2. Literature Review

2.1 Introduction

The industrial revolution saw a shift in the way people did business. The requirement of capital and the scale on which business was conducted grew manifold. The need was, therefore, felt to envisage newer forms of business organisations.

The joint stock companies have grown manifolds since 1991, an era where India followed the economic policies of Liberalisation, Privatisation, Globalisation (LPG) (Anand and Grover, 2004).

Company form of business organisations, therefore, proliferated post industrial revolution. One major characteristic of a company form of business organisation is "Separation of ownership from management".

What this separation does is separates people who invest in the capital of the business – the risk bearers and the real owners - and the people who manage their money on their behalf as trustees. This also gives rise to various forms of stakeholders depending on the security used to raise capital.

All the stakeholders have their own interests that need to be looked after by the managers. It is, thus, felt important about the way the managers must act so that the interest of the stakeholders is protected and also the interest of the real owners - the shareholders - is enhanced not by means of "profit maximisation" but by way of "wealth maximisation".

The performance measurement of the companies; therefore, faced a change. Not only were the parameters, which saw a sea change but also reporting of the details to the stakeholders got more substantiate and elaborate.

In the earlier periods when the form of business organisation was not as complex as today, the Profit after Tax (PAT) sufficed to measure the corporate performance. But
as the newer changes were brought about in the forms of business organisation, the
way people conducted business and the geographical areas over which business was
cported, mere PAT were not sufficient.
There was a need felt for proper cross sectoral and cross company fair comparison,
which gave rise to analysts using ratios and percentages as a yardstick to measure
business performance.
Thus, measures such as Earnings per Share (EPS), Return on Asset (RoA), Return on
Capital Employed (RoCE), Return on Investment (RoI), Net Profit Margin (NPM),
Operating Profit Margin (OPM), Gross Profit Margin (GPM) etc. became popular
means of measuring corporate performance.
These ratios and percentages were derived from the accounting data prepared by the
companies i.e. from financial statements such as Profit and Loss Account and Balance
Sheet, etc.

2.2 Profit Maximisation v/s Wealth Maximisation dilemma

The firm’s decision making are continuous and unavoidable. In order to make them
rationally, the firm must have a goal. It is generally agreed in theory that financial
goal of a firm should be “Shareholder Wealth Maximisation” as reflected in the
firm’s market value of shares.
Profit maximisation as a business objective was a 19th century criterion when the
characteristic feature of the business structure were self financing, private property
and single entrepreneurship. The only aim of the single owner then was to enhance
his/her individual wealth and personal power which could easily be satisfied by the
profit maximisation (Solomon, 1969).
The modern business environment is characterised by limited liability and a divorce
between management and ownership. Shareholders and lenders today finance the
business firm but it is controlled and directed by professional management. The other important stakeholders of the firm are customers, employees, government and society.

In the new business environment profit maximisation, therefore, is regarded as unrealistic, difficult, inappropriate and immoral (Robert B., 1960). Profit maximisation as an ultimate objective for the economic welfare of the owners is also criticised due to following limitations:

1. It is vague;
2. It ignores the timings of returns;
3. It ignores risk. (Solomon, 1969)

Shareholder Wealth Maximisation means the net present value or a wealth of a course of action is the difference between the present value of its benefits and the present value of its costs.

The objective of Shareholder Wealth Maximisation takes care of the questions of timing and the risk of the expected benefits. These problems are handled by considering the Weighted Average Cost of Capital (WACC) while calculating the return (Pandye, 2010).

It was found that Shareholder Value Creation is a good yardstick to measure Corporate Performance (Kakani, Saha and Reddy NSE Research Paper No. 5).

We, thus, realise that the researchers the world over have realised the importance of Wealth Maximisation as an objective of every firm. Wealth maximisation as represented by Shareholder Value Creation has thus, become objective of all managers and managements (Pandye, 2010).

The dilemma that now persists is how one measures Shareholder Value Creation. Are the traditional accounting measures good enough to measure the Shareholder Value Created or do we need look out for some other measures?
2.3 Critique of Traditional Accounting Measures

There have been many who critiqued these yardsticks to measure corporate performance but the most eloquently put criticism to Historical Cost based accounting came from a famous researcher Alfred Rappaport.

Rappaport in his book “Creating Shareholder Value” (1986) offers five reasons why “earnings fail to measure changes in the economic value of the firm”

1. Alternative accounting methods may be employed (e.g. FIFO and LIFO).
2. Risk is excluded (there is no adjustment for risk; thus, an increase in earnings because of increased debt does not necessarily reflect an increase in economic value).
3. Investment requirements are excluded (income plus depreciation may not equal net cash balance changes);
4. Dividend policy is not considered (earnings are not affected by dividends paid, but dividends paid affect stock price);
5. The time value of money is ignored (any investment earning more than a zero return will increase earnings, though the investment might not be desirable).

Rappaport recommends use of EVA over traditional accounting measures such as RoI, RoE, EPS, ....

Alfred Rappaport, in his book Creating Shareholder Value, said:

“The growing recognition that traditional accounting measures such as Earnings per Share (EPS) are not reliably linked to increasing the value of the company’s stock price has made top management more receptive than ever to considering alternate measures”
There were many more that criticised use of Historical Cost based accounting. Here are a few who made their voice loud and clear against the historical cost based accounting.

Notwithstanding their common cash flow component, Historical Cost (HC) performance indices are not reliable surrogates for shareholder Value Creation performance criteria. The former apparently do not accurately capture changes in corporate valuation and generally understate the variability of market-based returns. The multi period HC income of a going concern characteristically overstates its contemporaneous multi period cash flows to a considerable degree. Contrary to common supposition, the former does not therefore constitute a 'normalized' or 'smoothed' version of a firm's 'primitive' cash flows in the sense that the cumulative (multi period) values of the two measures tend to converge. As a consequence of HC income and its near relation, taxable earnings, are dubious bases for measuring interest-paying, tax-paying and dividend-paying capacities. Corporate income-distribution decisions based on HC accruals-based profit measures frequently trigger external financing which may cause shareholder wealth losses and wealth transfers from shareholders to lenders. However, 'fiscal drag' appears to be the most serious consequence of HC accruals-based income distribution decisions (Lawson, 1996).

Return on Investment (RoI) was developed by Dupont Powder Company in the early 1900 to help manage vertically integrated enterprise. The intent of this measure was to evaluate the success of a company or division by comparing its operating income to its invested capital (Johnson and Kaplan, 1987).

A major drawback of RoI is it forces managers to take decisions that are short term in nature and not necessary in the best interest of the company in long term (Morse, et al., 1996).
This conflict gave rise to our first research question:

"Is Shareholder Value Creation a good proxy for corporate performance in India?"

The problem is if Shareholder Value Creation has to be tested to find out if it is a good proxy for corporate performance then we need to know how to calculate shareholder value creation.

We thus, come across a measure to value shareholder value creation i.e. Economic Value Added (EVA™) – a registered trademark of Stern Stewart and company.

2.4 Why EVA?

Economic Value Added (EVA) a registered trademark of Stern, Stewart and company, USA is a refinement of the concept of "Residual Income" spoken by the famous economist Alfred Marshall. It measures excess of return over the cost of capital.

EVA stands well out from the crowd as the single best measure of wealth creation on a contemporaneous basis and is almost 50% better than its closest accounting-based competitor [including EPS, ROE and ROI] in explaining changes in shareholder wealth (Stern and Stewart, 1994).

The usefulness of EVA has been widely debated in the literature.

