Chapter 8

Summary, Findings and Suggestions

Corporate management now-a-days has been placed under growing pressure to implement financial strategies that create value for its shareholders. While maximizing shareholder wealth has become the paramount corporate mission, how this mission is to be achieved is much less certain. For many years company executives and shareholders have been relying upon standard accounting ratios like Earning per Share (EPS), Return on Investment (ROI), Return on Equity (ROE) etc. as the best criterion for evaluating the shareholder wealth. However, there has been a growing awareness that these traditional accounting measures are not reliably linked to the measurement of a company’s value creating performance. This occurs because such metrics don’t consider the cost of equity capital and are influenced by accrual accounting based conventions. Moreover, these GAAP (Generally Accepted Accounting Principles) based accounting measures just reflect accounting numbers which can be easily manipulated to reflect the company more profitable than it is in reality. So, the conclusions drawn on the basis of such measures are sometimes far from reality which may present misleading information to the company’s shareholders. Secondly it may also create a sense of contentment among managers that keeps them away from looking for further opportunities to add value. In fact, the true reality of a company’s success or failure is not exhibited by its accounting reality but rather through its economic reality that deals with the intrinsic value being added or destroyed by the company.

In India, most of the companies are still in dark about exactly what they’re supposed to do for managing the shareholder value, but virtually all of them say they are doing it. Investors and portfolio managers too, are keen to find the ‘best companies’ in terms of value creation. The purpose behind this is to take the decisions regarding stock selection, portfolio construction and risk control. Stern-Stewart & Company, the proponents of Economic Value Added (EVA) metric stated that the substantial way through which companies can create value is to earn a rate of return that is greater than the cost of capital. In other words, to maximize the shareholders’ wealth, the business enterprise has to earn sufficient economic returns to its shareholders for its economic survival. Thus,
Stern and Stewart advocated two measures of financial performance that account properly for all ways in which value can be added or lost. These measures are Economic Value Added (EVA) and Market Value Added (MVA).

In the present study, an attempt has been made to identify the financial performance of the selected Indian companies based on their ability to create wealth as indicated by these two unique metrics: EVA and MVA. Besides explaining the computational aspects of both of these measures the study also tries to make a comparison between traditional measures of financial performance and value based performance measures on the basis of their association with MVA. Further, the study analyzes the impact of firm-specific attributes on the shareholder value of Indian companies and explores the EVA disclosure practices prevalent in Indian corporate sector. Thus, this research work is aimed at accomplishing the following specific objectives:

1. To compute and analyze the Economic Value Added (EVA) and Market Value Added (MVA) of selected Indian companies.

2. 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.

3. To examine the influence of firm specific attributes on the shareholder value creation of the selected Indian companies and

4. To have a comprehensive view about EVA disclosures in Indian companies. This objective is subdivided into two parts:

   i. To examine the extent of EVA use and reporting practices in corporate financial reports of selected Indian companies and

   ii. To provide the empirical evidence on the factors influencing the Indian companies’ EVA disclosure choice.

Study Period and Sample Selection
The present study is based on the secondary data and covers a period of 12 years ranging from 1995-96 to 2006-07. The purpose of considering such a longer time frame is to
avoid factors like temporal instability and business cycles that might influence the results of the study.

Initially, top 200 companies have been selected from Business Today’s Survey i.e. BT-500, India’s most valuable private sector companies (year 2005 rankings). The rationale behind selecting BT-500, as sample base is that, these companies are ranked on the basis of market capitalization in Indian Securities Market and are projected as India’s largest and best performing companies. As the proposed study seeks to focus on the India’s most valuable companies only, this sample base can be observed to be the true representative of the need. Further, companies which do not meet the following specified criteria have been identified and eliminated:

