Chapter 1
Introduction

In a market-driven economy, many companies create wealth for its shareholders whereas other firms certainly destroy it. Finding the best companies and industries in terms of shareholder value creation has become the primary focus of managers and financial analysts world over. The managers that fail to see the importance of this imperative in an open economy, do so at the peril of the organization and their own careers (Grant, 2003). Moreover, they also fail to convince investors of their ability to deliver adequate returns and thus place themselves at a competitive disadvantage in the race for global capital resources (Young, 1997). Given these arguments, one needs to understand why creating shareholder value is fundamental to the economic survival of a company. S.C. Kondragunta, the Vice-President & Country Manager (India) of Stern-Stewart & Company explains “All corporations have a fundamental duty to meet the expectations of all of their investors (both creditors and equity-holders). Equity holders as a rule get paid at last since their returns come out of after-tax savings; moreover, the other claim holders to the corporate pie, like creditors and employees, have stronger legal covenants to enforce their contracts with the corporation. The obligation to meet shareholder expectation would arise only after the organization has satisfied every other claimant. The corporate goal of meeting shareholders expectations, then, is the same as fulfilling the obligations of every stakeholder in the corporation. Therefore a company’s management should adopt and pursue only those strategies that will deliver the most value to the shareholders. This objective is the philosophy that will ensure that the organization’s scarce resources are allocated, managed and redeployed as efficiently as possible. This, in turn, maximizes the wealth of society at large.”

Stern Stewart & Company has listed certain fundamental conditions necessary for increasing shareholder wealth. These include:

- A solid understanding of how the market values businesses
- A management system that drives market-based decisions about resource allocation and management deep into the organization
- An incentive structure that makes managers think and act like owners
A commitment to continuous improvement rather than short-term goals

Thus, shareholder value creation is an innovative way reflecting the quantum of incremental value, a company generates for its shareholders, after providing for its cost of operations as well as opportunity cost of capital. But it is not easy to measure. It has been observed that there is no direct performance metric that can help not only in measuring the shareholder value but also leads to achieve it. Balance Sheet based Measures are veiled in accounting anomalies that, often, measure notional profits not real ones (Business Today, 2000). These measures fail to include the total cost of capital and are unduly influenced by the accrual based accounting conventions. Moreover, the accountants also use various creative accounting techniques like inflating inventory, creating excessive provisions, recording repairs and maintenance expense as capital expenditure etc. to present the performance of the company highly impressive than it is in reality. All these lead to the distortions in measurement and interpretation of accounting performance. On the other hand, Market-Driven Measures like stock prices and market capitalization are prone to the volatility of bourses.

Therefore, recognizing the practical limitations of accounting earnings and market driven measures, Stern-Stewart & Company, the New York based US-Consultancy firm, came up with two value based measures namely MVA and EVA.

1.1 Market Value Added (MVA)

MVA being an absolute measure assesses that how much capital a company has added to or subtracted from its shareholders’ investment. It is the cumulative amount by which a company is perceived to have enhanced or diminished shareholder wealth. It is based upon the logic that if the total market value of a company is more than the capital invested in it, the company has managed to create shareholder value. However, if the market value of a company comes less than its invested capital, company has destroyed the shareholder value. MVA thus, measures the value added by the management over and above the capital invested in the company by its shareholders and lenders. It is the perfect summary assessment of corporate performance that shows how successful a company has been in allocating and managing resources to maximize the value of the enterprise and the wealth of its shareholders (Stewart, 1994). MVA is obtained by subtracting the
invested capital of a corporation from its total market value i.e. what investors can take out of the company.

Mathematically,

\[ \text{MVA} = \text{Market Value of the firm} - \text{Invested Capital} \]
\[ = (\text{Market Value of Equity} + \text{Market Value of Debt}) - (\text{Book Value of Equity} + \text{Book Value of Debt}) \]

Market value of firm’s equity is arrived at by multiplying the stock price by the number of outstanding shares of the firm. Whereas, book value of equity includes all equity equivalent items like reserves, retained earnings and provisions. In other words, all the items that are not debt (interest bearing or non-interest bearing) are classified as equity. Moreover, market value of debt is presumed to be equal to its book value. The reasons behind such assumption are

- determining the market value of most corporate debt issues is difficult, as they are not actively traded.
- debt market values are usually relatively close to book values.
- the purpose of the assumption is to assess the additions to shareholder’s wealth and
- the market value of an organization’s debt is more closely related to interest rates movements than to managerial actions that influence shareholder wealth (Gapenski, 1996).

Thus, the above formula can be rewritten as:

\[ \text{MVA} = \text{Market Value of Equity} - \text{Book Value of Equity} \]

Hence, shareholder wealth is maximized by increasing the difference between the company’s market value and its invested capital. Here it is worth mentioning that increase in the market value of a company does not necessarily results in the maximization of shareholder value. This idea can be well explained with the help of a hypothetical example. Suppose, Company A with market capitalization worth Rs. 100 crore has raised Rs. 75 crore from the investors since its inception and has retained 10 crore from company’s earnings. This means company’s MVA stands at Rs. 15 crore. now suppose, company utilizes the retained earnings of Rs. 10 crore to invest them in a project that is expected to generate future cash flows of Rs. 8 crore (project with negative NPV.
of Rs. 2 crore). Undertaking this project, company’s market value will undoubtedly be Rs. 8 crore higher than if those 10 crore are distributed as dividend to shareholders but at the same time, shareholders wealth will be reduced by Rs. 2 crore. It is because company has added Rs. 10 crore in the invested capital whereas its market value increased by just Rs. 8 crore resulting in the loss of shareholder wealth by Rs. 2 crore. On the contrary, if earnings were distributed as dividends then shareholder could invest those funds in the portfolio of stocks and bonds with comparatively less risk and high returns (return, atleast equal to risk free rate). Moreover it is also noticeable that as the project is giving negative NPV of Rs. 2 crore, the shareholders’ wealth i.e. MVA has also reduced by an equal amount.

Further, moving from a single project to the entire company, Stewart (1994) stated that “besides reflecting the wealth of the shareholders, MVA also represents the stock market’s estimate of the net present value of a company considered as a whole. MVA is a significant summary assessment of corporate performance-one that shows how successful a company has been in allocating, managing and redeploying scarce resources to maximize the NPV of the enterprise and thereby, the wealth of its shareholders.” Although MVA is a perfect measure of company’s ability to create wealth, it also suffers from a few limitations that are given below:

- As MVA is a static measure that reports on the sum total of the company’s value creation from its beginning to the date the MVA is calculated, it is less practical than other measures for evaluating and rewarding managerial performance (Young, 1997).
- Since, MVA is prone to the fluctuations in a company’s scrip price, it changes every (trading) minute, and therefore is not a consistent management tool (Kondragunta, 2000).
- MVA can be calculated only for companies or divisions of companies that are publicly traded and have a market price (Ehrbar, 1998).
- Even for the public companies, MVA can be calculated at the level of entire company i.e. it does not exist for divisions, business units, subsidiaries or product lines within an organization (Ehrbar, 1998).
Thus, MVA does not provide help in assessing the performance of the many pieces that make up the corporate whole, so managers have to focus on some internal measure of performance that is closely linked to the external market verdict (Ehrbar, 1998).

The second value based measure i.e. Economic Value Added (EVA) has been recognized as the most accurate measure of the ability of a company to add shareholder value. It is possible to calculate EVA separately i.e. department-wise, product-wise as well as service-wise EVA generated/lost. Moreover it is not a function of the market price of a company’s scrip rather it is a measure that best explains the changes in the MVA of a company (Business Today, 2000).

1.2 Economic Value Added (EVA)

EVA is the internal performance measure that is most highly correlated with MVA and provides the most reliable guide to- whether and by how much, management actions have contributed to shareholder wealth (Ehrbar, 1998). It measures whether the operating profit is enough as compared to the total cost of capital employed and identifies that if shareholders are getting the return that compensates the risk taken by them. Thus, Economic Value Added is defined as the difference between a company’s net operating profit after taxes (economic profits) and its overall cost of capital (including the cost of equity capital). Thus, EVA is superior to all other traditional performance measures because it takes into consideration both, the direct cost of debt capital as well as indirect cost equity capital, as reflected in the shareholders’ required return on capital stock (Grant, 2003).

The idea behind EVA is that shareholders must get a return that compensates the risk taken by them i.e. equity capital has to earn at least same return as investments with equivalent risk earn. If that is not the case, then there is no real profit made and actually the firm operates at a loss from the viewpoint of shareholders (Misra and Kanwal, 2004). Thus, EVA accounts for the overall cost of capital and determines the sufficiency or insufficiency of earnings generated by the firm to cover the cost of capital i.e. whether a firm is a value generator or a value diluter.