Biddle, Bowen, and Wallace (1997) assert EVA to be more highly associated with stock returns and firm values than with accrual earnings. They suggest that EVA components only marginally add to information content beyond earnings.

How does EVA promote shareholder interests?

1. It clearly specifies to management that the primary financial objective of the company is to create shareholder wealth.

2. It emphasizes continuous improvement in the company’s EVA as the basis for increased shareholder wealth.
Assuming the efficient market hypothesis holds, stock price reflects the company's current performance; therefore, the level of EVA isn't important, but changes in that level are. Management focus on these two issues can result in dramatically increasing EVA (Farslo, Degler, Degner, 2000).

"For companies that aim to increase their competitiveness by decentralizing, EVA is likely to be the most sensible basis for evaluating and rewarding the periodic performance of empowered line people, especially those entrusted with major capital spending decisions" (Stern, Stewart, and Chew, 1995).

The literature relating to EVA, literally begins with the publication of the book "The Quest for Value" by Stewart (1991), in which the author exposed his views about the usefulness of EVA as the basis of performance measurement of a company and its management at a total or a divisional level.

In his empirical research he examined the informational content of EVA canvassing 613 American companies comparing two periods, namely 1984–85 and 1987–88. He found a strong correlation between EVA and MVA, which becomes more apparent when the changes in EVA and MVA are considered giving an $R^2$ of about 97%. However, for companies with a negative EVA the association becomes less obvious, because of the increased probability of liquidation or acquisition, which sets a lower limit on the market value of these companies.

In a subsequent study again by Stewart (1994) which investigated the performance of the largest 1,000 American companies, he reported that the change in EVA explains 50% of the change in MVA (the remaining 50% is explained by the future EVA), whereas the change in sales explains only 10% of the change in MVA, comparing it with 15–20% of the change in earnings per share (EPS) and 35% of the change in ROE.
In the same line, the study by *O'Byrne* (1996) gave support to the argument of incremental informational content of EVA.

*O'Byrne*, using a large sample of American companies for the period 1985–93, examined the relationship between the ratio of market value to invested capital (as the dependent variable) and independent variables, the ratios of EVA/WACC, free cash flow (FCF)/invested capital and NOPAT/invested capital. After several adjustments in the regression equations, such as setting different coefficients for negative and positive EVAs and creating a dummy variable which controls for intra-industry differences, *O'Byrne* found an $R^2$ of 56%, reaching to the conclusion that EVA explains the value of companies much better than the operating profits.

*Grant (1996)*, examining a sample of 983 American companies for 1983, reached similar conclusions about the validity of EVA by finding that the ratio of EVA/WACC explains the 31.6% of the ratio MVA/invested capital. However, he reported that for the 50 companies with the highest EVA (wealth creators) the $R^2$ of regressions increases to 83.2%, while for the 50 companies with the lowest EVA (wealth destroyers) the $R^2$ of regressions falls to 2.7%, implying that investors are less likely to proceed to valuations of companies for which they know that they are wealth destroyers.

They even claim that EVA compensation is "effectively 'self-financing' due to the strength of the correlation between changes in EVA and in shareholder value" (*Stern, Stewart, and Chew, 1995*).

EVA has managed to attract a significant following. Stern Stewart and Co. is cited in *Meyers* (1996) claiming that EVA is currently being utilized by some 250 corporate clients.
John Shiely, President and Chief Operating Officer of Briggs and Stratton, believes that EVA is "a measuring stick, an unbiased measure of performance...EVA instils capital discipline" (Achstatter, 1995).

Varity CEO Victor Rice writes "At Varity, EVA has become more than just a yardstick. We fundamentally believe that over time, there is a direct relationship between EVA improvement and a higher share price" (Rice, 1996).

ATandT's Jim Meenan says, "The correlation between MVA and EVA is very high. So when you drive your business units toward EVA, you're really driving the correlation with market value" (Walbert, 1994).

The American Management Association Council has "enthusiastically endorsed economic value added (EVA) as a yardstick for company or unit performance" (Bennett, 1995).

EVA is compared with several other valuation measures including cash flow, operating income, and profit after tax from the viewpoint of both levels and changes. Also two different forms of EVA are examined by using the Weighted Cost of Capital (WACC) from the Capital Asset Pricing Model (CAPM) and the WACC from the Fama–French (1993) model. The results reveal that corporate market values in both levels and changes have stronger linkages with cash flow and other earnings measures than either form of EVA (Tsuji, 2006).

EVA is a complete financial management system in comparison to EPS model as it tends to create lower risks and lower leverages (Stern, Stewart and Chew, 1996).

Garvey and Milbourn (2000) find a simple correlation between EVA or earnings and stock returns. They suggest that EVA is a reasonably reliable guide to the firm value. Machuga, Preiffer, and Verma (2002) show that EVA can be used to enhance future earnings predictions.
Chen and Todd (2001) examine the extent to which EVA information can explain the variation in stocks returns. They conclude that the variation appears to be attributable to non-earnings-based information.

Abate, Grant and Stewart III (2004) show that EVA can be a valuable investing tool to identify good companies with good stocks.

Economic value added (EVA) is a well-known and widely used measure of operating performance.

Value-added performance measures, such as economic value added (EVA), are promoted as a means to better align managerial incentives and improve firm performance. We find mixed results consistent with previous studies. In examining risk adjusted market returns, we find that the full sample significantly underperforms the market. However, during the period of the study, EVA adopters exhibit less negative performance than non-adopters. Moreover, over the entire study period, adopter performance improves in a positive direction, while non-adopters experience a performance decline. Adopting firms also exhibit higher earnings growth and higher returns. In perspective, these results suggest there is some benefit to EVA adoption, relative to a peer group, as adopters outperform their peer group. In a comparison of peer matched groups, firm size and growth opportunities are found to have a significant impact on performance for three size-based groups (Hamilton, Rahman and Lee, 2009).

(Worthington and West, 2004), Pooled time-series, cross-sectional data on 110 Australian companies over the period 1992–1998 is employed to examine whether the trademarked variant of residual income known as economic value-added (EVA) is more highly associated with stock returns than other commonly-used accounting-based measures. These other measures of internal and external performance include
earnings, net cash flow and residual income. Three alternative formulations for pooling data are also employed in the analysis, namely, the common-effects, fixed-effects and random effects models, with the fixed-effects approach found to be the most empirically appropriate. Relative information content tests reveal returns to be more closely associated with EVA than residual income, earnings and net cash flow, respectively. An analysis of the components of EVA confirms that the GAAP-related adjustments most closely associated with EVA are significant at the margin in explaining stock returns.

Support for EVA has also been forthcoming from other sources. *Fortune* has called it ‘today’s hottest financial idea’, ‘The Real Key to Creating Wealth’ (*Anonymous 1993*) and ‘A New Way to Find Bargains’ (*Topkis 1996*), And Peter Drucker in the *Harvard Business Review* suggested that EVA’s growing popularity reflected the demands of the information age for a measure of ‘total factor productivity’ (*Drucker 1991*). *McClenahan (1998)* similarly observes that ‘traditional corporate performance measures are being relegated to second-class status as metrics such as EVA become management's primary tools’.

Finally, there has been the widespread adoption of EVA by security analysts since ‘instead of using a dividend discount approach, these models measure value from the point of view of the firms’ capacity for ongoing wealth creation rather than simply wealth distribution’ (*Herzberg, 1998*).

In response to these claims, an emerging literature has addressed the empirical issue as to whether EVA is more highly associated with stock returns and firm values than other accounting-based figures.
Similarly, *Uyemura, Kantor and Petit (1996)* demonstrated that EVA has a high correlation with market value added (the difference between the firm's value and cumulative investor capital) and thereby stock price.

