Findings, Suggestions and Conclusion
Chapter 6
FINDINGS, SUGGESTIONS AND CONCLUSION

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Chapter 6
FINDINGS, SUGGESTIONS AND CONCLUSION

6.1 Introduction:

The Role of Cement Industry in India GDP is significant in the economic development of the country. The cement industry in India is one of the oldest sectors in India.

The industry is driven by the immense growth in the housing sector, the infrastructure development, and construction of transportation systems.

Indian Cement Industry is the second largest cement producer in the world after China with a total capacity of 151.2 Million Tons (MT). Government of India has been giving immense boost to various infrastructure projects, housing facilities and road networks, the cement industry in India is currently growing at an enviable pace. In the coming years more growth in the Indian cement industry is expected to come. It is predicted that the production in India would rise to 236.16 MT in FY11 & expected to rise to 262.61 MT in FY12 in the Cement Industry.

The Indian cement industry is dominated by 20 companies, which account for almost 70% of the total cement production in India. The companies all over India have produced 11 MT cement during April-September 2009. The Indian Cement industry plays a major role in the growth of the nation for that case in any country. Industry Cement Industry was under full control and supervision of the government.
However, it got great relief at a large extent after the economic reform which made its growth easier. Still government interference, especially in the pricing, is evident in India.

6.1.1. Role of Cement Industry in India GDP-Facts

- The Indian cement industry is one of the booming sectors of the Indian economy
- The infrastructure development of the country in the recent years is the demand driver for the cement industry
- The Indian Cement Industry is experiencing the entry of many foreign players in the Indian market
- The average monthly capacity utilization during the year 2006-07 was 94%
- The cement dispatches in the year 2006-07 was 155 million tones
- The growth of the cement sector pertaining to the total output was 10%

6.1.2 Role of Cement Industry in India GDP-Production

- India ranks second in the production of cement in the world
- The growth rate of the production of cement during the year 2006-07 was 9.1%
- The export of the cement in the year 2006-07 was 9.3 million tons
- The cement industry in India constitutes of 365 small cement manufacturing units and 130 large cement manufacturing units
- The total installed capability of the cement manufacturing is 165 million tons per year

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- The large manufacturing units accounts for 94% of the total output of cement

6.2 **Summary:**

The entire research study has been present in the following chapters which are as under.

**Chapter: 1**

In chapter number one the brief history, organization and structure of Indian cement industries has been discussed.

**Chapter: 2**

The title of the present study is “*Analysis of Capital Structure of Cement Industry of Gujarat*”. The present study is mainly intended to examine the Financial performance and capital structure of cement industry. This study is mainly based on secondary data published by the selected cement industries and in its annual reports, various websites, other publishing materials, journals have been referred. The main objective of the present research is to find out the Financial performance and capital structure of the selected cement industries. Various statistic techniques like average, F test (ANOVA) and regression has been applied to test the validity of two hypothesis namely first null hypothesis and second alternative hypothesis. And finally the limitations of the present research have been present. In this chapter also existing review of literature have been included.

**Chapter: 3**  Importance and impact of the capital structure

Introduction, Meaning of capital structure, Owner’s funds comprise, borrowed funds comprise, comparison of components of
capital structure, trading on equity, types of leverage, financial leverage,
capital structure theories, concept of optimal capital structure, features of
optimal capital structure, constraints in designing optimal capital
structure, importance of capital structure etc. The concept of capital
structure is generally described as the combination of debt and equity that
make the total capital of firms. The proportion of debt to equity is a
strategic choice of corporate managers. The term capital structure of an
enterprise is actually a combination of equity shares, preference shares
and long term debts. In capital structure David Durand's approach, M. M.
Approach and factor affecting capital structure has been discussed.

Chapter: 4

Capital structure and Liquity, Introduction, Working capital
theories, Cash Management, Profitability V/s. Liquidity, Importance of
liquidity in to the capital structure, Ratios to know the situation of the
liquidity use are Current ratio, Liquidity ratio, Cash as Percentage to
Total Assets ratio, Cash to Net Working Capital Ratio, Cash to current
assets ratio, Liquidity analysis, Measurement of Liquidity and Trends.

Chapter: 5

In this chapter the financial performances of selected cement
industries have been evaluated. The researcher has taken 6 cement
industries of Gujarat. For each cement industry different types of
parameters have been used with the help of ratio to evaluate the Financial
Performance ratio like return on equity, net profit margin, interest spread,
return on long term fund, earning per share, net profit to total fund and
total income to capital employed capital structure ratio like debt to total
assets and debt to owners fund ratio for the period of study. Here various ratios of Financial Performance and capital structure have been tested with the help of F test (ANOVA) and correlation.