Stewart (2000) defines EVA as an estimate of ‘true economic profit’, or the amount by which earnings fall short of the required minimum rate of return that shareholders and lenders could get by investing in other securities of comparable risk.
Stewart (1994) has articulated the merits of EVA metric as “EVA is conceptually a superior measure of performance because it charges management for using capital at an appropriate risk-adjusted rate, and it eliminates financial and accounting distortions to the extent it is practical to do so.” Economic Value Added is calculated as:

**Computation of Economic Value Added**

EVA is the difference between NOPAT and the stakeholders’ expectations, which is the capital charge for both debt and equity i.e. overall cost of capital. Operationally defined, 

\[
EVA = NOPAT - \text{Capital charge} \\
= NOPAT - \text{WACC} \times \text{Economic Capital}
\]

Where, NOPAT is Net Operating Profits after adjusting for non-operating items, non-recurring events and other economic adjustments to compute economic profits from accounting profits. The adjustments have been explained thoroughly in Chapter 4.

\[
\text{NOPAT} = (\text{PAT} + \text{non-recurring expenses} + \text{revenue expenditure on R & D} + \text{interest expense} + \text{goodwill written off} + \text{provision for taxes}) - \text{non-recurring income} - \text{R & D amortization} - \text{cash operating taxes.}
\]

\[
\text{WACC} = \text{Weighted average cost of capital.} \\
= \text{Cost of equity} \times \text{proportion of equity in total capital} + \text{Cost of debt} \times \text{proportion of debt in total capital} (1 - \text{tax rate}) + \text{Cost of preference capital} \times \text{proportion of preference capital in total capital.}
\]

\[
\text{Economic Capital} = \text{Net Fixed Assets} + \text{Investments} + \text{Current Assets} - (\text{NIBCLs} + \text{Miscellaneous Expenditure not written-off} + \text{Intangible Assets}) + (\text{Cumulative Non-Recurring Losses} + \text{Capitalized expenditure on R & D} + \text{Gross Goodwill}) - \text{Revaluation Reserve} - \text{Cumulative Non-Recurring Gains}
\]

Here, if NOPAT exceeds CC i.e. capital charge, it means that return is more than cost and hence company’s EVA is positive. It indicates that company has generated value for its shareholders and growth in firm’s size would result in higher EVA. On the contrary, if NOPAT is less than CC, EVA is negative and company is wealth destroyer. More
investment in the business would mean more negative EVA. Thus, negative EVA means investors would be better off if management just give them the money as a dividend. In such a situation, the firm should try to either increase the NOPAT or reduce the capital invested to improve EVA. Further, if NOPAT is equal to CC, it means EVA = 0, but this should be taken as sufficient achievement because shareholders have earned a return that compensates the risk taken by them. Hence, EVA as an absolute measure of financial performance answers the query that whether company is creating ‘real value’ for its shareholders or not.

In its unadjusted form, EVA is equivalent to net income minus cost of capital, which equals Marshall’s ‘Economic Profit’ or what accountants usually call ‘Residual Income’ (Young, 1997). The divergence between Residual Income (RI) and EVA comes solely from accounting adjustments that are made to the GAAP based financial statements. Besides this, EVA and RI are the same.

1.3 Relationship between Economic Value Added and Market Value Added

While the EVA of a company is historical figure based on the efficiency with which it used the resources at its disposal in a particular year, its MVA is the market assessment of its ability to create wealth in future. Stewart (1994) articulated this vital link between EVA and MVA as “by subtracting the cost of capital, EVA automatically sets aside a return sufficient to recover the value of the capital that has already been or will be invested. For this reason, it automatically accounts for any premium over or discount under the capital employed, a spread i.e. exactly the NPV (Net Present Value) of a project or the MVA of a company.”

Ehrbar (1998) has explained that “If investors expect a company to earn exactly its cost of capital, and no more or no less, then its market value will be exactly equal to capital. In this case MVA i.e. market value minus capital will be zero. Wealth is perceived when investors expect a company to generate enough profits to meet the minimum acceptable rate of return. If expected returns exceed the cost of capital, the company’s stock will sell at a premium and MVA will be positive, that means management has created wealth by convincing investors that it will produce profits that exceed the cost of capital. If
expected returns amount to less than the cost of capital, management has destroyed wealth and MVA will be negative.”

From the finance perspective, MVA equates the present value of the company’s expected future EVAs. Companies having positive EVA momentum should on balance see their stock prices go up over times as the increasing profits, net of the overall capital costs lead to a rise in the company’s Market Value Added (Grant, 2003). On the contrary, a company, whose return on invested capital is not sufficient to cover up its overall cost of capital, face adverse EVA situation, the result of which is the decline in its stock prices and therefore, its Market Value also falls. Thus, positive EVA results in the positive MVA and vice-versa. Stewart (1991) has defined the relationship between EVA and MVA as:

\[
MVA = \text{Present Value of expected future EVAs} = \frac{EVA_1}{(1+k)^1} + \frac{EVA_2}{(1+k)^2} + \frac{EVA_3}{(1+k)^3} + \ldots + \frac{EVA_\infty}{(1+k)^\infty}
\]

\[
= \sum_{t=1}^{\infty} \frac{EVA_t}{(1 + \text{WACC})^t}
\]

Where,

- \(EVA_1, EVA_2, EVA_3, \ldots, EVA_\infty\) are the expected future EVAs
- \(k\) is the Weighted Average Cost of Capital (WACC)
- \(t\) indicates the time period that extends from one period to \(\infty\) period.

Thus, MVA equates the stream of future EVAs discounted at a rate equivalent to the cost of capital of the firm. The bigger expected EVA the company has, the bigger is the market value of the company and the stock price, resulting in an obvious increase in its MVA. In other words, MVA is equal to the market estimate of the net present value of all future EVAs. This link between EVA & MVA assists corporate managers to assess, whether their planned investments in real assets will lead to create wealth for its shareholders or not. Figure 1.1 clearly captures the relationship between Market Value, MVA and EVA.

Mäkeläinen (1998) explained that stock prices reflect the future EVA expectations. Those expectations are very uncertain and continuously changing and therefore stock prices are
volatile. Therefore it might be difficult in short term to see the underlying connection between EVA (financial performance) and stock prices. On the other hand, long term perspective helps in this sense. The empirical studies that have supported this theoretical connection between EVA and market value are Stewart (1990), Lehn and Makhija (1996), Uyemura et al. (1996), O’Byrne and Stephen (1996), Milunovich and Tsuei (1996), Grant (1996) etc.

**Figure 1.1: Relationship between EVA and MVA**

(A) **Premium Value (When Market Value of the firm is more than its Book Value)**

![Diagram A](http://www.sternstewart.com)

Future Expected EVA

(B) **Discounted Value (When Market Value of the firm is less than its Book Value)**

![Diagram B](http://www.sternstewart.com)

Source: [http://www.sternstewart.com](http://www.sternstewart.com)
1.4 Evolution of Economic Value Added

The evolution of economic profit—Economic Value Added (EVA)—is a fascinating study with historical roots that can be traced back to the classical economists’ notion of “residual income” (Grant, 2003). One of the earliest attempts to mention residual income concept can be associated with famous British economist, Alfred Marshall, who in 1890, explained the real meaning of a business owner’s ‘profit’ as “What remains of his profits after deducting interest on his capital at the current rate may be called his earnings of undertaking or management.” This statement evidences that the economists’ view of residual income is quite different from the accounting measures of profit that ignore the return on shareholder’s funds. In turn, classical view of residual income is based upon the notion that a company is not truly profitable unless its revenues have a) covered the usual operating and non-operating expenses of a business and b) provided interest on invested capital at current rate. Thus, the residual income view seems to be the foundation of today’s ‘economic profit’ concept.

Grant, (2003) explored the evolution of EVA concept and traced that “While EVA is rooted in classical economic theory, three pioneering 20th century American economists—Irving Fisher during the 1930s, Nobel Laureates Franco Modigliani and Merton Miller in the late 1950s to early 1960s—expanded upon the full meaning of economic profit in a corporate valuation context. Irving Fisher established a fundamental link between a company’s net present value (NPV) and its discounted stream of expected cash flows. In turn, Modigliani and Miller showed that corporate investment decisions—as manifest in positive NPV decisions—are the primary driver of a firm’s enterprise value and stock price—as opposed to the firm’s capital structure mix of debt and equity securities.”

The increased acceptance and rapid adoption of economic profit based analysis in research occurred when investors lost their confidence in management, financial statements and Wall Street research. It was recognized that, accounting metrics like return on investment and earnings per share that were being used as the most important performance measures and even as the bonus base in a large number of companies, did not actually depict strong theoretical correlation with shareholder value creation (Ray and Choudhuri, 2004). In 1980s, shareholders’ activism demanding wealth maximization
reached unforeseen levels with the companies in United States. Thus, after recognizing the practical limitations of accounting earnings and the increased pressures on companies to maximize shareholder wealth, early economic profit innovators namely, Joel Stern and George Bennett Stewart III (the founders and managing partners of New York based financial consultancy firm named Stern Stewart & Company), commercially developed the Economic Value Added (EVA) concept in 1982. This analytical and financial metric gained early acceptance from corporate community because of its close alignment with shareholder wealth maximization. The theory of EVA was based on two principle assertions i.e. 1) a company is not truly profitable unless it earns a return on invested capital that exceeds the opportunity cost of capital, and 2) that wealth is created when a firm’s managers make positive NPV investment decisions for the shareholders (Grant, 2003).

Although developed in 1982, it spent the first 12 years of its existence in Limbo. Then in 1995, the CEO of Coca-Cola, Robert Goizueta, announced to the world that it was the use of EVA metric that had turned Coca-Cola into the number one Market Value Added Company. Coca-Cola’s stock price increased from $3 to over $59 when it first adopted EVA in the early 1980s. In 1995, Coca-Cola’s investors received $8.63 wealth for every dollar they invested (Dubey, 2000). Suddenly, EVA demonstrated great interest among researchers and companies world over. Peter Drucker, in his 1995 Harvard Business Review article “The Information Executives Truly Need,” also opined that “What we call profits, the money left to service equity, is usually not profit at all. Until a business returns a profit that is greater than its cost of capital, it operates at a loss. Never mind that it pays taxes as if it had a genuine profit. The enterprise still returns less to the economy than it devours in resources.... Until then it does not create wealth; it destroys it.”

