Chapter 6

Conclusion and Recommendation
6.1 Conclusions
6.2 Recommendations
6.3 Implications of the Study
6.4 Scope of Future Research
Chapter Overview

This chapter presents major findings of the research. It is organized into four sections. It begins with Conclusion which is followed by the Recommendations. The Implication of the study are then listed. Finally, the chapter concludes by suggesting areas for Future Research.

6.1 Conclusions

The following section depicts the conclusion on the research study done.

The major conclusion of the study has been presented below:

- **Impact of Human Capital Efficiency (HCE) on Earning Per Share (EPS)**

  It can be concluded from the study that Human Capital Efficiency (HCE) has no significant influence on Earning Per Share (EPS). However, the study also depicted a contrary result (the researcher has found that Human Capital Efficiency (HCE) has significant influence on Earning Per Share (EPS) with respect to select sectors). Therefore **impact of HCE on EPS can be said to be mixed**. The conclusion derived by the researcher is in line with the study made by Makki et al. (2009) where the author commented that it could be due to the fact that developing countries business managers invest heavily in human capital without caring of availability of efficient management to exploit it. It is also substantiated by the study made by Chadha (2013) where he has shown that Indian public sector banks are lagging behind Indian private sector banks. Emerging economies usually face this problem of shortage of management expertise, employee competence and expertise. As a result, careless hiring of human resources in absence of managerial abilities jeopardizes utilization of manpower and thus reduces its HC efficiency toward value creation (Makki, 2009). **As a result, human capital efficiency gives dismal figure leading to no significance influence on EPS performance.**
• Impact of Structural Capital Efficiency (SCE) on Earning Per Share (EPS)

The researcher also concludes that Structural Capital Efficiency (SCE) has significant positive influence on Earning Per Share (EPS) as shown in the correlation analysis. Structural capital is deemed as the foundation stone for an organization in the knowledge age. If the organizational culture, rules, procedures and system are weak, well motivated employee capabilities would not be able to add value to the firm. Strong structural capital possesses supportive environment to its employees thus increasing productivity and eventually profit and decreasing total cost of product. This justifies the result that Structural Capital Efficiency (SCE) has significant influence on value creation which leads to higher performance of EPS.

• Impact of Capital Employed Efficiency (CEE) on Earning Per Share (EPS)

The study concludes that Capital Employed Efficiency (CEE) has no significant influence on Earning Per Share (EPS). This was a significant conclusion. Capital Employed by the Public Sector is mostly decided by the Government and are not solely market driven. There are green field investments made by the Government for long-term benefits of the citizens. So, Capital Employed efficiency is not showing significant contribution of value creation leading to higher performance of EPS.

• Impact of other variables on Earning Per Share (EPS)

Size of the Asset (ASSET)

Size of the Asset (ASSET) depicted significant negative influence on Earning Per Share (EPS). This is contrary to the result shown made by Carol-Anne Ho and S. Mitchell W. (2011) that size increase the Impact of IC on financial performance considerably which leads to higher Earning Per Share (EPS). This may be the cause that in Indian Public Sector Enterprises there are large assets in possession but their efficient utilization are not being done.
Frequency of the Board meeting (MEETING)

Frequency of the Board meeting (MEETING) has no significance influence on Earning Per Share (EPS). It is not in line with the perception that more board meeting will create more value leading to higher Earning Per Share (EPS). Meeting of the board of directors are generally treated as intellectual exercise by executive and non-executive directors. Vafeas (1999) studies found that operating performance improves following the years of high frequency of board meeting. Somehow, in Indian public sector it is not effective as may be due to the fact that board meeting are called adhoc without any concrete agenda.

Remuneration of CEO and Directors (CEOEXDIR)

Remuneration of CEO and Directors has significant positive influence on Earning Per Share (EPS). Literature also supports that remuneration of CEO and Directors have significant impact on board efficiency as well as company performance. Merhebi (2006) conclude that CEO pay-performance association is positive and significant in Australia.

Number of Executives (NOEXE)

Number of Executives (NOEXE) has been taken into account in performance of Knowledge Capital as Executives are the knowledge worker in the organization. The results can be said to be mixed as the results indicated that the Number of Executives (NOEXE) has no significant influence on Earning Per Share (EPS) but in Panel data analysis it also revealed contrary result wherein NOEXE showed significant and positive influence on EPS. This may be due to the fact that hiring of executives in absence of any proper planning hampers optimum utilization of manpower and thus reduces their ability in creating value which leads to no influence on EPS as whole.

Ratio of Non-Executive Director to Total Number of Directors (NONR)

Ratio of Number of Non-Executives Director to Total Number of Directors (NONR) has no significant influence on Earning Per Share (EPS). Executive Directors are usually responsible for running day to day operations of the
organization while non-executive Directors keep independent and close eye on executives and oversee whether activities and polices are fruitful for the business. But just as the frequencies of meeting are not effective so is the number of independent director on board. This may be due to the fact the independent directors are not really independent.