6.3 Findings:

Ratio analysis is one of the most important techniques to measure the profitability and short-term & long-term solvency. The findings of this study have been narrated as under:

1. Current ratio

The current ratio of all the cement companies shows fluctuation trend throughout the study period except Saurashtra Cement Ltd. which shows decreasing trend. The minimum Current Ratio in Gujarat siddhi cement is 1.47 (2008), Saurashtra Cement Ltd. is −0.80 (2012), Gujarat Ambuja is 1.29 (2012), Digvijay Cement Ltd. is 2.36 (2008), and in the Tata Chemicals Ltd is 2.25 (2008). The maximum Current Ratio in Gujarat siddhi cement is 1.92 (2010), Saurashtra Cement Ltd. is 3.09 (2008), Gujarat Ambuja is 3.79 (2010), and Digvijay Cement Ltd. is 3.17 (2011) and in Tata Chemicals Ltd.

The result shown by 'F' test ANOVA reveals that there is significant different in Current ratio is found among the selected cement industries under the study.

2. Liquidity ratio

The liquidity Ratio of all the cement companies shows fluctuating trend throughout the study period except Saurashtra Cement Ltd. which shows decreasing trend. The minimum Liquid Ratio in Gujarat siddhi
cement is 0.39 (2008), Saurashtra Cement Ltd. is 0.26 (2012), Gujarat Ambuja is 0.17 (2012), Digvijay Cement Ltd is 0.58 (2008), and in India Cement is 0.39 (2009). The maximum Liquid Ratio in Gujarat siddhi cement is 0.73 (2009), Saurashtra cement is 1.39 (2008), Gujarat Ambuja is 1.32 (2009), and Tata chemicals is 1.43 (2012) and in Digvijay Cement is 0.56 (2011).

The result shown by 'F' test ANOVA reveals that there is no significant different in Liquid ratio is found among the selected cement industries under the study.

3. **Cash percentage to total assets ratio**

The Cash as percentage to Total Assets of all the cement companies shows fluctuating trend throughout the study period except India Cement which shows decreasing trend. The minimum Cash as percentage to Total Assets in Gujarat siddhi cement is 0.83 (2012), Saurashtra Cement Ltd. is 2.25 (2011), Gujarat Ambuja is 0.53 (2012), Digvijay Cement Ltd is 0.54 (2008), and in Tata chemicals ltd is 0.33 (2012). The Maximum cash as percentage to Total Assets in Gujarat siddhi cement is 2.26 (2009), Saurashtra Cement Ltd. is 3.42 (2009), Gujarat Ambuja is 5.64 (2009), and Digvijay Cement Ltd is 2.44 (2010) and in Tata chemicals ltd is 2.86 (2008).

The result shown by 'F' test ANOVA reveals that there is no significant different in Liquid ratio is found among the selected cement industries under the study.
4. **Cash to net working capital ratio**

The Cash to Net Working Capital of all the cement companies shows fluctuating trend throughout the study period except Gujarat siddhi cement and Digvijay Cement Ltd which shows decreasing trend. The minimum Cash to Net Working Capital in Gujarat siddhi cement is 0.09 (2012), Saurashtra Cement Ltd is -0.45 (2012), Gujarat Ambuja is 0.18 (2011), Digvijay Cement Ltd is 0.04 (2008), and in Tata chemicals ltd is 0.01 (2012). The Maximum Cash to Net Working Capital in Gujarat siddhi cement is 0.15 (2008 and 2009), Saurashtra Cement Ltd is 0.27 (2011), Gujarat Ambuja is 0.40 (2009), and Digvijay Cement Ltd is 0.19 (2012) and in Tata chemicals ltd is 0.17 (2008).

The result shown by 'F' test ANOVA reveals that there is no significant different in Liquid ratio is found among the selected cement industries under the study.

5. **Cash to current assets ratio**

The cash to current assets of all the cement companies shows fluctuating tend throughout the study period except India Cement which shows decreasing trend. The minimum cash as percentage to current assets in Gujarat siddhi cement is 0.04 (2012), Saurashtra Cement Ltd is 0.10 (2012), Gujarat Ambuja is 0.05 (2012), Digvijay Cement Ltd is 0.02 (2008), and in India Cement is 0.01 (2012). The maximum cash to current assets in Gujarat siddhi cement is 0.07 (2010), Saurashtra Cement Ltd is 0.16 (2011), Gujarat Ambuja is 0.30 (2011), and Digvijay Cement Ltd is 0.12 (2012) and in Tata chemicals ltd is 0.10 (2008).
The result shown by 'F' test ANOVA reveals that there is significant different in Current ratio is found among the selected cement industries under the study.