EVA also received a lot of favor from press since its inception. Many prestigious publications namely, Fortune, Investors’ Business Daily, CFO, Financial Executive, Management Review, Chief Executive and the Wall Street Journals have touted its virtues (Ray and Choudhuri, 2004). Till date, EVA has emerged as a powerful financial metric which is being successfully and interestingly used by a number of world’s best corporations. For instance, Diageo, Eli Lilly, Guidant, SPX etc. have implemented EVA to guide them in improving their wealth creating capabilities. Further, Bonuses and
Incentive pay schemes at these firms have been built around the managers’ ability (or lack thereof) to generate positive EVA within the firms’ operating divisions (Grant, 2003). Moreover, a sample of the transnational companies implementing EVA like Siemens, Sony, Telstra, AT & T, IBM, Quaker Oats, Briggs & Stratten CSX, Johnson Worldwide and Akzo Nobel, indicates that EVA can well be recognized as this millennium’s most relevant management technique. In such a situation of growing popularity and acceptance of EVA metric, the Indian companies have also recognized EVA implementation to be critical for their success. In this regard, Singh and Garg (2004) have suggested that the corporates in India need to be fully equipped with the ‘ifs’ along with ‘buts’ of EVA not just for the reason of global competition but for their long standing continued existence.

In India, only a few companies like Hindustan Unilever Ltd., Infosys Technologies Ltd., Tata Consultancy Services, Dr. Reddy’s Laboratories Ltd., Godrej Industries Ltd., Balarampur Chinni Mills, Hero Honda Motors Ltd. etc. have yet adopted EVA to measure their financial performance and shareholder value enhancement. However, these companies do not calculate EVA rigorously, rather they take casual approach in calculating and reporting EVA numbers (Bhattacharya and Phani, 2000). Moreover, majority of the companies have failed to adopt EVA in their corporate philosophy. One reason could be that most Indian companies are reluctant to change accounting systems because they think that notional profits can well disappear when adjustments for accounting anomalies are made (Dubey, 2000). Secondly, EVA implementation requires the adoption of EVA-based management appraisal and compensation system within the company. Thus, managers may resist the changes that affect their own earnings. On these grounds Stewart (2000) claimed that “however, overtime, the success of those that have adopted EVA will convince others that they must also do so to compete effectively tomorrow.”

1.5 Economic Value Added: The Key to Maximize Shareholder Value

If the pivotal goal of a company is to maximize shareholder value and net present value is the decision making tool upon which various actions and corporate strategies are based then the question arises that how the initiatives of managerial and operating people be aligned and directed towards the goal of maximizing NPV. Thus, with this purpose in
mind and to redress the alleged accounting distortions offered by GAAP, Stern Stewart developed EVA concept. Below listed are the three principal aspects as given by Stewart (1994) that differentiate EVA from Accounting Profits:

1. EVA is the residual income remaining after subtracting the cost of all capital that has been employed to produce the operating profit. It thus integrates operational efficiency and balance sheet management in one measure accessible to operating people.

2. EVA is charged for capital at a rate that compensates investors for bearing the firm’s explicit business risk. The assessment of business risk is based upon the Capital Asset Pricing Model, which allows for a specific, market based evaluation of risk for a company and its individual business units using the concept of ‘Beta’. In addition, the tax benefit of debt financing is factored into the cost of capital but in such a way as to avoid the distortions that arise from mixing operating and financing decisions.

3. EVA adjusts reported accounting results to eliminate distortions encountered in measuring true economic performance.

Thus, by explicitly assigning a cost of equity capital and removing the distortions of accounting conventions, EVA better measures the wealth created by a company during a period than does traditional accounting measures of financial performance. A Summary of the shortcomings of various conventional accounting measures in comparison to EVA is given below:

1.6 Summary of Shortcomings of Various Conventional Performance Measures vis-à-vis Economic Value Added

Conventionally, managers and shareholders believed that growth in earnings and EPS, ROA, ROE and ROI were the best metrics for measuring shareholder wealth. Each of these has its merits but in recent years there has been a growing awareness that these traditional measures are not reliably linked to increasing the value of the company’s shares. This criticism has occurred because earnings do not reflect changes in risk and inflation, nor do they take account of the cost of additional capital invested to finance growth. For instance,
I. Stewart (2003) stated that the most egregious error that accountants make is to treat equity capital as a free resource. Although they subtract the interest expenditure associated with debt financing, they do not place any value on the funds that shareholders put or left in a business. Dubey (2000) explains that it is assumed that dividends are distributed out of profits and if a company does not earn profit, it can skip paying out dividends. Assumptions like these constitute a recipe for disaster. Shareholders expect at least a market rate of return when they buy a company’s shares. Thus, by treating equity as a free source of capital, companies often report accounting profits when in fact they are destroying shareholder value (Stewart, 2003).

II. The profit-based measures such as Earnings and EPS ignore the amount of the investment as reflected in the balance sheet i.e. they disregard the value of the assets used to generate them (Wet, 2004; Ehrbar, 1998; Stewart, 1991; Stern, 1993).

III. Balance sheet measures are veiled in accounting anomalies that often measure notional profits, not real ones (Business Today, 2000). For instance, GAAP based accounting writes off all intangible assets in the current year e.g. R&D expenditure, advertising, promotion, training and development costs for people and goodwill etc. rather the entire amount spent under these heads should be capitalized and written off over their expected economic useful life (Stern, 2000). Young (2003) states that even under the best financial reporting conditions in which managers do not intend any manipulation or gaming of profit numbers, GAAP inevitably distorts accounting measure of profit and capital.

IV. Traditional financial measures confuse accounting anomalies with the underlying economies of business and thus, growth may be sacrificed at the alter of short-term results. Pettit (2003) has well explained this point through an example i.e. A cellular company delayed the rollout of its digital network conversion by several months to avoid depreciation, despite the fact that the cash was already spent and competition was stealing customers with digital services.

V. The empirical research to date suggests that there is not even a single accounting based measure upon which, one can rely to explain changes in shareholder wealth
(Worthington and West, 2004; Chen & Dodd, 1997; Rogerson, 1997; Lehn and Makhija, 1997; Riahi-Belkaoui, 1993).

VI. Stern (1993) found that traditional accounting measures such as Earnings, Earnings Growth, Dividend Growth, Assets Growth and even Cash Flow Growth can not be relied as appropriate measures of corporate performance because all of them showed a very low degree of correlation with market values of the selected companies. Using the coefficient of determination ($R^2$) to examine the relationship between MVA and various traditional performance measures the study revealed that all the traditional measures explained very small variation in the market value of the selected companies ranging between 9% by turnover growth to 25% with Return on Equity. In contrast, $R^2$ for EVA relative to Market value was found to be as higher as up to 50%. Wallace (1998) also found that when compared to such common performance measures as return on capital, return on equity, growth in earnings per share, and growth in cash flow, EVA has the highest statistical correlation with the creation of value for shareholders.

VII. Because traditional financial measures ignore the returns that shareholders expect (cost of equity) any corporate project with just a positive but not necessarily an adequate return above zero can improve managers’ margins, unit cost, profits and productivity measures. However, such a project can also destroy value (Pettit, 2003).

VIII. There are a number of other reasons why Earnings fail to measure changes in the economic value of business. These are

- Alternate accounting methods may be employed.
- Dividend policy is not considered.
- Time value of money is ignored.

Thus, the above arguments from a number of prominent researchers suggest that the traditional/conventional financial performance measures fail to assess the economic reality of a business. Young (1997) indicates that EVA is similar to conventional accounting measures of profit but with two important differences: EVA considers the cost of all capital and it is not constrained by GAAP. Stern & Stewart have also made bold
claims establishing the superiority of EVA over other financial measures of performance. A few among those are:

“Forget about earnings, earnings per share, earnings growth, rate of return, dividends and even cash flow. All of them are fundamentally flawed measures of performance and value. EVA is all that really matters” (Stewart, 1991).

“EVA is almost 50% better than its closest accounting-based competitor in explaining changes in shareholder wealth” (Stewart, 1994).

The following paragraphs seek to clarify the usefulness of EVA as compared to higher order balance sheet oriented tools like EPS, ROCE, ROE etc.

A. Earning Per Share (EPS): Recognizing that EPS is an unreliable measure of corporate financial performance, Escalona (2002) stated that accounting earnings can easily be manipulated that can consequently overstate the EPS growth without improving the real performance of a company. Moreover, the index can also be increased by repurchasing ordinary shares, augmenting EPS but without improving earnings. There are several other attributes of EPS that make it even more unreliable tool to measure financial performance.

1. Being based upon the accounting profits, EPS is prone to the accounting distortions and does not recognize the cost of equity capital and riskiness of a firm’s operations.
2. For instance, a company that does not pay out all its earnings in the business and does not distribute that portion as dividends can expect an increase in EPS from one year to the next, without actually improving the performance. Wet (2004) explained that the reinvested portion of earning, with or without extra borrowings to maintain the capital structure, in fact leads to a bigger asset base, which in turn is expected to result in higher overall earnings and higher EPS. This situation can better be exhibited through a hypothetical example. Suppose Company A has total assets of Rs. 5 Crore, financed solely by 5 lakh Equity shares. If company earns Profit after Taxes (PAT) worth Rs. 1 Crore (20%), its EPS will be Rs. 20. now assume that company distributes just half of the earnings as dividend to equity shareholders and reinvests remaining earnings worth Rs. 50 Lakhs. In the next year, if company’s rate of earnings remains same, its PAT will rise to Rs. 1.10 Crore and consequently EPS will rise from Rs. 20 to Rs. 22 (No. of equity shares remained same). Thus, it will be
worth noticing that the increase in EPS is due to growth in assets and is not derived by improved performance.