*O'Byrne (1996)* estimated that changes in EVA explain more variation in long-term stock returns than changes in earnings.

Finally, and from a stock selection perspective, *Herzberg (1998, p. 52)* concluded that the residual income valuation model (including EVA) ‘appears to have been very effective in uncovering firms whose stock is underpriced when considered in conjunction with expectations for strong earnings and growth’.

Nevertheless, the bulk of empirical evidence indicates that the superiority of EVA over earnings (as variously defined) has not been established. However, when examining existing research in this area, two salient points emerge. First and foremost, and notwithstanding that EVA figures are readily available and promoted in the UK, Australia, Canada, Brazil, Germany, Mexico, Turkey and France (*Stern Stewart 1999*).

*No empirical studies of this type (as far as the authors are aware) have been conducted outside the United States.*

This is despite several international companies adopting EVA for performance measure and/or incentive compensation packages. There is an obvious requirement to examine the usefulness of EVA vis-à-vis traditional financial statement measures in an alternative institutional milieu.

Second, there has been an emphasis in previous empirical work in this area on either a cross-section of companies or limited pooled time-series, cross-sectional data.

For example, *Bao and Bao (1998)* only employ a cross-section of 166 firms over the period 1992/93. Examination of extended time-series data would certainly permit
greater empirical certainty on the usefulness of economic value-added. However, while data sets that combine time series and cross sections are increasingly common in financial analysis, modelling in these settings calls for some quite complex stochastic specifications. For example, past empirical studies have often employed pooled time-series, cross-sectional data without giving specific a priori justification for the choice of model formulation.

While EVA has been given an increasing amount of attention by Japanese management executives, it is nonetheless subject to a number of pros and cons (Brealey and Myers (2000) and Damodaran (2001)). The EVA style of investing emphasizes the fundamentals of wealth creation in the profiling of a company and its stock. It thus provides securities analysts and portfolio managers with a robust framework for identifying good companies that have good stocks. EVA also provides insight into the critical role of risk adjustment in stock selection and portfolio risk control. The EVA style of investing can be used to aid investors (institutional or otherwise) in their decision to allocate funds between an actively managed or passive indexing approach depending on the degree of capital market efficiency (Abate, Grant, and Stewart III, 2004).

The analysis is done using a portfolio separation test that examines the statistical significance of the regression coefficient generated when the cumulative returns from one portfolio are regressed against the cumulative returns from the other portfolio. We conclude EVA does provide economically useful information that can be used to forecast portfolio separation. Specifically, forming portfolios based on higher and lower values of EVA divided by the average book value of debt and equity from a buy list yields portfolios with cumulative returns that are statistically different (Fountaine, Jordan and Phillips, 2000).
Proponents of EVA also argue that there is a positive correlation between EVA and stock performance. Empirical results from both Lehn and Makhija (1996) and O'Byrne (1997) support the notion that stock prices react positively when companies are generating high levels of EVA every year.

In addition, papers such as Birchard (1996) and Davies (1996) provide anecdotal evidence that stock prices rise when companies implement EVA as a management tool.

The study examines whether information, if any, is indeed embedded in economic value added (EVA) that would prove useful in creating wealth, and in minimising risk, for the investor during bull and bear market environments. Should this be so, then past EVAs should contain information that aids in the creation of stock portfolios with favourable future risk-return structure. EVA-based stock portfolios were found to be similar to the S&P500 Index, but yet produced positive alphas across subsamples, an indication that EVA contains information beneficial to increasing shareholder wealth, even in bear markets. On closer examination of the EVA-based stock portfolios, it was suggested that in times of market upswings, one should construct a portfolio based on lower EVA-ranked stocks, while switching to higher EVA-ranked stocks during market downturns (Chong, Fountaine, Her and Phillips, 2009).

EVA and MVA were also compared using a portfolio separation test (Fountaine et al, 2008), and the differing results between the highest and lowest performers from each were found to be significant and generally similar to one another. The portfolio separation test was further used to compare the best (highest) and worst (lowest) EVA performers from each of the years between 1995 and 2004, chaining the cumulative returns of each group together in two annually rebalanced portfolios. The cumulative
wealth creation was shown to differ between the high and low groups, and regressions of the daily returns of each showed the difference between them to be statistically significant. The researchers concluded that EVA has explanatory power on relative shareholder wealth creation across both bull and bear market environments.

_Floarea Iosub-Dobrica_ (2008): The shareholder value maximization objective function of Anglo-Saxon publicly quoted corporations over the last three decades gave raise to contrasted reactions. The controversy raised by the implementation of this new form of capitalism goes beyond the simple interactions between corporate governance and its achievements. The means allowing corporations to maximize shareholders' wealth are nowadays fuelling the debate, especially when considering the eventual generalization of the Anglo-Saxon corporate governance model to other countries. Excessive corporate debt, massive job cuts, considerable assets reductions etc. are the most recurrent corporate strategies denounced as harmful by shareholder value maximization detractors. While these strategies are often retained in descriptive studies or in the Medias as a by product of the shareholder value maximization policy, empirical support in this direction is lacking.

Economic Value Added, thus, is a very popular method of measuring Shareholder Value Creation and also very highly researched. One needs to however, note that most of the research in EVA has happened mainly in a developed and an efficient markets like USA, Japan & Europe.

### 2.5 Critique of EVA

Though, there have been a lot articles written and good number research publication on the usefulness of EVA, there also have been contradictory views about EVA. Major critique of EVA was at the very basis of EVA. How to calculate EVA? Weaver did a survey of the CEOs of the companies that implemented EVA and he found that
none of the respondents measured EVA, NOPAT or Capital Employed in the same way. From the prescribed 164 adjustments, the average EVA proponent makes 19 adjustments with a range between 7 and 34 adjustments. There is limited consistency even within the same industry (Weaver, 2001).

Further Paulo (2002) argues that EVA is just another piece of accounting information, and—like other accounting information—it has become less relevant to stock returns and stock price changes.

Some felt that EVA alone is not a very useful tool.

Adsera and Vinolas (2003) emphasize the principle of one value and suggest that the financial and economic value added (FEVA) approach, which integrates the EVA, discounted cash flow, and Modigliani and Miller models, is preferable to EVA alone.

Chen and Dodd (1997) likewise examined different dimensions of the EVA system and concluded: ‘... not a single EVA measure annualised EVA return, average EVA per share, change in standardised EVA and average return on capital was able to account for more than 26% of the variation in stock return’.


Clinton and Chen (1998) also compared share prices and returns to residual cash flow, economic value-added and other traditional measures, and recommended that companies using EVA consider residual cash flow as an alternative.

Biddle, Bowen and Wallace (1997) used relative and incremental information tests to examine whether stock returns were more highly associated with EVA, residual income or cash flow from operations. They concluded that while ‘for some firms EVA may be an effective tool for internal decision making, performance
measurement, and incentive compensation, it does not dominate earnings in its association with stock market returns'.

*Bao and Bao* (1998, p. 262) in an analysis of price levels and firm valuations concluded that the 'results are not consistent for earnings and abnormal economic earnings, but are consistent for value-added, that is, value-added is significant in both levels and changes deflated by price analyses'.

Several other empirical studies offered results arguing against the superior informational content of the EVA.