6. **Return on Equity:**

This ratio was highest in Tata Chemicals Ltd., if we considered average of the last five years that is financial year 2007-2008 to 2011-2012. Average of this ratio was lowest in Gujarat Ambuja cement Ltd. i.e. 10.63 percent. Different cement industries achieved highest return on equity during 2007-08 to 2011-12 year wise Tata Chemicals Ltd. 22.96 percent in 2007-08.

The result shown by 'F' test ANOVA reveals that there is significant different in Return on Equity ratio is found among the selected cement industries under the study.

7. **Net Profit Margin:**

During the period of study average highest NPM found in Narmada Cement Ltd. i.e. 14.87 percent and lowest average NPM in Gujarat Ambuja Cement Ltd. it was 10.5 percent. During the period of study NPM showing different tendency during first two years it was found highest in Gujarat Siddhi Cement i.e. 13.96 percent and 15.89 percent.

The result shown by 'F' test ANOVA reveals that there is no significant different in Net Profit Margin ratio is found among the selected cement industries under the study.

8. **Interest Spread Ratio:**

Overall result of study period showed that the Narmada Cement Ltd. stood at first position with 6.34 percent interest spread while during
the same period Digvijay Cement Ltd. stood at last with 3.51 percent interest spread. During 2007-08 Narmada cement Ltd stood at a first position at 7.08 is 8.31 percent interest spread for rest of the year.

The result shown by 'F' test ANOVA reveals that there is significant different in interest spread ratio is found among the selected cement industries under the study.

9. **Return on Long Term Fund:**

Among sample units Digvijay Cement Ltd. secured first position with best return on long term fund while Narmada Cement Ltd. listed at last because of that continues poor performance. During 2007-08 and 2011-12 Digvijay Cement Ltd. secured highest statistics that is 151.48 percent and 132.08 percent respectively. During 2008-09 to 2010-11 Tata Chemicals Ltd. secured first position as far as ROLTF is concern with 156.65 percent, 150.33 percent and 120.51 percent respectively.

The result shown by 'F' test ANOVA reveals that there is significant different in Return on Long Term Fund ratio is found among the selected cement industries under the study.

10. **Earning Per Share:**

During the study period average highest EPS in Gujarat ambuja cement Ltd. it was 136.96 percent and lower EPS in Tata Chemicals Ltd it was 17.28 percent. Year wise EPS showing better position in Gujarat ambuja cement Ltd. only. It was highest in 174.15 percent in 2011-12 and lowest in 116.07 percent in 2010-11, Gujarat ambuja cement Ltd. secured and maintained highest that is 106.56 percent, 143.67 percent, 144.37 percent, 116.07 percent and 174.15 percent during 2008-09 to 2011-12.
respectively. This ratio is lowest in 2008-09, 2010-11 and 2011-12 it was 7.99 percent, 11.1 percent and 14.65 percent in Tata Chemicals Ltd only.

The result shown by 'F' test ANOVA reveals that there is significant different in Earning Per Share ratio is found among the selected cement industries under the study.

11. **Net Profit to Total Fund:**

During the study period average highest net profit to total fund in Narmada Cement Ltd. i.e. 1.51 percent and lowest average net profit to total fund in Gujarat Ambuja Cement Ltd. it was 0.92 percent.

The result shown by 'F' test ANOVA reveals that there is significant different in Net Profit to Total Fund ratio is found among the selected cement industries under the study.

12. **Total Income to Capital Employed:**

This ratio was highest in Narmada Cement Ltd. if we considered average of the last five years that is financial year 2007-08 to 2011-12. Average of this ratio was lowest in Saurashtra Cement Ltd. i.e. 8.17 percent. Saurashtra Cement Ltd listed at last because of that continues poor performance.

The result shown by 'F' test ANOVA reveals that there is significant different in Total Income to Capital Employed ratio is found among the selected cement industries under the study.

13. **Debt to Total Assets:**

Debt to Total Assets ratio showing proportion of borrowed capital applied by the company for the acquisition of the total assets. Overall position of last five year shown Narmada Cement Ltd. is strong with
minimum debt to total assets ratio 80 percent and Tata Chemicals Ltd. as standing at last position with 91.09 percent. During the year 2007-08 to 2009-10 Narmada Cement Ltd. secured top position with minimum debt to total assets ratio i.e. 76.09 percent, 75.05 percent and 80.21 percent while for the years 2010-11 and 2011-12 Narmada Cement Ltd. stood at peak with minimum debt to total assets ratio i.e. 80.4 percent and 86.07 percent.

The result shown by ‘F’ test ANOVA reveals that there is significant different in Debt to total assets ratio is found among the selected cement industries under the study.

14. **Debt to Owners Fund:**

Overall position of last five years shown Narmada Cement Ltd. is strong with minimum average debt to owners fund ratio it was 8.55 percent and Tata Chemicals Ltd. as standing last position of last five years average it was 20.35 percent. During the year 2007-08 to 2011-12 Narmada Cement Ltd. secured top position with minimum debt to owners fund ratio.