3. Klinger (2005) discussed that one area in which accounting methods falter in EPS is that accounting presumes that Price Earning (P/E) Multiple never change. According to Stern-Stewart & Company, P/E multiple changes frequently in the events like acquisitions, changes in financial structure and new investment opportunities. Wet (2004) explains that EPS may be wrongly interpreted when one company acquires another and where the P/E ratio of the respective companies are quite different and the purchase price of the shares in the target company is paid by an issue of shares in the company making the acquisition (a share exchange). Thus, even if no synergy advantages are expected from the takeover, the EPS of the newly formed group as a whole changes. This point can clearly be understood with the help of a hypothetical example given below:

### Exhibit: 1

<table>
<thead>
<tr>
<th>Items</th>
<th>Company A</th>
<th>Company B</th>
<th>If Company A acquires Company B</th>
<th>If Company B acquires Company A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding Equity Shares</td>
<td>1,00,000 Shares</td>
<td>60,000 Shares</td>
<td>1,30,000 Shares</td>
<td>2,60,000 Shares</td>
</tr>
<tr>
<td>Market Value per Share (A)</td>
<td>Rs. 10</td>
<td>Rs. 5</td>
<td>Rs. 10</td>
<td>Rs. 5</td>
</tr>
<tr>
<td>Market Price (B)</td>
<td>Rs. 2,00,000</td>
<td>Rs. 1,20,000</td>
<td>Rs. 2,46</td>
<td>Rs. 4.07</td>
</tr>
<tr>
<td>EPS (B) (A/B)</td>
<td>Rs. 2</td>
<td>Rs. 2</td>
<td>Rs. 2.46</td>
<td>Rs. 1.23</td>
</tr>
<tr>
<td>P/E (A/B)</td>
<td>Rs. 5</td>
<td>Rs. 2.5</td>
<td>Rs. 4.07</td>
<td>Rs. 4.07</td>
</tr>
</tbody>
</table>

If Company A acquires Company B, the existing shareholders of Company A may be highly satisfied with increased EPS, but in reality, the quality of the earnings of the combined company has been deteriorated as reflected in declined P/E Ratio (from Rs. 5 to Rs. 4.07). In case, Company B acquires Company A, the acquisition will not attract the existing shareholders of Company B as it leads to decline in EPS from Rs. 2 to Rs. 1.23 per share. In fact quality of earnings of the combined entity has drastically improved as depicted by increased P/E multiple from Rs. 2.50 to Rs. 4.07, which needs to be taken care of.

Stewart (1991) stated that in such situations, EPS will differ: however, the company will be the same regardless of who acquires whom. Secondly, the assets, prospects,
earnings and value will not change and so we can see a major problem with using
EPS as a performance measure to take such critical decisions. On the same lines, Wet
(2004) explained that from an economic point of view, all that matters is whether the
value acquired is more than the value sacrificed to pay for the acquisition.

4. EPS can be easily increased by investing more capital in the business, but that
additional investment should be sourced from debt. In such a situation, EPS will rise
if rate of return on additional investment is higher than the cost of debt only.
Moreover, if additional investment is made by investing retained earnings in the
business, EPS will rise even if the additional investment is earning much lower but
positive rate of return. Both the cases are better exhibited in the example given below:

Exhibit: 2

<table>
<thead>
<tr>
<th>Item</th>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invested Capital</td>
<td></td>
<td>Rs. 10 Crore</td>
<td>Rs. 10 Crore</td>
<td>Rs. 10 Crore</td>
</tr>
<tr>
<td>Number of Equity Shares</td>
<td></td>
<td>10 Lakh</td>
<td>10 Lakh</td>
<td>10 Lakh</td>
</tr>
<tr>
<td>Rate of Return</td>
<td></td>
<td>10%</td>
<td>15%</td>
<td>18%</td>
</tr>
<tr>
<td>Profit before Taxes</td>
<td></td>
<td>Rs. 100 Lakh</td>
<td>Rs. 150 Lakh</td>
<td>Rs. 180 Lakh</td>
</tr>
<tr>
<td>Tax (30%)</td>
<td></td>
<td>Rs. 30 Lakh</td>
<td>Rs. 45 Lakh</td>
<td>Rs. 54 Lakh</td>
</tr>
<tr>
<td>Profit after Taxes</td>
<td></td>
<td>Rs. 70 Lakh</td>
<td>Rs. 105 Lakh</td>
<td>Rs. 126 Lakh</td>
</tr>
<tr>
<td>EPS</td>
<td></td>
<td>Rs. 7</td>
<td>Rs. 10.50</td>
<td>Rs. 12.60</td>
</tr>
</tbody>
</table>

Case-I: Additional Investment of Rs. 1 Crore raised through Debentures @ 12%

| Invested Capital                 |      | Rs. 11 Crore | Rs. 11 Crore | Rs. 11 Crore |
| Number of Equity Shares          |      | 10 Lakh     | 10 Lakh     | 10 Lakh     |
| Rate of Return                   |      | 10%         | 15%         | 18%         |
| Profit before Interest & Taxes   |      | Rs. 110 Lakh | Rs. 165 Lakh | Rs. 198 Lakh |
| Interest on Debentures (12%)     |      | Rs. 12 Lakh | Rs. 12 Lakh | Rs. 12 Lakh |
| Profit before Taxes              |      | Rs. 98 Lakh | Rs. 153 Lakh | Rs. 186 Lakh |
| Tax (30%)                        |      | Rs. 29.4 Lakh | Rs. 45.9 Lakh | Rs. 55.8 Lakh |
| Profit after Taxes               |      | Rs. 68.6 Lakh | Rs. 107.1 Lakh | Rs. 130.2 Lakh |
| EPS                              |      | Rs. 6.86   | Rs. 10.71  | Rs. 13.02  |

Case-II: Additional Investment consists of Retained Earnings worth Rs. 1 Crore
(rate of return on additional investment is 8%)

| Invested Capital                 |      | Rs. 11 Crore | Rs. 11 Crore | Rs. 11 Crore |
| Number of Equity Shares          |      | 10 Lakh     | 10 Lakh     | 10 Lakh     |
| Rate of Return                   |      | 10%         | 15%         | 18%         |
| **Profit from Initial Investment of Rs. 10 Crore (a)** |      | Rs. 100 Lakh | Rs. 150 Lakh | Rs. 180 Lakh |
| **Profit from Additional Investment of Rs. 1 Crore (@ 8%) (b)** |      | Rs. 8 Lakh | Rs. 8 Lakh | Rs. 8 Lakh |
| **Total Profit before Taxes (a + b)** |      | Rs. 108 Lakh | Rs. 158 Lakh | Rs. 188 Lakh |
| Tax (30%)                        |      | Rs. 32.4 Lakh | Rs. 47.4 Lakh | Rs. 56.4 Lakh |
| Profit after Taxes               |      | Rs. 75.6 Lakh | Rs. 110.6 Lakh | Rs. 131.6 Lakh |
| EPS                              |      | Rs. 7.56   | Rs. 11.06  | Rs. 13.16  |
Based upon EPS, the above trend also depicts that the company’s performance is improving each year. But there is no indication that whether company is actually creating value or is undoubtedly destroying it. For this purpose, cost of equity capital is brought into picture:

**Exhibit: 3**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case-I: Additional Investment of Rs. 1 Crore raised through Debentures @ 12%</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td></td>
<td>Rs. 6.86</td>
<td>Rs. 10.71</td>
<td>Rs. 13.02</td>
</tr>
<tr>
<td>Rate of Return (PAT/Invested Capital)</td>
<td></td>
<td>6.24%</td>
<td>9.74%</td>
<td>11.84%</td>
</tr>
<tr>
<td>Expected Cost of Equity Capital</td>
<td></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Economic Value Added (EVA)</td>
<td></td>
<td>-3.76%</td>
<td>-0.26%</td>
<td>1.84%</td>
</tr>
<tr>
<td><strong>Case-II: Additional Investment consists of Retained Earnings worth Rs. 1 Crore (rate of return on additional investment is 8%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EPS</td>
<td></td>
<td>Rs. 7.56</td>
<td>Rs. 11.06</td>
<td>Rs. 13.16</td>
</tr>
<tr>
<td>Rate of Return</td>
<td></td>
<td>6.87%</td>
<td>10.05%</td>
<td>11.96%</td>
</tr>
<tr>
<td>Expected Cost of Equity Capital</td>
<td></td>
<td>10%</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>Economic Value Added (EVA)</td>
<td></td>
<td>-3.13%</td>
<td>0.05%</td>
<td>1.96%</td>
</tr>
</tbody>
</table>

Thus, the above example clearly shows that based upon EPS trend, company’s performance seems to be improving each year. But when seen from the EVA perspective, the economic realities are revealed i.e. company is infact a wealth diluter firm in the first two years i.e. 2006 and 2007 (in Case-I) and in the year 2006 (in Case-II). Thus, by recognizing the cost of capital and riskiness of firm’s operations, EVA reflects far better view of company’s economic performance.

5. Escalona (2002) criticized the usefulness of EPS as a measure of comparison between companies because it is dependent on the number of shares. Thus, two companies having equal earnings but with different number of equity shares will report relatively different EPS. In contrast, instead of inter firm comparisons, EPS will reflect better results in intra-firm comparisons (i.e. within a company, over number of years).

**B. Return on Capital Employed (ROCE) and Return on Investment (ROI):** The ROCE is determined by dividing net profit by the capital employed or investment made to achieve that profit (Kishore, 2002). Interpreting by way of Dupont formula, ROCE consists of two components viz (i) profit margin and (ii) investment turnover.
ROCE = Profit Margin $\times$ Investment Turnover

$\frac{\text{Net Profit}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Investment}}$

The main problem with ROCE is that maximizing the rate of return does not necessarily maximize the returns to shareholders rather by ignoring risk component and opportunity cost of capital, ROCE fails to guide operations completely. Therefore capital can be misallocated on the basis of ROCE (Kaur, 2005). Suppose a group having the objective to maximize its ROCE has two subsidiaries A and B. Cost of capital for both of the subsidiaries is similar at 12%. The ROCE of subsidiary A is 15% and for subsidiary B, it is 10%. To achieve the target of maximizing ROCE, subsidiary A rejects all the proposals with ROCE less than 15% although there are some projects that are having 12%-14% return. Similarly, subsidiary B accepts the proposals with prospective return above 10% although it is below 12%. Suppose, following this criteria, both the subsidiaries have managed to enhance their ROCE from 15% to 17.5% (in case of subsidiary A) and from 10% to 11.5% (in case of subsidiary B). But from the perspective of shareholder value creation, it can be clearly observed that subsidiary B’s decision to accept the project with return less than the cost of capital itself actually destroyed the shareholder value. Although its ROE improved from 10% to 11.5%, still it is lower than the cost of capital of 12%.