For example, *Dodd and Chen* (1996), who examined 566 American companies for the period 1986–92, discovered that EVA can explain only the 20% of the variability of stock returns, in contrast with ROA which can explain the 24.5% of the corresponding variability. They found that EVA appeared to have higher explanatory power when it was compared with ROE and EPS, but when it was compared with a simple measure of residual income (without the accounting adjustments of Stern Stewart) they could not identify any significant incremental informational content.

*Peterson and Peterson* (1996) for a sample of 282 American companies for the period of 1988–92, evaluated the correlation between traditional performance measures, e.g. ROA and ROE and measures based on added value, such as EVA, MVA, changes in MVA with stock returns. They reported that EVA has a low correlation with stock returns, while the measures based only on MVA are statistically significantly correlated with stock returns.

*Biddle et al.* (1997) also offered empirical evidence against the validity of EVA, by investigating a large sample of American companies for the 1983–94 periods. They discovered that the earnings before extraordinary items (EBEI) had greater
explanatory power of stock returns than EVA, residual income and operational cash flows (OCF).

*Bao and Bao* (1998) examined the relative informational content of net income, abnormal economic earnings (their definition of EVA) and value added (defined as sales – cost of goods sold – depreciation) using a sample of 166 American companies for the period 1992–93. Their results did not support the argument of superior informational content of the EVA, since they found inconsistent behaviour in the abnormal economic earnings variable, which produced a negative sign when the dependent variable was the value of the firm, and then changed to positive when the dependent variable was either the stock price or the stock return. The only variable, which consistently generates positive signs with high explanatory power in all three models, was the value added.

In the same category of studies against the validity of the EVA, we can also classify that of *Chen and Dodd* (1998), who found, by using a sample of 566 American companies for the period 1983–92, that EVA did not have an incremental informational content in explaining the variability of stock returns, when compared to operating income and simple residual income. However, in the same study the variable of residual income appeared to have a marginally higher explanatory power than operating income.

The authors studied EVA to find out if it had good correlation with the stock price and returns. They found that EVA along with traditional accounting measures and stock prices are good measures to ascertain managerial and firm performance. EVA by itself does not explain the value created entirely (*Garvey and Milbourne, 2000*).

There is insufficient evidence to conclude that poor stock performance leads firms to adopt EVA or that adopting EVA improves stock performance. Firms that adopt EVA
appear to have above average profitability relative to their peers both before and after
the adoption of EVA: further, there is some evidence that EVA adopters experience
increased profitability relative to their peers following adoption (Ferguson, Rentzler,
and Yu, 2005).

EVA does not control for size difference across the plants or divisions (Hansen and
Mowen, 1997; Horngren et al, 1997).

EVA is a computed number that relies on financial accounting methods of revenue
realisation and expense recognition. If motivated to do so managers can manipulate
these numbers by altering their decision making processes (Horngren, et al, 1997).

EVA overemphasises the need to generate immediate results, therefore, it creates
disincentive for managers to invest in innovative product and process technology
(Brewer, Chandra and Hock, 1999).

Claiming that EVA alone can offer an organisation a sustainable source of
competitive advantage is an overstatement. EVA can provide a valuable measure of
wealth creation and can be used to help align managerial decision making with firm
preferences; however, it is only one piece of the performance measurement puzzle
and it must be used in conjunction with a balanced set of measures that provide a
complete picture of performance (Brewer, Chandra and Hock, 1999).

EVA may provide a slightly better tool of analysis for the company and a premise for
effective decision making but is not the ultimate and the only tool for the performance
measurement system (Weissenrieder, 1997).

The performance measure economic value added (EVA) has been adopted by a
rapidly growing number of firms and is beginning to appear in mainstream finance
textbooks. Despite such acceptance, little empirical work has been done on the ability
of EVA to reflect market value added. The results do not fully support the arguments
of EVA proponents that it is the best internal measure of corporate success in adding value to shareholder investments (Kramer and Pushner, 1997).

While EVA has certainly attracted popular attention and a significant following, we find minimal evidence in the academic literature to support this reputation. Stern, Stewart, and Chew (1995) make numerous claims for EVA. "EVA's detractors often say it's too complex to calculate, mires the company in short-term thinking, and doesn't explain shareholder returns any better than other, less-complicated accounting methods" (Nuelle, 1996).

Biddle et al (1997, 1999) compared EVA with other financial measures such as net income and residual income, and found that the latter two had higher explanatory power to stock returns than EVA.

Bacidore et al (1997) developed a refined EVA (REVA), computing capital charges based on market values of debt and equity instead of adjusted book values. For the years between 1982 and 1992, they compared the explanatory power of EVA and REVA on market-risk adjusted excess returns, and found that REVA out-performed EVA in measuring firm performance.

Kramer and Peters (2001) examined the correlation between EVA and NOPAT with MVA, and reported that NOPAT exhibited higher explanatory powers than EVA in 42 of the 53 industries, based on adjusted R², from ordinary least-squares regressions. They concluded that there is no significant 'industry effect' to EVA, and that EVA is not better suited to manufacturing versus knowledge-based businesses.

Ferguson et al (2006) investigated the effectiveness of trading strategies derived from EVA and MVA for the period 1994–2003. They formed 10 groups of portfolios from the top 100 to the bottom 100 of the SS1000 firms, ranked by adjusted-EVA (dEVA/MVt_1) and adjusted-MVA (dMVA/MVt_1).3 They did not find statistically
significant differences between the top and the bottom portfolios based on both ranking variables. However, they observed unique characteristics of the winner groups using two different ranking variables, but not for the loser groups.

*Birchard* (1994) notes that it can be biased against low return start-up investments and can favor businesses with heavily depreciated assets.

ATandT's *Justin Wolcott* notes similar limitations: "You can create different results for DCF (Discounted Cash Flow) versus EVA analysis because of EVA's use of accounting, not cash figures" (*Birchard, 1994*).

GATX CEO *James Glasser* (1996) is "convinced that the EVA approach can penalize companies that invest in assets with long-term returns." Consultant Alfred Rappaport explains that "EVA is a short-term measure based on sunken cost-historical investment...EVA can report value increases while the business is investing below the cost of capital, or value destruction while the business is actually investing above the cost of capital" (*McConville, 1994*).

Consultant *Bruce Keener* simply concludes that "EVA fails to look forward" (*McConville, 1994*).

The empirical evidence regarding the strength of EVA as a measure of performance is limited. The developers of EVA, Stern Stewart find an $R^2$ value of 60% between EVA and MVA, but this relationship is calculated for the average levels of these variables among 20 groupings of firms. They also report that changes in EVA over a five-year period explain 50% of the change in MVA over the same period (*Stern, Stewart, and Chen, 1995*).

*Thomas* (1993) of BCG-Holt, which advocates an alternative measure, calculates an $R^2$ between MVA and EVA of just 4% for the 1,000 firms in the Stern Stewart 1000
database in 1988. After removing 31 "extreme" outliers, he finds the $R^2$ increases to 27%.

Finally, Dodd and Chen (1996) report that EVA accounts for only 20.2% of the variation in stock returns for a sample of 566 companies, while the return on assets explains 24.5% of market returns.

Certainly the existing evidence does not consistently support the many claims made for EVA.

Stern Stewart and Company (SSC) developed the measure. Economic Value Added (EVA), to reward employees for maximizing shareholder wealth. Financial analysts also use EVA to measure firm performance. This study assesses the performance of companies that have implemented the EVA-based compensation system and questions whether analysts should use EVA performance to forecast stock performance. Investors in EVA adopters or in firms for which EVA has been used to forecast stock performance would have suffered significant loss (Griffith, 2004).