At first, from the top 200 companies’ list, Banks, Financial Institutions and NBFCs have been excluded to prevent distortions in the comparisons. As the second criteria, companies, for which complete financial information for the last 15 years (i.e. from 1993 to 2007) is not available, have also been excluded. Here it is worth mentioning that although the study covers a time span of 12 years yet for certain items like calculation of average capital employed and adjustment for research and development expenditure etc., the financial information for previous years is also required. For instance, to calculate average capital employed on 31\textsuperscript{st} March 1996, one also needs beginning capital i.e. as on 1\textsuperscript{st} April 1995 which is the ending capital of the previous year 1994-95. Further, as the third criterion, companies for which capital market data (regarding share prices) is not available for the last 15 years have also been removed from the list. This criterion has been applied for making beta computations that are required for estimating cost of equity capital. Thus, after applying above filters, the resultant sample of 104 companies (list provided in Annexure A) has finally been selected for the purpose of achieving 1\textsuperscript{st} objective of the study i.e. computations of EVA and MVA of sample companies.

For the subsequent analysis, four companies were identified as outliers, thus, a final sample of 100 companies was selected and analyzed for objectives 2\textsuperscript{nd} and 3\textsuperscript{rd}.

As far as 4\textsuperscript{th} objective is concerned, i.e. to study the extent of EVA reporting practices in Indian corporate sector, the sample of the study constitutes all the 500 companies from the list of BT-500 India’s most valuable private sector companies (year 2005 rankings).
The EVA reporting practices of these companies have been analyzed over a period of 5-years i.e. from 2003-04 to 2007-08.

**Data Sources**

All the financial information required for the study has been sourced from the CMIE’s corporate database *Prowess*. Data regarding share prices has been taken from the *Capitacharts* of Capital Market Publishers of India Ltd. The risk-free rates have been obtained from the annual reports of Reserve Bank of India. Further, to examine the extent of EVA reporting practices among selected Indian companies, annual reports of all the 500 companies were examined over a period of five years i.e. from 2004 to 2008. These annual reports were downloaded from the EDIFAR (Electronic Data Information Filing and Retrieval System) link in SEBI’s (Securities and Exchange Board of India) website. The annual reports which were not available from the SEBI’s website were downloaded from the websites of respective companies. In case of companies or years for which annual reports could not be located from the specified sources, the publicly available financial statements were investigated instead of the complete reports.

**Data Analysis Techniques**

Various statistical techniques have been applied to carry out the analysis of the data collected for different objectives of the study. The main statistical techniques used in the study are: Regression Analysis, Panel Data Regression Models, Univariate Analysis (t-test), Correlation Analysis and Ratio Analysis. Among these, Panel Data Analysis has been employed using EViews Software while other statistical techniques have been carried out on SPSS Software.

The imperative *findings* that have emerged in the course of the study are summarized below:

**8.1 Shareholder Value Creation in Selected Indian Companies: Computation of EVA and MVA**

The primary objective of the study was to look beyond the façade of traditional measures like Earning per Share, Return on Investment, Return on Equity etc. so as to investigate the economic realities of India’s largest and most valuable companies. The purpose was to examine whether the selected companies’ management has really been adding value to
its shareholders or indulged in value destroying activities. Thus, an attempt has been made to identify the financial performance of the selected Indian companies based on their ability to create wealth as indicated by two value based metrics: EVA and MVA. Part-I of this chapter explained the application of EVA principles in practice for the evaluation of companies and industries. Besides calculating EVA of selected Indian companies, it also highlighted and explained all the elements that find place in the EVA computations like calculations of NOPAT (Net Operating Profit After Tax), ROI (Return on Investment), WACC (Weighted Average Cost of Capital), Cost of debt, Cost of equity as per CAPM (Capital Asset Pricing Model) and Cost of preference capital. Further, Part-II aimed to define and discuss the measurement of MVA. It also examined the causes of variation in the directions of EVA and MVA figures of sample companies. The results of this section are outlined as below:

- Taking a sample from India’s most valuable companies, the study identified that around 50% (51 out of 104 companies) of the sampled companies representing India’s wealth club undoubtedly destroyed the wealth of the shareholders. However, on an average; only 53 out of 104 companies have reported a positive EVA.