6.2 Recommendations

The following section gives the recommendations by the study

- As the investment in intellectual capital brings higher financial return than the same investment in physical assets, organisations are recommended to use Value Added Intellectual Coefficient (VAIC) as an indicator of future EPS.
- Among SCE, CEE and HCE, SCE is found to be the most important factor influencing EPS. Therefore, it is recommended that Indian Public Sector should take steps to enhance this Structural Capital like Brand Building, Knowledge Management system implementation.
- It is recommended that since impact of additional variables reveal that Size of the Assets and CEO’s & other Director’s remuneration have highly significant impact on Earning Per Share (EPS) and can be accommodated in Value Added Intellectual Coefficient (VAIC) to have a better picture of Intellectual Capital Efficiency (ICE).
- It is recommended that Public Sector Enterprises include Remuneration of CEO and other Directors and Size of Asset as important variables of VAIC.
- Potential investors and portfolio managers should look after the Knowledge Capital of companies for investment.
- New model of valuation of a firm based on the study can emerge and it will help to judge the proper valuation of Public Sector Enterprises for disinvestment.
- Low-ranking companies, whose GRA levels low Intellectual capital will have other companies to follow their best practices. It prescribes to inefficient
firms specifically benchmarks to follow and what adjustments to the inputs and outputs should be made to reach the efficiency frontier. This result of GRA offers a guideline to become efficient.

- In the basis of MPI indicator the companies can find and benchmark for most productive users of Intellectual Capital.

6.3 Implications of the Study

The following section listed out the implications of the study

The objective of this research is to empirically investigate the relationship between firms’ Intellectual Capital and Earning Per Share (EPS) using companies listed in India’s stock market. This research study is expected to contribute to existing literature in the following ways:

1. This research study provides an essential link between intellectual capital and financial performance that should help to bring together the currently distinctive disciplines of finance and performance measurement.

2. The research provides the evidence of the impact of intellectual capital on earnings per share in the companies by using data from listed public sector companies in Bombay Stock Exchange. The findings of the research will enhance the importance of intellectual capital in emerging economies.

3. The research indirectly provides evidence of the relationship between intellectual capital and corporate performance. Investors in the market place tend to demand shares of firms having higher performance than those with average performance in the market.

4. The research study will provide evidence of application of VAIC as an aggregated, standardized measure of corporate intellectual ability, specifically, the explanatory power of VAIC and its components towards earnings per share in the different industries in India, since investors’ earning is related to corporate performance. Shareholders invest money in any organization so they want maximum return of their shares. In the literature survey the researcher observed that there has been studies undertaken covering Intellectual Capital, Return of Investment, market to book value ratios, profitability, productivity, market
valuation, average turnover etc. but no study has been done so far to see impact of Earning Per Share on Value creation efficiency to maximise long term shareholder value specially in Indian context.

5. The study contains empirical tests of association between IC and EPS. Thus it would be a good source of reference to conclude the role of IC towards financial performance globally. Business managers may benefit by understanding the importance of allocating its precious resources to support IC and financial return than the same investment in physical assets. Managers would be in a better position to control EPS through controlling their firms' IC efficiency.

6. It can also be used as an indicator for future EPS.

7. In addition, the study further expands the analysis to determine whether number of top level executives, their remuneration and meetings including assets size of a firm have any influence on boosting the impact of IC efficiency on shareholders earning, which were found significant in many years. Therefore these components can be included to expand VAIC model.

8. Potential investors and fund and portfolio managers seeking more EPS will be benefitted after having new idea of IC modelling which provides better measure of evaluating the firm in association with traditional approach of net profitability.

9. Due to availability of information related to IC efficiency, potential investors would be in a better position to estimate the risk associated with their investment which may reduce borrowing cost and ultimately lead to reduction in weighted average cost of capital for the company.

10. In this study, the researcher clearly revealed intellectual capital management ability of each Indian PSE by GRA and DEA. The intellectual capital management performance is the key factor of high-tech companies’ operation outcome. Therefore the research results can serve as precious reference for the academia and professionals.

11. GRA has been a very flexible and easy tool to deal with decision-making problems and DEA has been accepted as an efficient analytical tool. However scanty literature exists about the applications of GRA and MPI on knowledge capital particularly with reference to Public Sector Companies. The performance measurement via the application of GRA, MPI, operational performance rankings,
productivity evaluation, all provide meaningful implications of intellectual capital management. They are useful benchmarking tools to examine the relative firms’ progress among competitors.

12. The research result suggest that intellectual capital which comprises human capital, customer capital and structural capital is one of the main sources of competitive advantage for firms, especially those technology-drive industries. This study argues that, intellectual capital is an essential strategic tool for us against competitors in sustaining in business. The emphasis on intellectual capital can help firms implement new initiatives for enhancing performance.

13. Public Sector Enterprises are the pillars of industries in India. Measuring the operational performance of intellectual capital management and competitiveness of these companies will enable these firms to examine whether they have managed these vital intangible assets efficiently. Moreover, Capital employed, intellectual property, influence the success and failure of PSEs significantly.

14. VAIC measures the depth and breadth of IC efficiency based on a company’s accounting data and produces a standardized measure that can be used for comparison across companies, industries and nations.

6.4 Scope of Future Research

The following section listed the points by which the research can go forward.

According to the research result and the courses of the research, the researcher has come up with issues and has enlisted them as suggestions for further studies:

1) Studies can be undertaken involving a larger numbers of input variables and output variables; such as, number of patents, the ratio of R&D expenditure or number of research employees.

2) This research study focused on Public Sector Enterprises; other high-tech industries can also be assessed using the same model.

3) The research study may include Research & Development Capital Efficiency (R&D expenditure/ Book value of common stock) into consideration.