Relative information content tests reveal that net and operating income appear to be more value relevant than EVA. Additionally, incremental information tests suggest that EVA unique components add only marginally to the information content of accounting profit. Moreover, EVA does not appear to have a stronger correlation with firms' Market Value Added than the other variables, suggesting that – for our Greek dataset – EVA, even though useful as a performance evaluation tool, need not necessarily be more correlated with shareholder's value than established accounting variables (Kyriazis and Anastassis, 2007).

In a work by Fernandez (2001), who followed a different approach by examining the correlation coefficients between EVA and MVA for a sample of 582 American companies for the period 1983–97, it was shown that for 296 firms of the sample the
changes in the NOPAT had higher correlation with the changes in MVA than the corresponding changes in EVA, while for 210 sample firms the correlation between changes in EVA and MVA was negative.

Finally, in one of the few published studies using European data, by Peixoto (2002) for a sample of 39 Portuguese companies for the period 1995–98, it was reported that the net income variable has a higher informational content than EVA and operating profits, when the dependent variable is the market value of the companies. EVA appeared to have a superior informational content when the dependent variable is the MVA. The latter finding implies that EVA may perform well as a measure of evaluation of management performance, when the goal is the maximisation of shareholders’ wealth. Based on the above findings of empirical research carried out so far, we obtain an inconclusive and mixed picture regarding the explanatory power of EVA measures in relation to stock returns and market value of firms.

It also appears from the majority of the studies that simple unadjusted measures of residual income (without the accounting adjustments of Stern Stewart) tend to better explain stock returns. The possible causes for this phenomenon may be attributed to the likelihood that the market makes different estimates about the cost of capital, or that the market does not consider appropriate the accounting adjustments that Stern Stewart suggests. There is also one possibility that the empirical studies which offered contradictory results to those conducted by Stewart (1991, 1994), did not apply correctly all the accounting adjustments applied by Stern Stewart.

We analyze 582 American companies using EVA, MVA, NOPAT and WACC data provided by Stern and Stewart. For each of the 582 companies, we have calculated the 10-year correlation between the increases in the Market Value Added (MVA) each year and each year’s EVA, NOPAT and WACC. For 296 (of the 582) companies, the
correlation between the increase in the MVA each year and the NOPAT was greater than the correlation between the increase in the MVA each year and the EVA. There are 210 companies for which the correlation with the EVA has been negative! The average correlation between the increase in the MVA and EVA, NOPAT and WACC was 16%, 21% and -21.4%. The average correlation between the increase in the MVA and the increases of EVA, NOPAT and WACC was 18%, 22.5% and -4.1% (Fernandez, 2001).

Which effectively meant was that EVA was not the most ideal method to calculate Shareholder Value Creation.

Furthermore, we would like to stress that in emerging markets which are relatively inefficient, as is the case with India, it may be equally possible that investors are unaware of the 'true economic value' of firms. They solely rely on traditional measures of performance which are based on generally accepted accounting principles.

2.6 In nutshell

Originally developed from the residual income model, and introduced by Stewart (1991), many of the findings supporting the use of EVA are from in-house research such as Stewart (1994) and O'Byrne (1996). In many cases, somewhat exaggerated arguments supporting the use of EVA have been presented 'Forget EPS, ROE and ROI. EVA is what drives stock prices' (Stern Stewart advertisement in Harvard Business Review, November–December, 1995, p.20), or 'EVA is almost 50% better than its closest accounting-based competitor in explaining changes in shareholder wealth' (Stewart, 1994, p. 75).2 In the USA, there has been little empirical research focusing on EVA and corporate values, and what literature there is has often reached
conflicting conclusions: for example, O'Byrne (1996) supported the usefulness of EVA, whereas Biddle et al. (1997) provided evidence to the contrary.

There were a few studies concerning EVA and corporate values were conducted in Japan by Tsuji. He observed that in the Applied Economics journals, there are many studies on corporate values, such as Keasey and Short (1997), Firth (1998), Naceur and Goaied (2002), Brio et al. (2003) Becchetti and Adriani (2004), Naceur and Goaied (2004), Jones and Danbolt (2004), Alonso et al. (2005), and Abhyankar et al. (2005).4 However, none of these studies focus on EVA. Accordingly, some attempt should be made to test the assertions of Stern Stewart and Co. outside of the USA. It is expected that the present research will provide this journal series with new insights, since no Applied Economics journal papers have analysed EVA. 

This also points out to the fact that EVA was not rigorously researched outside USA.

In all, we have found no clear evidence to support the contention that EVA is the best measure of corporate success in adding value to shareholder investments. On the contrary, the market seems more focused on "profit" than EVA. Further, we do not see a clear advantage to shareholders in looking at EVA, as the accounting return on their investment is NOPAT. While these investors certainly need to be aware of capital structure, they should already be familiar with the opportunity cost of their investments and may not need to incorporate this into the measure of performance. From the point of view of management decisions, we are not arguing against the concept of "economic profit" or the use of the NPV of future cash flows for investment decisions. We certainly think it is important for management to understand its cost of capital, but we do caution against an overemphasis on either NOPAT or EVA as currently defined, as both are simply single-period accounting measures. Neither gives an infallible measure of performance and despite claims of market
myopia, the market is not perfectly tied to either. There is a need for further research in this area, especially by individuals without a vested interest in EVA or other measures. Future work should look at other measures of short-term performance and examine the implications of these findings on the development of various compensation schemes. It appears from our results that shareholders can align management's wealth enrichment more closely to their own, at least in the short-term, by tying compensation to profits rather than EVA. However, our results are applicable to the SS 1000 and not the EVA management system per se. A study comparing performance of companies that have implemented an EVA system to those that have not would also be valuable. It also seems essential to investigate the ability of other measures of short-term performance to reflect long-run value added. (*Kramer and Pushner, 2004*).

This shows very clearly the research on EVA is inconclusive and indecisive. It is, therefore, felt and noticed that:

1. Major research has happened only in USA and not outside USA;
2. There are too many conflicting results even within USA based research which calls for further research;
3. There is some substance in the basic concept as it has become very popular and a lot of US based companies have implemented EVA in their organisations to improve efficiency.

EVA is, therefore, considered as one of the tools to calculate shareholder value creation in the research.

### 2.7 About PFM

One of the major critiques of EVA as a tool to calculate shareholder value creation was a Latin American economist *Pablo Fernandez*. He did an extensive research on
EVA and concluded that EVA does not measure shareholder value. His reasons for saying it were:

1. EVA uses historical accounting data, which have their own limitations;
2. He found a very low correlation between EVA and MVA which goes on to prove the futility of EVA as a tool to measure shareholder value creation. The interesting part was Fernandez arrived at the correlation between EVA and MVA of the companies whose data is published annually by Stern, Stewart & Co.

Pablo Fernandez not only criticised the concept of EVA but also put forth a new model to calculate shareholder value creation where he used Equity Market Value. His method is a combination of two methods that existed like the Total Shareholder Return and Economic Profit. The concept of Total Shareholder Return (TSR) was modified by him to get a complete shareholder return. From this shareholder return cost of equity was subtracted to arrive at created shareholder value. The model he proposed was:

**Figure 2.1: PFM Model**

| Equity Market Value | Increase of Equity Market Value | Shareholder Value Added | Shareholder Return | Required Return to Equity | Created Shareholder Value |

Total Shareholder Return (TSR), as the name suggests, is a measure of total returns earned by shareholders of a company during a given period of time i.e. the sum total of appreciation in share price plus dividends declared during the period. Given the objective of maximization of shareholder returns, TRS is often assumed to be the
most significant parameter governing corporate performance but that may not be the case (Mittal, 2004).