Similarly, subsidiary A’s cut off point at 15%, no doubt made additions towards shareholder value but at the same time, its decision to reject the proposals below its current ROCE at 15% might have ignored certain good projects that could yield return above the cost of capital of 12%. These proposals could still create and increase shareholder value. The other major shortcomings of ROCE as identified by different researchers are given below:

- Girotra (2001) stated that ROCE ignores the definite requirement that the rate of return should be at least as high as cost of capital. Secondly, ROCE does not recognize that the shareholders’ wealth is not maximized when rate of return is maximized. Shareholders want the firm to maximize the absolute return above the cost of capital and not to increase percentages.
• Gurminder (2005) explained that companies should not ignore projects with return more than cost of capital just because the expected return is less than the present return.

• Rappaport (1998) stated that ROCE is not a good indicator when financing policy is changed. If the weighted average cost of capital (WACC) is changed, the value of the firm will change but ROCE would not be affected by this change in the capital structure.

• Moreover, Escalona (2002) provided that ROCE is affected extremely by the growth rate of new investment. If a company is heavily investing, the book value of the assets will increase, decreasing the ratio. Therefore, if managers are measured by ROCE, they might postpone investments that could create value.

Thus, ROCE/ROI, being based on the historic and subjective accounting practices, don’t account for opportunity cost of capital and does not take into account future earnings also. Clearly, focusing on ROCE to evaluate corporate performance or value creation can lead to inappropriate decisions.

C. Return on Equity and Return on Net Worth: ROE is considered as an important yardstick of performance for equity shareholders since it indicates the return on the funds employed by them. It measures rate of return as a percentage of book value of shareholders equity. The calculation of ROE can be broken up into these separate ratios namely

\[
\text{ROE} = \frac{\text{Net Profit after Interest and Taxes}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Assets}} \times \frac{\text{Assets}}{\text{Shareholders Equity}}
\]

These three ratios or components as described by Wet (2004) are Profitability, Assets Turnover and Financial Leverage. Thus, ROE can be improved by improving profitability, by more efficient utilization of assets and by increasing financial leverage.

ROE is prone to the similar shortcoming as of ROCE, but it is also very sensitive to the changes in the capital structure. ROE can easily be raised by simply investing more capital but that investment should be sourced from debt and rate of return from additional investment should be more than the cost of additional debt raised. In this way, profitability will raise keeping shareholders equity intact. Escalona (2002) stated that if
managers are measured by ROE, they might be stimulated to assume more debt than the optimal leverage, decreasing the value of the company considering the costs of financial distress that affects companies with high leverage.

As far as first component i.e. profitability is concerned, ROE includes book profits that are prone to the accounting anomalies that mask the true performance of a business. Thus, a business has to fix these anomalies (through EVA based accounting adjustments as given by Stern-Stewart and Company) to reflect the true value created/lost by it. Rappaport (1986) pointed out that the second component of ROE, namely asset turnover is affected by inflation in such a way that it may increase even when assets are not utilized better. The study provides reason that sales immediately reflect the impact of inflation, whereas the book value of assets which is a mixture of new and old assets, does not adopt as quickly to the effects of inflation.

Due to the subjectivity of accounting, ROE like other conventional ratios can be easily manipulated. If maximization of ROE is the target of a company, then there are two ways to improve it. Liebenberg (2004) explains that one is through better corporate performance. If that is not possible, reduce the equity in the firm by buying-in shares, either with cash or with debt to finance the repurchase. Thus, with fewer shares outstanding at the same level of profits, the ROE will obviously rise. Thus ROE is found to be very sensitive to changes in the third component i.e. financial gearing.

Moreover ROE neither incorporates risk component nor does it takes into account the time value of money. Thus, it should be interpreted in the light of its limitations to measure the value created or lost in a business.

Thus, earnings oriented (conventional) approach to value relates to the accounting treatment of various items that cause earnings to diverge from cash flows and lead to a general underestimation of the amount invested in the assets of a company (Wet, 2004). But in reality, shareholders are more interested in the company’s ability to generate future cash flows and risk associated with the projects undertaken to generate them than just in the accounting profits. Rappaport (1986), on the other hand suggests that the conventional tools or ratios being less reliable indicators of shareholder value should not be interpreted as a failure of accounting rather the problem lies with its use by managers for unintended and inappropriate purposes. In order to overcome the criticisms against
the above mentioned measures, Stern Stewart came out with a value based measure i.e. Economic Value Added (EVA) that is similar to the Residual Income (RI) concept and integrates operational efficiency with balance sheet management. The entire discussion evidence that the higher-order balance sheet oriented conventional ratios like EPS, ROCE, ROI, RONW etc. are all veiled in anomalies that often, measure notional profits and not real ones.

1.7 Advantages of Economic Value Added (EVA)

S. Chaith Kondragunta, the Vice-President & Country Manager (India) of Stern-Stewart & Company has briefly discussed the merits of Economic Value Added as:

- EVA is the one parameter that best explains changes in MVA
- EVA is the only true measure of company’s economic performance
- EVA integrates operating efficiency with balance sheet management
- EVA serves as the centerpiece of an integrated management system
- EVA is the ideal basis for a company’s variable compensation system.
- EVA only sanctions investments that generate value not others

Thus, EVA is such a powerful financial tool that it can be used to measure performance, evaluate strategies, allocate capital, price a company’s acquisition or divestitures, restructure balance sheets and serve as the basis for a variable compensation system. It does have an extremely important role in refocusing energies and redirecting resources to create sustainable value for company, customers, employees, shareholders and management. What needs to be done to achieve all these is not just the use of EVA concept rather the effective implementation of this magical metric in corporate philosophy. Chart 1 briefly presents the benefits that EVA implementation offers to a company. Having a look at these benefits, one can really understand the importance of implementing EVA in the value system of an organization. The steps involved in an organization’s EVA implementation procedure are addressed in the next section.
Chart 1: Benefits of EVA Implementation

1. EVA is a consistent way of improving firm
   • Financial Management System or “Framework”
   • Goal is continuous improvement of EVA to increase stock price
   • Ends confusion of multiple goals
2. Managers behave like owners. Allows Managers to make better decisions and aligns interests of managers and investors i.e.
   • Incentive package offers rewards based on EVA improvement
   • Cash bonuses have no limit
   • Plan is Long-term
3. Improves Communication
   • Decentralizes authority
   • Motivates management and workers to cooperate
   • Investors understand goals
4. Evaluates Managers
   • Measures true profitability
   • Higher correlation with Stock Price
   • Cost of Equity gives investors opportunity cost
   • Evaluate divisions of company
5. Best Measurement of Shareholder Wealth
   • Accounts for all capital costs (cost of debt and cost of equity)
   • Shows wealth created or destroyed

Source: Presentation by Consultants of Stern Stewart & Company available at bear.cba.ufl.edu/radcliffe/Student%20Presentations/eva3.ppt

1.8 Implementing EVA

Establishing and implementing the value added measures could involve an extensive and expensive process. The ideal company to implement EVA is one in which the board of directors and the senior management want to improve the efficiency of a firm, take advantage of opportunities quickly, and align the interests of the management and shareholders (Stern, 2000). In an interview to Business Today (in January, 2000), Joel Stern, the founder of EVA concept claimed that there is no particular stage in a firm’s life cycle when EVA can be best applied. It works well in both the introductory and growth phases, where companies grow rapidly, as well as in the maturity and decline phases, where some companies seem to lose their way. As far as industry type is concerned, the industry is less far important than the attitude of the management. Thus, an EVA
A company is a company that is managed the EVA way. Dubey (2000) explains the three characteristics of an EVA company i.e.

- The primary objective of such a company is the enhancement of EVA. In contrast to the objective of maximization of sales or profits, the primary objective of such a company is the enhancement of EVA. The mathematical construct of EVA ensures that those companies trying to optimize it, also end up optimizing sales revenue, cost of capital, return on capital employed and net operating profits.

- Secondly, the entire financial reporting of the company is based on the EVA methodology i.e. EVA standardizes the financial information to reveal true economic realities of the operations.

- Thirdly, EVA is the moving force behind the company’s existing and new projects. That means all the corporate decisions, investment opportunities and actions of individual departments should ultimately be backed by the objective of incremental EVA.

Thus, to adopt EVA as a part of corporate strategy, managers can not just throw EVA into corporate culture, policy & strategy and further expect it to be successful. Rather a lengthy process has to be followed for EVA implementation to be effective (Roberston, 2005). Right from hiring some external consultants to assist in implementation process to the great deal of investment required for the measure to be employed correctly, there is a need of dedicated efforts and support from company’s top executives, board of directors, managers and employees. Stewart has recommended a four-step implementation process of incorporating EVA into corporate strategy that deals with Four-Ms i.e. Measurement, Management, Motivation and Mindset. These Four-Ms have been clearly described in Figure 1.2.