The result shown by ‘F’ test ANOVA reveals that there is significant different in Debt to Owners Fund ratio is found among the selected cement industries under the study.

15. **Correlation Analysis:**

The $R^2$ values were found to be significant for the major impact of debt to total assets on return on long term fund, total fund to capital employed and interest spread for 73.52 percent, 67.54 percent and 67.47 percent respectively. But no significant impact was found on the
remaining dependent variables. The least amount of impact was found on earning per share \((R^2 = 1.15\) percent) by debt to total assets. This reveals that remaining 98.85 percent is influenced by factors other than debt to total assets.

The \(R^2\) values were found to be significant for the major impact of debt to owners fund on return on equity, return on long term fund and total fund to capital employed for 59.04 percent, 88.04 percent and 67.18 percent respectively. But no significant impact was found on the remaining dependent variables. The least amount of impact was found on earning per share \((R^2 = 1.48\) percent) by debt to owners fund. This reveals that remaining 98.52 percent is influenced by factors other than debt to owners fund.

6.4 Suggestions:

There are some suggestions derived from the doing the “Analysis of Capital Structure of Cement Industry of Gujarat”. As such this chapter offer new suggestions for the improve profitability & solvency and proper capital structure decision of cement industry in India.

☐ The poor performing cement industries are required to increase their profit after tax to satisfy the share holders with adequate return.

☐ In cement industries long term fund found poor as compared to other industries. It is necessary for the cement industries to utilize their long term fund very effectively to generate enough return.
An appropriate mix of capital structure should be adopted in order to increase the profitability of cement industry.

In the case of higher debt, profitability will tend to decline. The reason behind this may be due to the high interest bearing securities engaged in the total debt.

Cement industries should concern much on internal sources of financing in order to increase their profitability.

The structure of the working capital (gross) be evenly constructed taking into consideration the operational requirements so as to reduce the cost and take optimum utilization of the different sources.

The reduction in operating expenses would go a long way to help the public enterprises increase profitability. This would be more pertinent in the context that most of the public enterprises earn gross profit, but that is siphoned off by the heavy operating expenses resulting in net losses. This is possible by committing the employees to the success of the enterprises like the scheme of Memorandum of understanding reached between the Government of India and the employees of the Central Public sector enterprises. This may help to build up high morale which is essential for the success of any organization.

The cement industries required hiring right kind of people, with adequate knowledge of cement industries.

Develop service oriented internal processes.

Include employees in the cement industries’ vision.
Right kind of reward to be provided to strong service provider.

6.5 Limitations:

- This study is related to selected cement industries of Gujarat only.
- The secondary data, which used for this study is based on annual reports of the cement industries. The quality of this research depends on quality and reliability of data published in annual reports of the industries.
- There are different methods to measure the profitability of the cement industries. View of expert can be different in this matter from one another.
- The present study is largely based on ratio analysis; such analysis has its own limitations, which also applies to the study.
- This study is in the nature of a positive empirical research. It is not being proposed to enter in the normative aspect and offer suggestion for improvement in the working.
- Financial performance has been analyzed in aggregate and segmental analysis is left for future research efforts. Since this study is in the nature of a positive empirical research, it is not proposed to enter in the normative aspect and offer suggestion for improvement in the working.
- The researcher does not have firsthand experience of working in cement industry and, therefore, it is not felt proper to offer suggestions for improvement in financial performance. Since this
study is related to selected cement industries, it is not proposed to make any generalization for universal application.

6.6 Conclusions:
To conclude, it can be said that

- The economic liberalization measures introduced by the Indian government coupled with trends towards globalization have substantially altered the cement sector and the profitability of cement industries has declined to a large extent.

- It is clear from the analysis that the cement companies are less profitable than the sector industries in terms of overall profitability.

- All these developments in cement industries are says that, the cement industries are moving towards modernization of Indian economy. It is grate change of cement industries.

- For a long term success of cement industries to require effective management of credit risk and diversified into fee based activities. Non-traditional activities of cement industries are more sophisticated and versatile instrument for risk assessment.

6.7 Scope for future research:
The present study deals with the “Analysis of Capital Structure of Cement Industry in Gujarat”. This study is limited only to the selected cement industries of Gujarat. The researcher is quite aware of the fact that there are several other aspects of the cement industry that could be studied such as cost benefit analysis of computerized transactions,
management related issues regarding cement industries computerization. Our study is limited only to the An Analytical Study of Capital Structure as Empirical investigation Liquity, Solvency and Profitability of the cement Industry in Gujarat. But there is still scope for the study Capital Structure as Empirical investigation Profitability of the other types of industries working in as well.