Again the model as proposed by Pablo Fernandez is not extensively researched has some rationale to it.

It was, therefore, felt pertinent to include Pablo Fernandez Model (PFM) as well as a tool to calculate in the Indian conditions. The research question listed above was, therefore, modified as under which has become our objective of research.

**Research question No. 1: “Is Shareholder Value Creation as measured by EVA and PFM a good proxy for corporate performance in India?”**

2.8 The sector debate

In a country like India where the type of economy practiced is mixed i.e. there is prevalence of both the private and government owned companies, there is a growing debate about which sector is more efficient. Since the time government of India has started following the liberalisation, privatisation and globalisation policy and with private sector doing rounds in the country the debate has grown out of proportion.

In times of financial crisis that began in the world in 2008 there is also a growing debate on which sector as classified by industry is hit and which sector is safe.

Shareholder Value Creation helps map the corporate performance and facilitates across sector comparison. It was, therefore, thought that we need to take a whole new look at this ongoing debate with respect to which sector – as classified by ownership patterns (public sector and private sector) and as classified by the industry they belong (like FMCG, Automobile, etc.) through the lenses of shareholder value creation.

The next research question emanated from this dilemma that was proposed on many a public platforms and articles.
Research question No. 2: Which sector, as defined by the ownership and industry it belongs, has created better shareholder value as calculated by EVA and PFM?

2.9 The factors that impact Shareholder Value Creation

Shareholder value depends on the financial decisions made by the firm from time to time. One major decision is how it finances its operations (Barges, 1963).

2.9 A. Capital Structure:

There have been many approaches elucidating the point. The earliest was the Net Income approach put up by Durand, David in 1959. A company with debt capital is a "levered" company and a company with complete equity is known as "unlevered" company. The net income approach believes that cost of equity is constant and in a levered company and WACC continuously declines as time passes by. Under net income approach, the firm will have maximum value and minimum WACC when it is 100% debt finance (Pandye, 2010).

There is a traditional view that says a judicious mix of debt and equity capital can increase the value of the firm by reducing WACC up to a certain level of debt. This approach very clearly implies that WACC decreases only within the reasonable limit of financial leverage and after reaching the minimum level, it starts increasing with the increased financial leverage. Hence a firm has an optimum capital structure that occurs when WACC is minimum, thereby maximising the shareholder value of the company (Soloman, Ezra, 1963).

Modigliani and Miller do not agree with traditional view. They argue that in perfect capital markets without taxes and transactions costs, a firm's market value and the cost of capital remains invariant to the capital structure changes. The value of the firm
depends on the earnings and risks of its assets (business risk) rather than the way in which assets have been financed (*Modigliani and Miller, 1958*).

The Financial/Debt policy variable, organisation size, and structure do not affect value creation but unobservable organisation characteristics such as management quality or strategy may be important for value creation (*Asogwa, 2009*).

One can conclude that initially profitability (income statement) ratios are the most important factors in the wealth creating process. However, as companies become established wealth creators and keep improving on their performance, profitability ratios become less important. Efficient financing of the balance sheet, efficient fixed asset and working capital management become top priorities in creating shareholder value (*Hall, 2002*).

Thus, if it is analysed we understand that the capital structure directly impacts the value of the firm as it has a direct impact on the WACC, which is an integral part of the shareholder value. The capital structure is represented by the "*Debt – Equity Ratio*"

2.9 B. Dividend policy:

Shareholder value is a function of the amount and timing of discretionary cash flows to the (common) shareholders of a company. Discretionary cash flow to shareholders represents a return on invested equity when it is:

1. Withdrawn from the business in the form of dividends, or remunerated above market rates (which is common in privately held companies);

2. Retained in the business for investment in incremental growth opportunities or held in the business as a redundant asset, thereby increasing the equity value of the business; or
3. Used to reduce the outstanding interest-bearing debt of a business, thereby increasing the equity value component of the business’ total value (i.e. its enterprise value) \(\text{(Johnson, 2002)}\)

Thus, the dividend decision is an important decision for the company to take. It is a crucial area of financial management. The dividend decision decides on what shall be retained earnings for the development plans of a company and what shall be dividend payouts considered desirable from shareholder return perspective \(\text{(Pandye, 2010)}\).

\textit{Walter} (1963) argued that the choice of dividend policies almost always affect the value of the firm. His model shows the importance of relationship between the firm’s rate of return and its cost of capital in determining the dividend policy that will maximise the wealth of the shareholders.

According to Walter the market price per share is the sum of the present value of two sources of income:

1. Present value of dividends and;

2. Present value of capital gains

He says if the Internal Rate of Return is greater than the opportunity cost of capital (what is also known as hurdle rate/expected return/ cost of equity) then the company should invest all the profits in the business, which is true if a company is going through the growth phase. This will have positive impact on the market price and a shareholder will get higher capital appreciation.

Where Internal Rate of Return is equal to opportunity cost of capital then the market price is not affected whether the company pays dividend or retains the earning, which is true for a company that has reached a saturation stage.

Where Internal Rate of Return is equal to opportunity cost of capital the company would pay higher dividend.
Gordon (1962) developed a very popular model explicitly relating the market value of the firm to dividend policy. According to this model the market price of a share is the present value of infinite streams of dividend received by the shareholders. He claims the dividend per share is expected to grow with retained earnings as the dividend per share equals to the payout ratio times the EPS. So if the Internal Rate of Return for a company is high and the company retains more, assuming all equity capital structure, the dividend per share shall increase and therefore, the market price of the share.

Of the two stocks with identical earnings record, and, prospects but the one paying higher dividend than the other will undoubtedly command a higher market price than the other because the stockholders prefer present to future values. Myopic vision plays a part in the price making process. Stockholders often act upon the principle of a bird in the hand is worth two in a bush and for this reason are willing to pay a premium for the stock with higher dividend rate, just as they discount the one with lower rate (Krishman, 1969).

The typical investor would most certainly prefer to have his dividend today and let tomorrow take care of itself. No instances are on record in which the withholding of dividends for the sake of future profits has been hailed with such enthusiasm as to advance the price of the stock. The direct opposite has invariably been true. Given two companies in the same general position and with the same earning power, the one paying the larger dividend will always sale at a higher price (Graham & Dodd, 1934).

Under a perfect market situation, the dividend policy of a firm is irrelevant, as it does not affect the value of the firm. The value of the firm depends on the firm's earnings that result from its investment policy. A firm has three situations:
2.9 A. The firm has sufficient cash to pay dividends by which the shareholders get cash as dividend but lose in the form of their reduced claim on the asset as the cash balance is reduced;

2.9 B. The firm does not have sufficient cash to pay dividends then the company either does not pay dividend or issues shares to pay the dividend where again it is a zero sum game;

2.9 C. The company does not pay dividend but the shareholders need cash in this situation the shareholders sale a part of their shareholding and generate cash. Thus, the dividend policy is irrelevant with respect to value creation for shareholders (Miller & Modigliani, 1961).

Thus, there is enough finance literature to show that there is an impact of dividend on the market price, opportunity cost of capital, asset liability management for a firm, capital structure decision.

Opportunity cost of capital and market volatility of stock price are directly related to cost of equity and cost of equity is an integral part of calculating weighted average cost of capital (WACC).