- It is quite shocking that out of 12 years of study period i.e. from 1996 to 2007, the sample registered negative EVA for eight years consecutively (i.e. from 1996 to 2003). Conversely, the sample reported a positive EVA only in four (i.e. from 2004 to 2007) out of all twelve years of study period. Thus, the study depicts that it is only after 2003 when India’s topmost valuable companies started registering positive EVA, a measure of shareholder value creation. The findings of the present study are in association with the results of Mohan (2007) which highlighted the period (1997-2002) as the period of significant slowdown in industrial growth leading to investment slowdown, loss in investors confidence, high real exchange rate depreciation, high real interest rates and the period of widespread restructuring. Whereas the situation improved after 2003 resulting in the boom in Corporate Profitability, Industrial Growth, Enhancement in Domestic Confidence, Emergence of International Confidence and Increased Mergers and Acquisition.
On the whole, the sample registered a 19.23% average rate of return on total economic capital ranging from a high of 24.85% in the year 2007 to a low of 15.83% in the year 1999.

WACC (Weighted Average Cost of Capital) of the sampled companies averaged 17.83% over the study period ranging between a low of 16.86% in 2005 and a high of 19.36% in 1997.

Since the average rate of return of 19.23% per annum on the economic capital is more than the average WACC of 17.83% per annum, it is apparent that the sample as a whole registered a positive EVA (of Rs 11320.38 crores) over the entire period under study. Although, a mere 53 out of 104 companies from the India’s most valuable company’s list boasted an overall positive EVA during the entire study period.

Taking Average EVA as the base, the companies which emerged as the top five wealth creating companies are Hindustan Unilever Ltd., Tata Steel, ITC, Wipro and Hindalco Industries Ltd. On the other hand, Reliance Infrastructure, CESC, Reliance Industries, Ispat Industries and Moser Baer are found to be the top five wealth destroying companies (worst performers) in the sample.

On an average, just 11 out of total 20 industries reported positive EVA throughout the study period, where Cosmetics, Soaps and Detergents Industry got the highest rank with highest average EVA. Auto Industry and Steel Industry got second and third ranks respectively. On the contrary, Cement Industry and Electricity generation being the worst offenders, reported negative EVA. Here it is worth mentioning that the sample doesn’t contain all the companies of each sector and hence the results might be different if the separate sectoral study is conducted.

From MVA perspective, as much as 102 out of 104 companies reported positive aggregate MVA. Moreover, wealth created by the sample as a whole is observed to be positive throughout the study period.

MVA-based ranking of sample companies clearly shows that Reliance Industries, Infosys Technologies, Wipro, ITC Ltd. and Hindustan Unilever Ltd. have got top five positions in value creation whereas just two companies namely Chambal Fertilizers & Chemicals and Voltas Ltd. have been placed in the value destroyers’ list with negative MVA.
• Thus, a mere 53 out of 104 companies from the India’s most valuable company’s list created an overall positive EVA during the entire study period. As far as MVA perspective is concerned, 102 out of 104 companies reported overall positive MVA. Quite obviously, EVA and MVA values of the sample companies do not seem to have moved in the same direction always. The findings revealed that around 51% of the sampled companies had positive EVA and positive MVA (Category A) and around 2% of the companies had negative EVA and negative MVA (Category B). Conversely, around 47% of the sampled companies had positive MVA but negative EVA (Category C).

• Companies falling in Category A seem to ensure that their management has shown outstanding performance both in creating very high EVA for the current year and in taking some positive NPV projects to ensure a very high MVA.

• Two companies that have been placed in Category B are not perceived to meet the expectations of the shareholders and a continuously negative EVA over time ensures to weaken the company from discharging its responsibilities to its various stakeholders. It further affects market expectations adversely resulting in negative MVA. These companies need to focus on improving their operational efficiency, reducing their financing costs and most importantly to discourage the management from deliberately taking value-destroying decisions.

• Companies in Category C seem to have gained the strategic investors’ confidence and hence their stock is overpriced. Such companies need to achieve a positive EVA by improving their operational efficiency and balance sheet management. Moreover, what matters more is that such companies should go for a substantial capital investment only when they are sure that they can raise their return on capital employed through better utilization of their existing assets or by stimulating demand for their products and services.