A. **Measurement:** This step involves designing a measure of value creation that best reflects economic reality in a particular industry. Any company that wants to implement EVA should institutionalize the process of measuring the metric regularly (Dubey, 2000). It should compute the EVA metric consistently and effectively, using the formula,

\[
\text{EVA} = \text{NOPAT} - \text{COC} \times \text{Capital Employed}
\]
But this computation should be made after making prescribed accounting adjustments to GAAP to convert financial statements from an accounting framework to economic framework. These adjustments reflect the right value creation motivates the right behavior and produce consistent and definitive results (Kontragunta, 2000). Although Stern-Stewart lists 164 accounting adjustments, including the Amortization of Goodwill, Research and Development expenses, Interest payment and Non-Interest Bearing Current Liabilities, a company does not need to trigger all the 164 issues. Stewart (1994) himself states that in most of the cases, only 20-25 key issues are addressed, and as few as 5 to 10 key adjustments are actually made in practice. It is further recommended that adjustments to the definition of EVA be made only in those cases that pass four tests:

- Materiality: Adjustments should likely to have a material impact on EVA.
- Motivation: Adjustments should have the potential to influence the decisions and outcomes.
- Simplicity: Adjustments should not be unnecessarily complex that the operating people can not readily grasp it.
- Data Availability: The required information should relatively be easy to track or derive.

So, for any one company, the definition of EVA that is to be implemented is highly customized with the aim of striking a practical balance between simplicity and precision (Stewart, 1994). Moreover, once that definition is reached, it should be thoroughly and consistently followed. Thus, the information systems that a company uses must be reliable in order for the EVA measures to be effective.

B. Management: While simply measuring EVA can give companies a better focus on how they are performing, its true value comes in using it as the foundation for a comprehensive financial management system that encompasses all the policies, procedures, methods and measures that guide operations and strategy (Yee, 2000). Most companies follow different (and often conflicting) metrics for different purposes. For instance, measures like net present value or discounted cash flows for capital budgeting decisions, earnings and market share for strategic planning and goal-setting, budgets for performance appraisals and compensation. This results in a
Figure 1.2: Four-Step Implementation Process of Incorporating EVA into Corporate Strategy

Most accurate measure of financial performance as it accounts for all capital costs

EVA computation requires adjustments to be made in conventional earnings in order to eliminate accounting inconsistencies and bring them closer to true economic results

Measuring EVA can give managers a better focus on performance

Provides a foundation for a comprehensive financial management system

Managers identify new ways & strategies to increase EVA and hence shareholder value

Incentive plans to make managers think like owners because they are paid like owners

Managers are paid bonuses with no upside limits when they improve EVA i.e. the only way they can make more money for themselves is to create more value for shareholders

EVA financial management and incentive compensation system transforms corporate culture

EVA system provides a common language for employees across all corporate functions

Facilitates decentralized decision making
corporate system that is inconsistent, complicated, divisive and disjointed resulting in a loss of comparability and accountability (Kondragunta, 2000). In contrast, EVA eliminates this confusion by using a single financial measure that links all decision making with a common focus i.e. how to improve EVA (Ray and Choudhuri, 2004). Thus, under the EVA based management system, the full range of corporate decisions relating to the choice of strategy, capital allocation, mergers and acquisitions, divesting businesses and goal-setting are linked to one measure i.e. improvement in the value-creation. Thus, by providing a common language for employees across all levels and allowing all management decisions to be modeled and implemented in a single and consistent way, the financial system becomes much easier to comprehend and administer. Figure 1.3 presents the comparison between conventional financial management system and EVA based financial management system. Thus, EVA companies should consider a course of action only if it is aligned to and derived from their EVA process. In the process of improving organizational decision-making, management should also review past, current and future decisions, develop spreadsheet tools to assist in decision-making and discover ways to improve a variety of processes within the company (Singer and Millar, 2003).

With EVA in place, managers also realize that there are mainly four ways to increase shareholder value:

- **Fix**: Increase returns from capital already invested in the company by using it more efficiently for instance, through higher prices or margins, more volume, or lower costs.
- **Grow**: Invest additional capital in projects that offer return more than the marginal cost of capital. For this, companies can introduce new products and services or can try to increase its existing market share.
- **Harvest**: Release/Withdraw capital from existing operations that would earn a higher return elsewhere. For this, companies can overhaul the operations and merge units, sell off or reduce the investments in businesses that do not earn adequate return (Swain and Misra, 2003).
- **Optimize Cost of Capital**: Optimize the financing cost through prudent use of debt, risk management and taking the advantage of financial innovations
Figure 1.3: Comparison between Traditional and EVA-Based Financial Management System

- No common denominator of value
- Heavily dependent on corporate synthesis and reconciliation of departmental figures
- Information transfers slow and inefficient

- Common Language for allocating resources, conducting valuations, measuring performance, and communicating with investors
- Minimal corporate synthesis and reconciliation
- Information transfers real-time and meaningful

(Swain and Misra, 2003). For example, the firm can increase its ratio of debt-to-equity provided it lowers the WACC and doesn’t threaten flexibility or survival (Stewart, 1994).

Stewart (1991) believes that there are several additional key derivers that can lead to an increase in EVA of a company. Figure 1.4 is the pictorial representation of those additional key derivers.

C. **Motivation:** EVA is most effective when it is used beyond as a performance measure i.e. when it is implemented as the performance appraisal variable in a company and is linked to the employees’ incentive/compensation system. The EVA based incentive plans replace the long established annual bonus incentive plans by insuring that the only way in which managers and employees can get higher incentives and bonuses is to make additions in the shareholder value. Dubey, (2000) explained that sales based incentives reward managers for incremental sales without considering the costs involved, and profits based reward systems can be the source of resentment, atleast among those managers who believe their rewards are based on variables beyond their control. However, the EVA based investment plans reward employees for both the current as well as cumulative increase in EVA, over time with an at-risk, bonus-bank system (Kondragunta, 2000).

Thus, EVA promotes growth in two ways: First, it holds managers accountable for the long term by putting a portion of their bonuses at risk, if there is a subsequent decrease in the company’s EVA (Dubey, 2000). Second, the targets for achieving bonuses are objectively set, based on investor and market expectations, and are communicated well in advance within the organization (Kondragunta, 2000). Thus, an opportunity is given to managers and employees at all levels to earn unlimited incentives/bonuses based on their capabilities to add value. It further leads them to think and act like owners because they are paid like owners. Moreover, with the opportunity to earn an uncapped bonus, the employees become highly motivated and work actively to discover investment opportunities that ultimately earn a high return above the cost of capital (Klinger, 2005).

Al Ehrbar rightly states, “The real magic in EVA comes from changing behavior throughout an organization, and that depends crucially on using it as the basis for incentive compensation”.
Figure 1.4: EVA Drivers- Strategies for Improving EVA

D. **Mindset**: is increasing the business literacy of employees through training and communications. Like other transformation techniques, the effective implementation of EVA necessitates a change in the culture and mindset of the company (Dubey, 2000). “In order to switch employees into a mindset of value creation, a significant effort is made on training and communications. Training of key staff on EVA concepts and corporate finance fundamentals creates a foundation for better understanding. The continued communication of the EVA philosophy and its successful application then builds on this foundation and maintains the momentum of these ideas” (Stern-Stewart & Company, 2000). Being trained to understand EVA methodology, its workings and how it leads to adopt value creating decisions, all the constituents of the company will reflect to have focus on one ultimate goal i.e. maximizing EVA. Thus, Dubey (2000) stated that such singular focus leaves no room for ambiguity as it is not difficult for employees to know just what actions of theirs will create EVA and what will destroy it. Further, Dubey (2000) also listed four steps process that companies can use to implement EVA. These are:

- The co-implementing EVA should train as many managers as it deems necessary-this depends on whether that company wish to implement EVA in one of its divisions or across the organization.
- The company should develop an effective financial reporting system that makes it convenient for managers to derive the financial information that they need to compute EVA.
- A culture of entrepreneurship among managers and employees should be instilled so that each individual in the company should take the responsibility ensuring that his performance will lead to enhance the company’s ability to create more economic value.
- Fourth and the most essential step of EVA implementation process is to align the company’s internal processes-its management, performance appraisal and compensation systems to its ultimate objective of increasing shareholder value.

Figure 1.5 presents the Stern Stewart’s approach for EVA implementation that links the entire corporate decision making to the measure of value-creation. Stern (2000) stated that EVA will fail-that is, it will not change the behavior of managers and workers-if it is
Figure 1.5: Implementing EVA - How the Stern Stewart Approach Ensures Managers Adopt Value-Creating Decisions

- Measure EVA
  - Create Systems Facilitating Proper Resource & Asset Allocation and Transfer Pricing
  - Create EVA Stretch Goals and Benchmark Them
  - Define EVA of Business Units, Strategic Groups, and Project Teams

- Provide Management Tools Using EVA
  - Refine Capability and Investing Techniques to Ensure Only Value Adding Projects Are Taken Up
  - Identify EVA Drivers and Operating Measures
  - Report EVA of the Business Division, Team, or Project on a Regular Basis

- Motivate People on the Basis of EVA
  - Adopt an EVA-Based Incentive Compensation and Appraisal System
  - Create a Long-Term At-Risk Bonus Plan to Replace the Annual Bonus-Incentive Plan

not embraced enthusiastically by the CEO. It will fail if it is not used as the basis of incentive compensation; if you pay managers for something else, they will not strive to increase EVA. And, finally, it will fail when managers have a bureaucratic, rather than an entrepreneurial outlook.”

1.9 Problems with EVA as a Measure of Financial Performance

All the financial measures have their own pros and cons. Similarly, despite of EVA’s advantages over traditional measures of performance, this metric is also subject to certain limitations:

- **Size Differences:** EVA does not control for size differences across plants or divisions (Hansen et al., 1997; Horngren et al., 1997). A larger plant or division will tend to have a higher EVA relative to its smaller counterparts (Brewer et al., 1999). Comparing the divisional performance just on the basis of absolute EVA figures might result in the misleading interpretations. Thus, to compare the performance of organizational units, EVA as a percentage of capital employed can better be used and analyzed.

