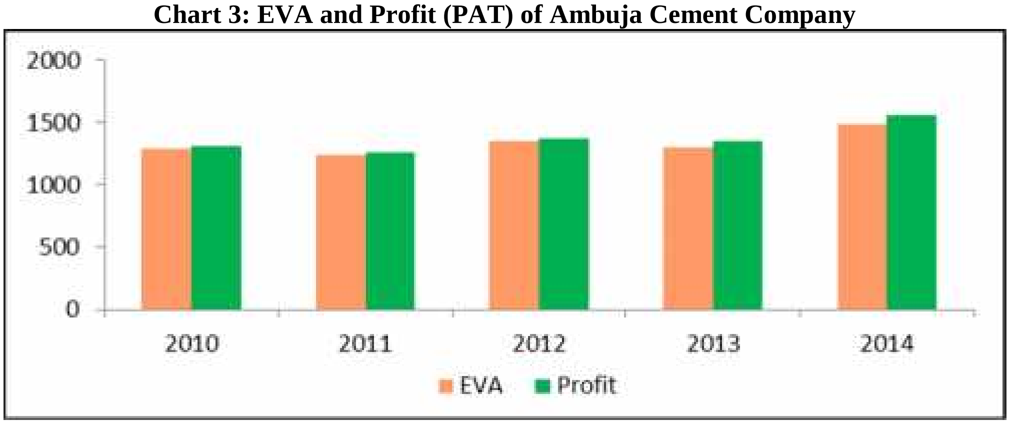

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Table 4 gives us a description of EVA earned by Shree Cement Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also it can be seen from the table is that the company's EVA and profit have dipped very much in the year 2011 and steadily increased in 2012 and 2013 with a dip again in 2014 compared to 2013 year.

In 2011 annual report company begs to differ in the way it is creating shareholder wealth compared to its competitors. It says that the earnings of the company retained and deployed in its business activities are generating better returns than the investments made from dividends received by shareholders. Yet, contradicting this point, the company says that they have increased dividends to its shareholders with real money and not money that exists only on paper. It says that the incremental earnings are reflected in the rising market cap of the company, which indicates their way of maximization of shareholder wealth.

Table 4: EVA and Profit (PAT) of Shree Cement Company:

Company	SHREE				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	727	179	622	999	850
Profit	816	434	866	1198	997

Chart 4: EVA and Profit (PAT) of Shree Cement Company

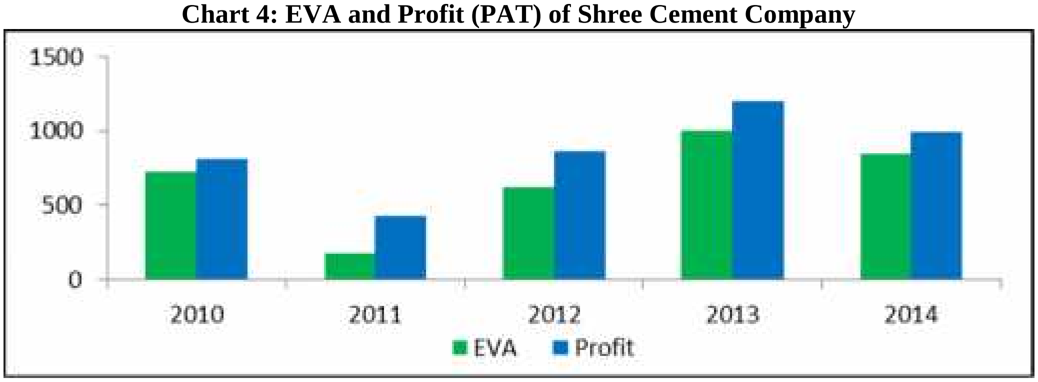


Table 5 gives us a description of EVA earned by Grasim Cement Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also it can be seen from the table is that the company's EVA and Profit have been declining since 2010 onwards due to foreign currency exchange volatility and Inflation at home front. From 2014 annual report it can be understood decline in business margins decreased for the company due to huge overcapacity in china, low GDP growth and huge slide in housing and infrastructure sector, despite its significant improvement in its operational efficiencies.

Table 5: EVA and Profit (PAT) of Grasim Cement Company

Company	GRASIM				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	1700	1136	1179	1016	883
Profit	1756	1182	1213	1061	938

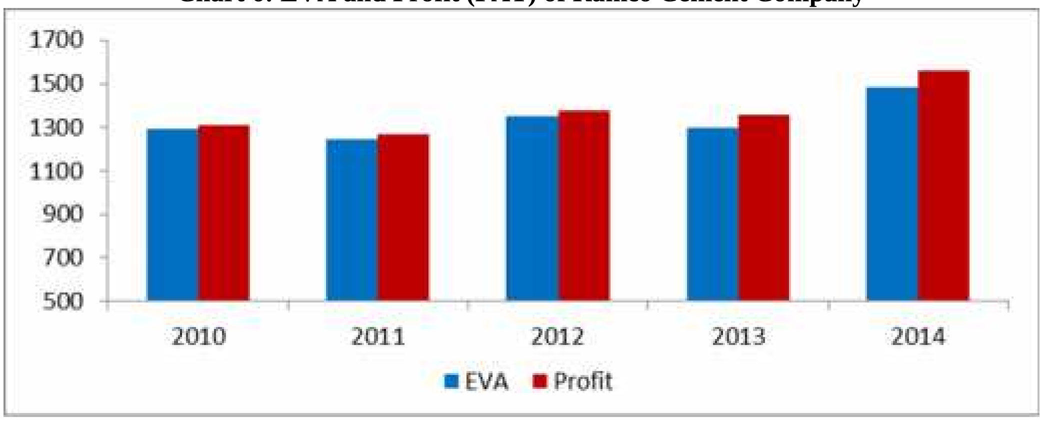
Chart 5: EVA and Profit (PAT) of Grasim Cement Company

Table 6 gives us a description of EVA earned by Ramco Cement Company against its Profit after Tax (PAT). As can be seen in the table the company showed positive EVA throughout indicating that the company has created Value to its shareholders and did not destroy it. Also it can be seen from the table is that the company's EVA and Profit have increased well in 2013 compared to other years taken in the study.

Table 6: EVA and Profit (PAT) of Ramco Cement Company

Company	**RAMCO**				
Year	**2010**	**2011**	**2012**	**2013**	**2014**
EVA	352	209	383	646	307
Profit	354	211	385	649	310

Chart 6: EVA and Profit (PAT) of Ramco Cement Company



IV. CONCLUSION

Economic Value Added is a measure of true economic performance of a company and a strategy for creating shareholder wealth. The current study clearly showed the difference between Profits earned by the company against EVA. As rightly said by Stern Stewart, EVA gives a clear picture of true economic profit of the company taking cost of capital into consideration. In India cost of procuring capital is very high hence the cost of capital procured cannot be treated as free which, accounting measures follow while assessing and reporting the profitability of the company. At the same time if an Indian company wishes to compete globally it certainly has to follow the global standards.

Many global companies have followed EVA and got benefitted from it, hence it can be concluded that it is a good measure to assess a company's performance and profitability. The current study concludes that these six companies have generated shareholder's value by generating positive EVA throughout the five years, which means that these companies have created wealth and did not destroy wealth of their shareholders.

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