• The findings reveal that despite being touted as “today’s hottest financial idea and getting hotter” EVA is being ignored by the corporates, professionals and Government bodies in India. Annual published reports still lack transparency and adequate disclosures. Investors’ hard-earned money is still being misused in the unprofitable projects resulting in shareholders’ wealth destruction.
- Corporate officials’ adverse attitude that fails to see the importance of EVA can be considered as one major cause that leads to shareholder wealth destruction in selected Indian companies.

Hence, Economic Value Added should be taken as a challenge thrown on Indian corporate sector and corporate leaders should respond in a way so as to develop a confidence among all the stakeholders. Companies must try hard to maximize shareholder value without which their stocks can never be fancied by the market. Moreover, EVA Statements should form part of the audited annual published accounts of the Indian companies so as to bring more transparency, better disclosure practices to catch the faith of World Business community on Indian stock market in the long run.

**8.2 Relationship of Economic Value Added and Conventional Performance Measures with Market Value Added**

The second objective of the study was devoted to identify the result of the metric war between traditional and value based measures of corporate financial performance empirically. It attempted to investigate “Does EVA dominate Earnings in Indian corporate sector?” Analyzing a pooled, time series, cross-sectional data of 100 Indian companies for a period of twelve years i.e. from 1996 to 2007, this section tested the hypothesis that Value Based Measures as well as Traditional Financial Performance Measures have equal relative and incremental information content i.e. equal association with MVA, a surrogate of Shareholder value creation. Thus, for this purpose, Market Value Added (MVA) was taken as the dependent variable and nine independent financial variables were chosen for the purpose of the study, of which five represented Accrual Accounting based Traditional Performance Measures, two were Value Based Performance Measures and the remaining two were Economic Variables. Using the econometric technique of Panel Data Regression Analysis, the study evidenced the under mentioned major findings:

- The study found no clear evidence to support Stern & Stewart’s claim that EVA is superior to the traditional performance competitors in its association with MVA. Our evidence suggested that the market seemed more focused on ‘Profits’ than value based measure ‘EVA’.
• The results of single coefficient regressions (for relative information test) showed that $R^2_{(PAT)} > R^2_{(ROCE)} > R^2_{(EVA)} > R^2_{(Cp)}$ where $R^2$ depicted the percentage variation in shareholder wealth (MVA), as explained by each particular explanatory variable.

• Relative information tests thus, showed the dominance of PAT and ROCE over EVA. The results provided the sufficient evidence that traditional measures of firm performance (both absolute and relative measures i.e. PAT and ROCE respectively) were highly associated with its shareholder value creation as measured in terms of MVA. So, accrual accounting based numbers can undoubtedly be continued for evaluating corporate financial performance.

• The pairwise combinations (to assess the incremental information content) indicated the increment in explanatory power by 46.64% over the PAT measure alone whereas it improved by 45.75% over the ROCE measure alone. Combining both of these measures i.e. PAT and ROCE, the incremental information content of PAT was slightly more than the incremental information content of ROCE. As far as the comparison between value based and accounting based measures was concerned, the results clearly depicted that explanatory power improved by 20.89% over the EVA measure alone. Thus, EVA provided incremental information but comparatively lower than PAT and ROCE.

• Thus, the Incremental tests found that solely accounting based measures provided considerable and significant additional information, whereas EVA provided comparatively lower incremental information.

• The results of the multivariate regression analysis showed that four explanatory variables i.e. Economic Value Added (EVA), Profit after Tax (PAT), Return on Capital Employed (ROCE) and Capital Productivity (Cp) collectively explained as much as 81.97% of the variability in the MVA. However, tested on the basis of $t$-statistic, just two independent variables i.e. EVA and PAT were identified as the significant predictors of MVA at 1% confidence level ($p<.01$). Both of these variables had positive slope coefficients (i.e. $\beta$ values) showing their positive association with MVA.
• As the key findings of the study evidence the Earnings’ superiority to EVA in Relative Information Content Test as well as in Incremental Information Content Test, the study identified the potential factors contributing to the failure of EVA to dominate Earnings in explaining the variations in shareholder value creation. These are:

  o Kramer and Pushner (1997) explained that as the market being fed with almost constant news on earnings, it is not surprising that it is not much responsive to EVA in the short-run.