- **Financial orientation:** EVA is a computed number that relies on financial accounting methods of revenue realization and expense recognition (Brewer et al., 1999). If motivated to do so, managers can manipulate these numbers by altering their decision making process (Horngren et al., 1997). For instance, managers can be biased against low return start-up investments and can favor businesses with heavily depreciated assets as a result of the adjustments made to compute EVA. So, EVA approach can penalize companies that invest in assets with long-term returns (Mishra and Swain, 2003).

  Moreover, EVA overemphasizes the need to generate immediate results; therefore it also creates a disincentive for managers to invest in innovative product or process technologies (Mishra and Swain, 2003).

- **Cost-Benefit Analysis:** The equity adjustments to GAAP sanitize the financial information to ensure that accounting numbers used by a company in its EVA computations are true economic figures. But this sanitation process involves some of the costs. For example, time spent by management in deciding the adjustments to be made, professionals’ consultancy fees, direct and indirect costs incurred in
providing training to accounting staff etc. these costs should not be ignored while considering the benefits of EVA.

- **Short-term Orientation:** It is sometimes said that a drive to increase EVA will encourage managers to give short-thrift to the longer term consequences of current decision (Stewart, 1994). As EVA overemphasizes the need to generate immediate results; therefore, it creates a disincentive for managers to invest in innovative product or process technologies (Brewer et al., 1999) where revenues come gradually. Against this criticism, Stewart (1994) argues “EVA is also employed for capital budgeting, strategy reviews and an incentive plan that rewards management for both current and cumulative increase in EVA over time with an “at-risk, bonus-bank” system. These practices serve to keep management focused on longer-term value building.”

- **Results Orientation:** Like its predecessor financial metrics, EVA too has the fault of being a result oriented financial number. Ray and Choudhuri (2004) stated that EVA that is accumulated at the end of an accounting period does not help to point towards the route causes of operational inefficiencies: therefore, it offers limited useful information to people charged with the responsibility of managing business processes.

- **Old Wine in a New Bottle:** Another criticism of EVA is that it is simply a retreat model of residual income and that the large number of “equity adjustments” incorporated in the Stern Stewart system may not be necessary (Chen & Dodd, 1997; O’Hanlon & Peasnell, 1998; Young, 1997 cited in Sharma, 2005). The similarity between EVA and residual income is supported by Chen and Dodd (1997) who note that most of the EVA and residual income variables are highly correlated and are almost identical in terms of association to stock return (Sharma, 2005).

- **EVA fails to account for Inflation:** Lusk, et al. (2002) explains that during times of inflation, EVA fails to serve as an appropriate measure. A modified version named as the adjusted EVA that takes into account the inflation, can be used instead of EVA. Warr (2004) also found that inflation distorts EVA through the operating profit, the cost of capital, and the capital base and these distortions have
the potential to result in inefficient investment and compensation outcomes. Thus, analysts, managers, and investors who attempt to gauge firm performance using EVA should be aware of the distortions that inflation causes.

Inspite of these shortcomings, EVA is regarded as the most accurate measure of shareholder value creation by the companies and corporate analysts world over. On one hand, accounting earnings are criticized due to their failure to include the opportunity cost of equity capital and being unduly influenced by accrual based accounting conventions. EVA has been advocated as an innovative measure of performance that charges management for using capital at an appropriate risk-adjusted rate, and also eliminates (or reduces) financial and accounting distortions. Thus, EVA has allegedly established its conceptual superiority over the traditional measures of financial performance. Joel M. Stern, the CEO of Stern-Stewart and Company, on company’s website has also claimed that “EVA and Net Present Value arithmetically tie, so companies can be assured that increasing EVA is always a good thing for its investors - certainly not the case with EPS or Free Cash Flow (e.g. the scams in Enron and Satyam Computer Services). Given the usefulness of the measure, many companies have adopted it as part of a comprehensive management and incentive system that drives their decision processes. Such focus on value creation has also served the shareholders of these companies. Figure 1.6 shows that between 1997 and 2007, Stern Stewart & Co.’s EVA adopters have beaten broader market indices MSCI (Morgan Stanley Capital International’s) World Stock Index by a significant margin”.

Since wealth (or value or return) created is of primary concern to investors, proponents claim that EVA is the only measure that ties directly to the intrinsic value of a company’s stock. However, Chen & Dodd (2001) argued that no matter how encouraging anecdotal EVA stories may be, experiences of individual firms can not be generalized to the whole population; therefore firms should carefully consider the outcome desired from adoption of EVA. Thus, the present dissertation is designed to bridge the gap between theory and practice and thus, to empirically investigate the appearance of EVA in Indian companies.
1.10 Purpose of the Study

The entire business world is nowadays moving towards greater transparency, supporting financial disclosure mechanism and superior corporate governance system. Globally, well-known companies are competing to have the lowest cost of capital and highest risk adjusted returns to achieve the goal of “shareholder value maximization”. Creating value for the shareholders has become the widely accepted corporate objective. Companies that add value to their enterprise often rank high when it comes to market capitalization – the company’s visible value. International markets too, look at economic value when it comes to sizing up a company. Hence, in order to test whether EVA is applicable in the Indian condition, an attempt is required to be made to identify what EVA is all about in Indian context.

The empirical research of academicians till date on this subject is limited particularly in Indian context. In the beginning, the researchers gave the conceptual aspects of EVA, but later on some empirical studies have also been undertaken. Most of these studies emphasized on the relationship between shareholder wealth and certain financial performance measures only. Present study is an attempt to analyze EVA as a financial performance measurement tool. The important contribution of this study is to calculate...
EVA of the selected Indian companies and comparing the same with the traditional performance measures like ROCE, RONW, EVA (%), EPS etc. This study is a pioneering effort in identifying the impact of firm specific factors on EVA of a company. Moreover, the study also explores the extent of corporate reporting practices regarding EVA in Indian corporate sector as a contribution towards the significant expansion of the current research agenda.

1.11 Research Questions

EVA being a value based measure assists investors about the wealth discovery and company-selection process. The overall purpose of the study was to examine the appearance of EVA in Indian corporate sector. The research questions that worked as motivation to carry out this project are given below, the answers to which are given in the course of the study.

The primary research question addressed in the thesis is:

(1) How to evaluate the shareholder value generated or lost by India’s most valuable companies (valuable in terms of market capitalization)?

Thus, this study tried to explain the application of EVA principles for the evaluation of value creating capabilities of selected Indian companies. The purpose of this exercise was to dig below the surface numbers to interpret the economic realities of these big business houses. This research question addressed the following issues:

- Understanding of the EVA Concept & Methodology
  - Calculation of NOPAT and Economic Capital
  - Calculation of WACC with special reference to the computation of Cost of Equity as per Capital Asset Pricing Model (CAPM)
  - Calculation of Economic Capital
  - Calculation of EVA

- Understanding of the MVA Concepts & Methodology
- Computation of EVA and MVA of the selected Indian Companies
- Ranking of Companies on the basis of EVA & MVA Generated/Lost

So, the first research question involved a series of computations to finally reach at the EVA and MVA numbers. Once, these figures were identified, the study moved towards exploring the second major research question:
(2) Does ‘EVA’ dominate ‘Earnings’ in explaining the variations in MVA of a company? In order to obtain a comprehensive answer, the study tried to identify the most significant predictor among traditional and value based performance measures, that best explains the changes in Market Value Added of selected Indian companies. Finally, it also discussed the potential factors contributing to the failure of EVA to dominate Earnings in explaining the variations in shareholder value creation (in context with Indian stock market).

(3) To what extent the firm-specific attributes influence the shareholder value of Indian companies.
This research question aimed to (i) develop a framework of the drivers of shareholder value creation and (ii) to identify how a particular decision affects it. So, various firm-specific attributes like company’s age, size, profitability, risk, efficient resource management etc. were examined to study their impact on accounting based (EVA), as well as market-based (MVA and Tobin’s Q) dimensions of shareholder value. Further, the study also identified:

- Whether the significant firm-attributes are common to both the dimensions of shareholder value i.e. accounting based (EVA) as well as market-based (MVA and Tobin’s Q).

Once the study traced out the firm-specific determinants of shareholder value creation to aid investors, corporate decision-makers and market analysts in developing country like India it finally moved towards examining the extent of Economic Value Added (EVA) reporting practices prevalent in Indian corporate sector.

(4) (A) To what extent EVA is being used and disclosed by Indian companies?
The study projected to examine corporate EVA disclosures in the light of following specific objectives:

- Which companies among BT-500 cited the use of EVA in their annual reports for the years 2004-2008 (either in the single year or in more than one year)?
- What is the Industry composition and Residential Status of the companies that formally adopted EVA?
Introduction

- Which medium of communication is adopted by the EVA reporting companies to convey their EVA implementation decision to the market participants and shareholders?
- What are the areas of corporate decision making where EVA metric is applied?
- How EVA user companies report Economic Value Added in their annual published accounts and what are the significant deficiencies and inconsistencies in the measurement of EVA and its major components?

The answers to these questions further raised the curiosity to investigate the firms’ specific attributes that are associated with companies’ EVA disclosure choices. So, at last the study attempted to look into the following research issue:

(B) What are the firms’ specific attributes that are associated with companies’ EVA disclosure choices?

For this purpose, the study compared the EVA reporting companies with that of EVA non-reporting companies on the basis of their background indicators and financial performance measures. Finally, it concluded with the discussion of implications for SEBI, ICAI, Company Law Board and other related parties and suggested the need to make EVA reporting mandatory in Indian corporate sector.