2.9 C. Interest rates

Selecting the interest rate for evaluating potential projects is a key part of the capital budgeting problem. Approaches include:

(1) The marginal or weighted average cost of capital (WACC);

(2) The opportunity cost of capital (from IRR ranking);

(3) The theoretically optimal intersection of the first two;

(4) Risk adjusted rates for equity from capital asset pricing theory--which are usually folded into the WACC as the equity component of the WACC, and
(5) Portfolio selection models with organizational and political factors. This article describes each approach's theoretical basis, strengths, and weaknesses. The article then attempts to reconcile these disparate approaches into a practical and theoretically sound approach to the project selection problem.

The interest rates a major macroeconomic factor usually is a good proxy for the economy (Shanmugham, 2006).

Interest rates in the economy generally have a far reaching influence as all the financial decisions are based on the basic tenet of “risk-return tradeoffs”. The interest rate has a direct influence on the WACC as it brings in the change in β value i.e. a measure of stock volatility vis-a-vis market and also the risk free rate of return which is used in calculating cost of equity by way of Capital Asset Pricing Model (CAPM).

2.9 D. Strategic decisions

Strategic decisions are the decisions that managers would take keeping in mind the long term time horizon (Furhan, William, 1980).

For any decision to be strategic it has to fulfil the following major criteria:

1. Magnitude: Strategic decisions are big decisions. They affect an entire organization or a large part of it, such as a whole division or a major function. And they entail a significant degree of interaction with the world around it—the organization’s competitors, suppliers, and customers.

2. Time-scale: Strategic decisions set the direction for the organization over the medium to long term. But they will have a short-term impact as well—the medium term may finish in several years’ time, but it starts at the end of this sentence! What constitutes medium or long term will depend on the organization and the industries in which it operates. In a fast-moving industry,
such as computer software or consumer goods, 18 months may be a long time to think ahead. In capital goods industries like electricity generation or oil production, where new facilities take several years to plan and bring on stream, 10–15 years may be a realistic time horizon. It is helpful to measure time-scales in terms of product life-cycles, with the short term being one product life-cycle and the medium term two. For most industries, this gives a time horizon for the strategist of around 3–5 years.

3. **Commitment**: Strategic decisions involve making choices, and committing resources in ways that cannot be reversed cheaply or easily. This may mean investing large amounts of money in buildings or high-profile, long-term, marketing campaigns, or large amounts of management time in changing the way an organization operates. There are a lot of decisions that can be categorised as strategic but the major decisions that have really played a major economic role are:

   1. Mergers and Acquisitions;
   2. Sharebuybacks; *(Mishra & Goel, 2005)*

The strategic decisions that affect the company mainly are Mergers and Acquisition and Share Buybacks *(Sacconaghi, 2007).*

**2.9 D 1. Mergers and Acquisitions**

Value theory views a firm as an economic unit whose objective is the maximisation of profits or, more generally, the maximisation of the present value of the firm. The traditional theory of firm postulates that only those firms which maximise corporate performance will survive and those that do not will either be taken over or eliminated *(Alchian, 1958).*
With firms striving to survive in the competitive business environment, mergers and acquisitions (M&A) are among the most efficient strategies for companies to grow and for driving shareholder value. In recent years, mergers have gained momentum due to liberalisation of the capital market and globalisation of competition (Mishra & Goel, 2005).

Mergers and acquisition deals on an average have the potential to enhance shareholder value (Weston, Chug & Hoag, 1990).

Campa and Hernando (2004): When distinguishing in terms of the geographical and sectoral dimensions of the merger deals, our main finding is that mergers in industries that had previously been under government control or that are still heavily regulated generate lower value than M&A announcements in unregulated industries. This low value creation in regulated industries becomes significantly negative when the merger involves two firms from different countries and is primarily due to the lower positive return that shareholders of the target firm enjoy upon the announcement of the merger. This evidence is consistent with the existence of obstacles (such as cultural, legal, or transaction barriers) to the successful conclusion of this type of transaction, which lessen the probability of the merger actually being completed as announced and, therefore, reduce its expected value.

The Mergers and Acquisitions (M & A) are undertaken by the corporate to grow. It has been proved by Fuller and Jenson (2002) that there is a positive impact of growth in earnings and sales due to Mergers and Acquisition activity on variables such as RoI, RoE and EVA. But this impact is positive only up to a certain level, beyond which the growth has negative impact on RoI, RoE and EVA and thus, the corporate become wealth destroyers (Ramezani, Soenen, Jung, 2006).
It is seen by the study that related Merger and Acquisition has a significant chance of upward revision of Shareholder Value in comparison to Merger and Acquisition undertaken with an objective to diversify. It is also significant to note that the companies indulging in M & A activity put unsubstantiated pressure on the wealth of acquirer companies Shareholders (Chander Shekhar, 2004).

The well-documented failure of the majority of acquisitions to create value is often identified in popular discussion with hostile acquisitions, whereas friendly acquirers seem to get a friendly press. The relative performance of friendly and hostile acquirers therefore warrants a rigorous empirical investigation. Clear evidence of superior value creation in hostile over friendly acquisitions allows us to judge the efficacy of the market for corporate control. In this article we examine the long-term shareholder wealth performance of four types of acquirers – friendly bidder, hostile bidder, white knight and hostile bidder facing a white knight or another hostile bidder. For a sample of 519 acquisitions of UK target firms during 1983–1995, we estimated the three-year post acquisition gains to acquirer shareholders and found that hostile acquirers deliver significantly higher shareholder value than friendly acquirers. We found that friendly acquirers with high stock-market ratings destroyed more value than hostile acquirers with a similar rating. Friendly acquirer top managers suffered greater job losses than those of hostile acquirers, perhaps paying the price for their inferior value-creation performance. Our study provides evidence of the superior value-creation performance of hostile acquirers and makes the case against takeover regulatory rules that may impede hostile takeovers (Sudarsana, Shraf Mahate, 2004).

Mergers and acquisitions are observed as value destroying for acquiring firm shareholders because there are no synergies, or these synergies are not realized or the acquirers overpay for their acquisitions. The scope for value creation overall and for a
positive share of these gains for the target and acquirer shareholders depends on the
acquirer type (Sudarsanm, 2003).

Morck, Shleifer and Vishny (1988b) argue that friendly mergers, i.e. agreed between
acquirer and target managements, are essentially driven by synergy considerations
whereas hostile takeovers, i.e. those resisted by target managements, are driven by the
discipline of the underperforming target management.

This is perhaps a simplistic dichotomy of sources of value in friendly and hostile
acquisitions since empirical evidence shows that targets of hostile acquisitions do not
underperform targets of friendly acquisitions (Franks and Mayer, 1996; Kini,
Kracaw and Mian, 2004).

United States in the 1980s had relaxed Anti Trust law with an objective to motivate
Mergers, Takeovers and Acquisitions but there is no evidence to prove that without
control mergers and acquisitions have created any Shareholder Value. The studies
show that Mergers largely are value destroyers (Lubatkin and Sriniwasan, 1997).

Investigation of the largest 75 acquisitions occurring during 1989 to 1993 reveals that
acquiring firms experience significantly deteriorating raw EVA after the completion
of acquisitions. When industry-adjusted EVA is examined, however, the difference is
almost indiscernible. These results indicate that the sharp decline in raw EVA is
mostly accounted for by industry effects. If EVA is calculated assuming that no
premium was paid to target firms, i.e., the premium is excluded from the acquiring
firm's capital in the post-acquisition period, industry-adjusted EVA shows an
insignificant improvement. These results suggest that acquiring firms tend to
experience slightly improved performance relative to their industry counterparts after
completion of the acquisition. But the improved operating performance is wiped out
by capital costs of the large premiums paid to the target firm, creating no real economic gains to the acquiring firm’s shareholders (Yook, 2004).