  o Another reason might be that accounting adjustments and estimates of the capital charge given by the EVA proponents may contain measurement error relative to what the market uses for valuing firms. Biddle et al. (1997) observes that in attempting to estimate economic profits, adjustments made by Stern & Stewart may remove accruals that market participants use to infer firm’s future prospects. Thus, while computing EVA, the true measure of company’s economic profitability is determined but its association with market returns is lost.

  o Moreover, another reason for the comparatively weak value-relevance of EVA might be the prevalent notion of ‘earnings myopia’. Biddle et al. (1997) viewed that some adopters of EVA feel that they must still base their external performance on earnings because this is the measure on which financial analysts continue to focus. As a result, market fails to recognize the reporting benefits of EVA.

However, the present study do not question the effectiveness of EVA because inspite of non-availability of detailed financial data and non-mandatory disclosure of EVA statements in annual reports of Indian Companies, market still seems to be quite responsive to EVA performance of a company. Thus, the findings advocate the adoption of EVA for management compensation, external communication and security analysis purposes. It also supports disclosure of EVA in financial reporting, to align management objectives with shareholders’ interests for facilitating value-based performance monitoring (Holler, 2008).
8.3 Impact of Firm-Specific Attributes on Shareholder Value Creation of Indian Companies

Shareholder value creation has become the motto of most blue chip companies since late nineties. The quest for long term value creation has provided a common language to employees across all operating and staff functions and has directed all management decisions to be modeled, monitored, communicated and compensated towards the most fundamental objective i.e. to bring an improvement in the value addition to the shareholders investment. In a market-driven economy, there are a number of companies that create wealth whereas others certainly destroy it. As a result, corporate executives may seek to inquire about the fundamental factors that cause the difference between the best and the worst performing companies and ultimately derive the long-term sustainable shareholder value.

The study, thus analyzed the decisive question of ‘What Drives Shareholder Value in Indian Corporate Sector’. It attempted to identify the significant firm-specific corporate attributes that can presumably have the considerable impact on the shareholder value creating capabilities of the selected Indian companies. It also examined whether the significant firm-attributes are common to both the dimensions of shareholder value i.e. accounting based dimension (EVA) as well as market-based dimensions (MVA and Tobin’s Q). Considering various corporate attributes (like age, size, profitability, risk (beta and debt-equity ratio), efficient in resource management, liquidity, marketing expenditure as percentage of sales and research and development expenditure as a percentage of sales as explanatory variables and shareholder value creation (in terms of EVA, MVA and Tobin’s Q respectively) as dependent variable, the study used the tool of Panel Data Regression Analysis, the results of which are summarized as follows:

- Panel data regression analysis between various firm-specific attributes and EVA (the accounting-based surrogate of shareholder value creation) of selected Indian companies revealed that AGE of the firm, as an explanatory variable had a highly significant and negative relation with EVA. It indicates that younger companies have performed better than the older ones when evaluated on the ground of shareholder value creation. Size (as measured with MARKETCAP) and Marketing Expenditure of a company depicted a positive association with its shareholder value. Kakani et al.
(2001) explained that an increase in the size probably enhances a firm’s financial clout and its market power, while an increase in the marketing expenditure by a firm probably improves its market share apart from increasing the size of the product market itself, helping the firm to increase its sales, margins and shareholder value. Further, profitability in terms of ROCE was found to have a significant (at 1% level) and positive impact on shareholder value creation. On the contrary, BETA showed a negative association (at 10% level of significance) with EVA that signals the inverse relationship between systematic risk of a company and its shareholder value which is in line with the hypothesized relationship. These results confirmed that companies with higher profitability and lower market risk add more towards their shareholder value. On the other hand, Debt-Equity Ratio (Unsystematic risk) and R&D expenditure were not found to be the significant determinants of shareholder value. From accounting perspective, an insignificant association between R&D and EVA might imply that in Indian companies the amount spent on R&D activities captures such a small share of sales revenue that doesn’t contribute to the shareholder wealth substantially.