1.12 Structure of the Study

To address the above discussed research questions, this dissertation is organized into eight chapters, thus raising the issues of shareholder value creation in a logical sequence and within a framework that allow for natural progression from one topic to the next. The first three chapters present the background of the thesis i.e. at first, describe all relevant aspects of EVA and MVA while at the same time create a platform for the empirical research to follow. The next four chapters comprise essays on the research carried out on specific issues; followed by the final chapter presenting the summary, conclusions and suggestions. Figure 1.7 presents the structure and inner logic of the dissertation for a quick and comprehensive overview. The layout of the chapters is briefly described below:

Chapter 1 is conceptual in nature. It introduces the concepts of EVA and MVA and describes the shortcomings of traditional accounting measures of performance such as Return on Investment, Earning per Share, Return on Capital Employed etc vis-à-vis value
based measure EVA. Followed by a discussion of advantages of EVA metric, it explains the essential steps that companies have to follow to implement EVA in their corporate philosophy. This chapter further proceeds to explain the purpose of the study along with research questions upon which the dissertation is structured. Finally it ends up with explaining the applications of the study.

Chapter 2 presents the review of the existing literature and is divided into three parts i.e. Studies relating to the comparison between Conventional Performance Measures and Value Based Measures in terms of their association with MVA. Second, studies dealing with determinants of shareholder value creation in India and abroad. Third, studies concerning EVA disclosure practices prevalent and adopted by companies. This part also includes the review of company specific case studies.

Chapter 3 covers the research design of the study and explains the research objectives, database and methodology. It also presents the limitations of the study.

Chapter 4 describes the main components in the computation of EVA namely the Net Operating Profits after Taxes (NOPAT), Weighted Average Cost of Capital (WACC) with special reference to the calculation of cost of equity capital as per Capital Asset Pricing Model (CAPM), the spread and the Economic Capital. It also discusses the various adjustments that are made to convert the accounting profits and capital into economic profits and economic capital in order to make correct computations of EVA and MVA.

Further it brings out the EVA and MVA computations for selected companies and carries out EVA-based and MVA-based rankings. While analyzing the identified trends it also explains the possible circumstances when MVA of a company does not follow its EVA.

Chapter 5 empirically tests the hypothesis that value based measures as well as traditional performance measures have equal relative information content i.e. equal association with MVA of a company. Based upon the findings, it also discusses the potential factors contributing to the failure of EVA to dominate Earnings in explaining the variations in shareholder value creation.

Chapter 6 seeks to examine the impact of firm-specific attributes on the Accounting-based (EVA) as well as Market-based (MVA & Tobin’s Q) dimensions of shareholder value creation. Thus, it identifies the firm-specific characteristics, among which the
corporate decision makers can navigate their key choices and trade-offs to create superior shareholder value.

Chapter 7 highlights the extent of Economic Value Added (EVA) reporting practices prevalent in Indian corporate sector. It also examines the corporate attributes that can be associated with the Indian companies’ EVA disclosure choices.

Chapter 8 contains the summary of the study and concludes the findings. It also provides some workable recommendations to instill EVA methodology in corporate cultures and disclosure mechanism in such a way that investors, market analysts and regulatory bodies can rely on the financial statements in true sense. It also suggests the possible areas and scope for further research.

Towards the end of this research work, comprehensive and updated bibliography on the topic is enlisted alphabetically. The appendices contain detailed data analysis that has been referred to in the discussion parts of the thesis.

1.13 Application of this Study

Inspite of successful adoption of EVA metric by many companies in the corporate world, most of the companies in India are still in the dark about exactly what they’re supposed to do for managing the shareholder value. Although most of them say they are doing it, yet there is some sort of confusion or uncertainty about a number of important facets of EVA. This dissertation contributes to the literature of Economic Value Addition, both in theory and in practice with special reference to Indian Corporate Sector. Besides corporate entities, it seeks to assist strategic investors, academic researchers, corporate managers, corporate decision makers and various regulatory bodies in a number of ways discussed below:

**Investors and Academic Researchers:** In a market-driven economy, there are a number of firms that create wealth whereas others certainly destroy it. EVA being a value based measure assists investors about the wealth discovery and company-selection process (Grant, 2003). Focusing this aim, the study explains the application of EVA principles for the evaluation of companies. By ranking sampled companies in terms of their relative EVA performance (Spreads) and MVA (Generated or Lost), the present study has also tried to identify the top performing as well as worst performing companies in India. Thus,
Figure 1.7: Structure of the Dissertation

1. INTRODUCTION
   - EVA Methodology
   - Motivation & Purpose of the Study
   - Research Questions
   - Structure of the Study
   - Applications of the Study

2. REVIEW OF LITERATURE
   - EVA vs Conventional Performance Measures in terms of their association with MVA
   - Determinants of Shareholder Value Creation
   - EVA Reporting Practices

3. DATABASE AND RESEARCH METHODOLOGY
   - Objectives of the Study
   - Methodology & Database
   - Limitations of the Study

4. SHAREHOLDER VALUE CREATION IN SELECTED INDIAN COMPANIES
   - EVA & MVA - Concept & Methodology
   - Computation of EVA and MVA
   - Ranking of Companies on the basis of EVA & MVA Generated/Lost
   - Analysis of the Findings

5. RELATIONSHIP OF EVA & CONVENTIONAL MEASURES WITH MVA
   - Identifies whether Value Based Measures (EVA & EVA%) as well as Conventional Measures of Performance (PAT, EPS, ROI etc.) have Equal Association with MVA

6. IMPACT OF FIRM-SPECIFIC ATTRIBUTES ON SHAREHOLDER VALUE CREATION
   - Impact of Firm-Specific Attributes on Accounting-Based (EVA) as well as Market-Based (MVA & Tobin’s Q) Dimensions of Shareholder Value Creation

7. EVA DISCLOSURES IN ANNUAL REPORTS OF INDIAN COMPANIES
   - Extent of EVA Disclosures in Selected Indian Companies
   - Factors Influencing the EVA Disclosure Choices of Selected Indian Companies

8. SUMMARY, FINDINGS AND SUGGESTIONS
   - Summarizing Empirical Findings
   - Proposed Suggestions
   - Scope for Further Research
along with investors, it also helps academic researchers, portfolio managers and corporate decision makers to dig below the surface numbers to interpret the economic realities of these big business houses.

In addition, the dissertation also helps investors by identifying the significant inconsistencies and irregularities in the measurement of EVA and its major components by the EVA-reporting Indian companies. Hence, it signals unsystematic, unscientific and non reliable EVA disclosures practices prevalent in the annual reports of corporate India.

**Managers and Corporate Decision Makers:** As companies introduce new tools for managing their businesses e.g. Balanced Score Card, Management by Objectives, Strategic and Activity-based Performance Management, Organizational Change Management etc., it is imperative that each manager also develop a working knowledge of these tools. This dissertation has been offered in that spirit to a readership of those managers whose specialty may or may not be accounting but they are having some interest in the topic ‘Economic Value Added’. The study attempts to create awareness about the applicability of this so called ‘hottest financial idea’ in context with Indian corporate sector and financial markets. Once they become aware of the merits and contributions of EVA implementation in the long-term economic survival of the businesses, they will become more responsive to the changes in corporate culture offered by EVA introduction.

Besides this, the dissertation also evidences that from the perspective of Indian markets, EVA has to be used in conjunction with the long established conventional measures of financial performance. Therefore, a manager’s sole concentration on EVA adoption by ignoring the traditional measures won’t serve the purpose as Indian markets are found to be comparatively less responsive to EVA measure.

This dissertation also informs the managers and corporate decision-makers about the key drivers of shareholder value creation around which they can navigate their key choices and trade-offs to create superior shareholder value. That means, this exploration can guide the managers regarding the firm specific attributes that have the greatest impact on value.

**Companies:** The present dissertation explores that EVA and MVA values of the sample companies don’t seem to have moved in the same direction always. So, it identifies the
possible reasons of such contradiction and also suggests a number of alternative courses of actions that companies can take in each situation.

**Regulatory Bodies:** This study evidences that under conventional accounting systems, most companies appear profitable, but many, in fact are not. A firm that appears to be profitable under conventional accounting perspective may prove to be a wealth destroyer, when measured on the value added platform. Thus, there is a need of recognizing the fact that in order to compete and survive in the globally competitive environment, economic value-additions by corporates are more important than mere post-tax profits. Thus, this study insists upon the need to make EVA adoption and reporting mandatory in Indian corporate sector which requires initiatives from various regulatory bodies like Securities and Exchange Board of India (SEBI), Institute of Chartered Accountants of India (ICAI), Company Law Board and other related parties. Through the establishment of separate accounting standards for EVA computations and disclosure and further linking it with the employees’ compensation plans, companies can reap benefits in terms of shareholder value enhancement.

**Society:** Gupta (2007) states that if the companies are successful in generating value, then not only are the investors but also the society at large is benefited. It is the pursuit of value that directs the resources to be utilized optimally and productively.

**Conclusion**

Developing a conceptual framework, this chapter discusses about the concepts of EVA, MVA and their relationship, Evolution of EVA, Summary of the shortcomings of traditional accounting measures of performance vis-à-vis value based measure EVA, Advantages of EVA metric, Stewart’s Four-Ms approach for EVA implementation and Problems with EVA as a measure of financial performance. It concludes that mere computations of EVA should not be the ultimate aim of the companies; rather EVA assists in creating shareholder value only when it is implemented as a performance measurement tool and incentive system across the company. Once, the basics and background of the topic is discussed, this chapter further proceeded to explain the Purpose of the study along with Research Questions upon which the dissertation is structured. Finally after portraying the Structure of the study, it ends up with explaining the application of the study.