“In contrast to the earlier euphoria over emulating excellent companies, the current restructuring movement should be solidly based on the Shareholder Value Creation principles” (Rappaport, 1986).

Certainly not all current mergers and acquisitions are based on value creation principles. Rappaport’s suggestion of using “Shareholder Value Creation” principles for investment and merger decisions is a sound recommendation (Bierman, 1990).

I examine the effects of shareholder activism by hedge funds from 1998-2005. When hedge funds accumulate more than 5% of a firm, they must file a regulatory disclosure with the SEC that indicates whether their intentions are active or passive. I find that firms which are targeted by hedge funds for active purposes earn larger excess returns than a control group of firms that are targeted by the same hedge funds for passive purposes. Firms targeted by activists experience increases in operating performance (ROA) following the acquisition of the block. These operational improvements appear to be driven by the divestiture of underperforming assets. I document that the returns to the hedge fund are larger for their active blocks than their passive blocks, indicating that activist shareholders may use higher returns to mitigate the cost of their monitoring effort (Clifford, 2007).

2.9 D 2. Sharebuybacks

The buyback of shares is the repurchase of its own shares by a company. Until recently the buyback of shares by Indian Companies was prohibited under section 77 of the Indian Companies Act. As a result of the companies act (amendment) 1999, a company in India can now buy back its own shares.
It is comparatively an important strategic decision. Major effect of Sharebuyback is the shares bought back cannot be reissued immediately meaning it permanently reduces the equity paid up capital which in turn has a positive impact on Earnings per Share (EPS) of the shares that are outstanding. This increase in EPS has an immediate and a direct impact on the P/E multiple of the stock which yields better valuations for the existing shareholders. Yet another impact is on the capital structure as it changes the debt equity composition.

Buyback is expected to increase earnings per share (EPS) as a result of favourable impact of financial and operating leverages Banerjee and Chakraborthy (2002).

Thus, to test the impact of Sharebuybacks a lot of researchers use EPS.

This is comparatively a new phenomenon in India and though there were a lot of companies that actually filed for Sharebuyback to Securities and Exchange Board of India (SEBI), there were a very few companies that actually bought back the shares and that too not the entire quota that they had applied for.

The following are 5 main reasons why company offers share buy back

1. To stop the fall in stock price.
2. In some situation company may want to bring down the public holding and increase promoters holding.
3. If the company sees there is no better opportunity to deploy its cash reserves then it may decide to buy back its shares.
4. The buyback may improve companies return ratios
5. When a company thinks its share price is undervalued.

Sharebuyback thus, has an impact on the WACC and also the return as it changes the EPS and also changes the composition of capital structure. If the Sharebuyback is
affected through the internal accruals it reduces the cash balance and if the money is raised by borrowings then the debt capital increases in the capital structure. There is, however, no study to find out if the Sharebuyback in reality have any impact on the shareholder value creation.

2.9 E. Managerial Remuneration

It is by now clear from the references quoted above that the major job of any manager of the company is to maximise Shareholder Wealth and create shareholder value. The tools of measuring this shareholder value creation may differ. Some may consider EVA, some PFM, some may plainly consider market value added some may consider increased EPS or NOPAT or PAT. But what is important is the managerial decisions must be aimed at creating shareholder value.

A major reason why EVA caught up with the International Community was because Managerial Remuneration was used as a yardstick to pay the Managerial Remuneration (Riceman, Cahan and Lal, 2002).

However, there are a lot of authors who have questioned its utility in paying Managerial Remuneration (Dimitris, Kyriazis and Anastassis, 2005).

It, therefore, becomes imperative to test if the managerial remuneration is paid on the basis of the Shareholder Value Creation whether there is a positive impact on the Shareholder Value Creation.

Managerial Remuneration is the remuneration that is paid to top level management, who are entrusted with the task of managing the business and money for the owners of the company. These are the remuneration paid to the board of directors of a company. There has been a long drawn debate about the basis on which this remuneration has to be paid to the board of directors. Some say fixed some say based on the returns the company earns (Madden, 2006).
There are a good number of researchers who like Riceman (2004), Cahan (2002) and Mohan Lal (2001) who tried using EVA as a basis for managerial remuneration.

Economic Value Added (EVA) is a performance measure that is being used by an increasing number of companies, but academic research on EVA is limited. In addition, all prior empirical academic studies on EVA have used the firm as the unit of analysis. In this study, effect of EVA on the performance of individual managers is examined. Specifically, we examine whether managers on EVA-based bonus plans outperform managers on traditional accounting-based bonus plans. We are able to test this because we have access to an EVA-focused company that has managers on both EVA and traditional bonus plans. Our results suggest that managers on EVA bonus plans who understand the EVA concept perform better than managers on traditional bonus plans. However, we find some evidence that the increase in performance results from increased consistency or congruence in the manager's evaluation-reward process rather than from superiority of EVA as a performance measure. Also, we find that the effect of EVA bonuses and EVA understanding differs depending on the area of the firm in which the manager is employed- This suggests that EVA may not be a universally appropriate base for reward system (Riceman, Cahan and Lal, 2002) Nevertheless, they reported that for companies where their management remuneration schemes are linked to EVA measures, EVA tends to have a marginally superior informational content than operating profits (Biddle et al, 1997).

It gave rise to the further research questions:

Research question No. 3: What are the factors that impact Shareholder Value Creation as measured by EVA and PFM?

Research question No. 4: What is the direction of association of these factors with Shareholder Value Creation as measured by EVA and PFM?
2.10 Reporting

For boards to serve shareholders better, Shareholder Value Reports (SVRs) need to become a standard part of every corporate annual report. In addition, on a voluntary basis, boards and managements could conclude that SVRs make eminent sense because SVRs benefit shareholders, society, and corporations themselves. This change is needed because, in the end, power without effective accountability is unsustainable (Madden, 2008).

2.11 The Indian Markets

As stated in the chapter of literature review there has been a good lot of research that has taken place in Shareholder Value Creation as a concept and also tools to measure shareholder value creation. But almost all the research is limited to US markets. And the undertaken research is also inconclusive in terms of giving a concrete direction.

US markets are more efficient in comparison to Indian Markets. It has been proved by Vaidyanathkn and Kumargali (1994) and Khan and Ikram (2004) that Indian Markets are different from the US and European markets in terms of Market Efficiency. Indian Markets namely NSE and BSE are good examples of Weak form of Efficiency with a little hint of Semi-Strong Efficiency. But in either case the Indian Markets do not reflect all the publicly available information.

It, thus, becomes all the more imperative to research the topic due to inconclusive nature of whatever research that has already happened and also that the Indian conditions are different and therefore, these performance matrices must be tested in Indian conditions to ascertain its utility.

The following, therefore, are the research questions that shall be attempted to be answered through the thesis:
1. Is Shareholder Value Creation as measured by EVA and PFM a good proxy for corporate performance in India?

2. Which sector as defined by the ownership and industry it belongs has created better shareholder value as calculated by EVA and PFM?

3. What are the factors that impact Shareholder Value Creation as measured by EVA and PFM?

4. What is the direction of association of these factors with Shareholder Value Creation as measured by EVA and PFM?

2.12 The model

Figure 2.2: The SVC Model

Operational:
Managerial Remuneration

Macroeconomic:
Interest

Financial:
1. Dividend Policy
2. Capital Structure

Strategic:
1. M&A
2. Sharebuyback

Return

WACC

SVC = Return - WACC