- The results of Panel data regression analysis with MVA as dependent variable (the market-based proxy for shareholder value creation) depicted that among all the selected independent variables representing various corporate attributes, as much as five variables showed the significant and positive association with MVA namely, Size (measured in terms of SALES), Profitability (as ROCE), Marketing Expenditure, Liquidity (QR) and Research & Development Expenditure (R&D). It indicated that larger firms which spend heavily on the marketing and advertising of their products and services and those with higher expenditure on R&D account, contribute positively towards their sales turnover and hence add more to the shareholder value. Similarly, higher SALES and higher ROCE also assist the firms in making additions in the companies’ shareholder value. The positive and significant slope coefficient of QR (Liquidity) showed that companies with better liquidity position are excellently monitored by Regulatory Bodies, Financial Institutions and Stock markets resulting in building the investor’s confidence that further leads to pick up the company’s market value and shareholder wealth.
The results of Panel data regression analysis, taking Tobin’s Q as the dependent variable were found to be consistent with the previously established relationships. Profitability (in terms of ROCE) once again established a significant and positive effect on shareholder value creation. Size as measured with MARKETCAP too, depicted a positive association with its shareholder value. A positive association between liquidity (QR) and Tobin’s Q indicated the competency of the sample companies to meet all present and potential demands on cash that minimizes cost and maximizes value of the firms. Moreover, the positive and significant slope coefficient of QR also signifies that companies with better liquidity position are excellently monitored by Regulatory Bodies, Financial Institutions and Stock markets resulting in building the investor’s confidence that further leads to pick up the company’s market value and shareholder wealth. Except the three explanatory variables namely ROCE, MARKETCAP and QR, all other variables showed insignificant association with Tobin’s Q.

Evaluating shareholder value on the basis of accounting based as well as market based dimension, the study revealed the divergence between the results. It showed that the set of independent variables explain about 66.93% of the variation in the accounting-based surrogate EVA whereas they account for 79.04% variation in the firm’s shareholder value when it is measured on the basis of market-based surrogate, MVA and 64.35% variation with Tobin’s Q as dependent variable. Kakani et al. (2001) stated that to the extent by which the effect of the predictor variables on market-based performance measures and accounting-based performance measures differs, it can be attributed to speculative forces that influence asset pricing in capital markets.

The present study also found that the firm characteristics like Age, Size, Profitability, Risk, Liquidity, Marketing Expenditure and R&D Expenditure depict a significant influence on the shareholder value although their composition differs. For instance, five variables i.e. AGE (-), Size as MARKETCAP (+), ROCE (+), BETA (-), and MARKETEXP (+) are significant with respect to accounting-based dimension EVA, whereas Size as SALES, ROCE (+), Liquidity (QR) (+), MARKETEXP (+) and R&D Expenditure (RD) (+) depict significant association in case of market-based
dimension MVA. Similarly, Size as MARKETCAP (+), ROCE (+), and Liquidity (QR) (+) are found to be the significant predictors of Shareholder value as far as Tobin’s Q is considered as dependent variable.

- Risk as measured by leverage was not found to be a significant predictor of a firm’s shareholder value as opposed to the expected negative relationship. However in case of EVA as dependent variable it was found to be significant at only around 10% level of significance and reported positive slope coefficient. That means the results of the study are in line with the Net Income Approach of capital structure theory given by David Durand. It states that with increased use of debt, the weighted average cost of capital declines and the total value of the firm rises. Moreover, such positive association also witnesses that in Indian companies, institutional investors and debt holders perform an adequate and effective monitoring role.

- In nutshell, the analysis in this section showed that investors tend to reward those companies which have higher profitability, lower market risk, more liquidity, higher marketing/R&D expenditures and the robust market capitalization.

Thus, Indian managers need to be aware of the investors’ expectations for high profitability, lower risk, huge size and more liquidity as these are embedded in today’s market valuations. The senior executives and decision makers should also strive to push their management teams to think creatively and aggressively about upcoming opportunities in such a way that at the end of the day, all decisions, including decisions about growth opportunities must drive to the long term shareholder value creation.

**8.4 EVA Disclosures in Annual Reports of Indian Companies**

In Part-I of this objective, an attempt has been made to explore the extent of EVA disclosure made by Indian companies in their published annual reports. As EVA disclosures are not mandatory for the Indian companies, a list of EVA-disclosing companies was at first developed through the detailed examination of each company’s Annual Reports for all the five years of study period i.e. from the year 2004 to 2008. Once the list was made, the study identified the purpose, medium and extent of EVA computations made and disclosed by the EVA-Reporting private Indian companies. The key findings of this section are:
• Among India’s largest 500 companies (on the basis of market capitalization), just 37 companies (7.4% of the sample) specifically mentioned the use of EVA as a measure of financial performance and decision making. Thus, the study revealed that more than 90% of the India’s largest companies do not at all report for EVA created or lost by them.

• Around 35% of the EVA reporting companies preferred to use a Separate Section in their annual reports as a medium of EVA disclosure followed by 30% companies preferring their Five-Year Financials at a Glance for the same.

• The use of traditional performance metrics continued after EVA implementation.

• EVA is primarily used for two purposes i.e. measurement of (a) financial performance and (b) shareholder value enhancement.

• EVA reporting in Indian companies is found to be irregular and inconsistent within a company over number of years, among cross-sections and also within the same industry.

• Not even a single company measured NOPAT, Economic Capital, Cost of Equity and EVA through proper methodology as provided by the Stern-Stewart & Company, the founder of EVA concept.

• Almost all the EVA reporting companies failed to provide for the economic adjustments required to fix the GAAP based accounting anomalies from a menu of up to 164 adjustments given by the proponents of the concept.

• The company that tried to calculate EVA appropriately and subsequently dropped the EVA computation and disclosure indicated the reason being incremental expenditure involved on EVA consultancy and legal fees.

• Although 51% of the EVA reporting companies used Capital Asset Pricing Model (CAPM) to calculate cost of equity capital, divergence occur in relation to market risk premium, risk-free rates and beta calculations.

• Thus, the study reveals that most of the EVA Reporting companies in India, do not calculate EVA strictly, rather they take casual approach in calculating and disclosing this information to their shareholders and other market participants. Moreover, Indian companies also avoid EVA disclosures due to its complex methodology that involve higher expenses on EVA consultancy and legal fees.
Another reason might be that most of the Indian companies are reluctant to change accounting systems because notional profits can well disappear when adjustments for accounting anomalies are made which can have detrimental effects on their compensation and managerial position.

After analyzing the EVA Disclosure practices in Indian corporate sector, an attempt has also been made to identify whether the EVA reporting companies are significantly different from EVA non reporting companies on the basis of their background indicators (age and residential status) and financial performance indicators (size, profitability, leverage, sales efficiency and earnings’ potential). Thus, Part-II of this objective examined the corporate attributes that can be associated with the Indian companies’ EVA disclosure choices. The comparison of differences between the EVA reporting and EVA non-reporting companies on the basis of their background indicators and financial performance measures revealed that

- The EVA usage and disclosure choice in Indian companies is influenced by company’s size, profitability, leverage and sales efficiency.
- The residential status, age and earnings’ potential of a company do not have a significant impact on EVA disclosures choice of a company.

Here it is worth mentioning that although the study indicated some differences between EVA reporting companies and EVA non-reporting companies on the basis of certain background and financial indicators, yet these differences may have existed prior to the introduction of EVA.

8.5 Suggestions

The extremely important suggestions that have been observed in the course of the study and need due attention are summarized as below:

- The findings of this research have implications for Securities and Exchange Board of India (SEBI), Company Law Board, Department of Company Affairs, Government of India, Institute of Chartered Accountants of India (ICAI) and the related parties that they should recognize the need to make EVA reporting mandatory in Indian corporate sector. To enhance the decision usefulness of public reporting, there is a need to establish separate accounting standard for EVA computation and reporting.
• To ensure a more meaningful and realistic use of financial information reported by the company, companies should provide either the required disclosure of EVA or at least, the required disclosure of their cost of equity capital. Prober (2003) claimed that such disclosure is not only essential to measure EVA metric but is also an important cost that can more readily and cheaply be reported by individual firms rather than calculated by individual analysts.

• Moreover, the success of EVA framework is possible if professional chartered accountants and auditors understand the EVA methodology thoroughly so as to make EVA related disclosures more accurate and reliable for the investors and external users of annual reports.

• Young (1997) suggested that a simple implementation approach with limited adjustments to US GAAP numbers outweighs the cost of increased complexity.

• It is apparent that one major cause that leads to wealth destruction is the corporate officials’ adverse attitude that fails to see the importance of EVA. Dodd et al. (1999) asserts that not using EVA as a part of compensation and incentive payment is one of the common mistakes that firms commit when converting to EVA. If management’s compensation is linked to economic performance of a company, it can have a significant impact on the business strategies of the corporate sector (Ooi and Liow, 2002). Bonuses and incentives pay schemes should be built around the managers’ ability (or lack thereof) to generate positive EVA within their own responsibility areas. Positive payments should accrue to the managers whose divisional profits are more than the divisional costs whereas negative incentive plans should be used if long term divisional profits fall short of divisional costs (Business Today, 2000). Thus, in this way, EVA can provide an incentive to the corporate managers to act like shareholders and investment decisions would be made on the basis of whether they would yield positive EVA or not.

Thus, the introduction of EVA reporting as a mandatory disclosure and its scientific computation will reap benefits in terms of shareholder value enhancement only when it is implemented as a performance measurement tool linked with the employees’ compensation and incentive payment system of the companies.
8.6 Scope for Further Research

Since the use of EVA metric as a measure of corporate financial performance has gained popularity in recent years, continued research on the subject is needed. There are a number of ways in which this research can be extended.

- The sample of the study comprises of India’s largest private sector companies that belong to different industries. That is the reason, why the EVA-based accounting adjustments incorporated are common in all the companies. In contrast to this, similar study can be conducted to identify the financial performance of a particular industry that can take care of the selection of EVA based accounting adjustments, specific for that particular industry. Thus, more comprehensive results can be obtained. On these lines, the comparison between two industries as well as comparison between public and private sector companies (i.e. industry-wise or sector-wise comparisons) can also be made. Moreover, such studies can also be conducted in banking sector and non-banking financial companies (NBFCs).

- EVA-theory states that the market value of a company is its book value plus the current value of future EVAs. This strict relationship between EVA and the market value of a company also suggests that EVA drives the market values of shares and thus, can also be investigated in context to Indian corporate sector. Moreover, if EVA finds place in corporate reporting and market becomes more responsive to EVA performance of a company, it is expected that the association between EVA and stock returns will be much stronger for EVA adopter companies.

- As stated by Biddle et al. (1999), “it is possible for a metric to be quite useful for internal incentive purposes even though it conveys little news to market participants regarding the firms’ future prospects. In this way, EVA can prove effective in motivating shareholder wealth creation without being much informative to investors”. The present study also supports the application of EVA as a tool for internal performance measurement and basis for employees’ compensation plans. Thus, the effectiveness of EVA based incentive system in the companies can also be investigated as a future scope of research, but only if EVA will be used as the employees’ performance measurement tool and further linked to their compensation and incentive payment system in Indian corporate sector. Thus, to examine whether
compensation plans based on EVA performance motivate managers to take actions consistent with increasing shareholder value or not is also another interesting area for future research.

- In order to study the extent of awareness and adaptability of EVA in Indian corporate sector, a survey of the accounting professionals (i.e. chartered accountants) and the financial executives of the companies using EVA can also be conducted. Such survey can reveal the benefits gained or problems faced by the companies in EVA implementation and can also throw a light on the future prospects of EVA in Indian corporate sector.
- To study the effectiveness of EVA-implementation program, companies’ financial performance can also be compared before and after EVA adoption.
- Moreover, Inflation adjusted EVA computations can also provide a significant contribution towards the scope for future research on this appealing subject.