SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION
CHAPTER-VII

SUMMARY OF FINDINGS, SUGGESTIONS AND CONCLUSION

In this chapter an attempt has been made to recapitulate the key findings of the present study and based on these findings a few suggestions have been offered. The study was aimed at analyzing the financial performance evaluation of large scale iron and steel companies in India. Seven major performance evaluating areas have been identified, such as production trend, sales trend, cost trends, profitability, financial strength (liquidity), financial health and value added. For this purpose, six iron and steel companies were selected in this study.

The specific objectives of the study are:

1. To study the profile of Indian iron and steel industry with a view to assess their achievement.
2. To analysis the trends of production, sales and cost of the selected iron and steel units in India.
3. To study the profitability and liquidity position of the selected iron and steel units in India.
4. To assess the financial health of the selected iron and steel units in India.
5. To examine whether the selected study units have been able to generate value for its shareholders.
6. To present summary of the study and to make suitable suggestions for improvement in the competitive business world.

The period of the study covers 10 years from 1997-98 to 2006-07. Necessary data used for secondary in nature, relating to financial statements
were collected from the compilation made by the Centre for Monitoring Indian Economy (CMIE). For the purpose of analysis, a variety of financial ratios such as profitability, liquidity, turnover, etc. were used to achieve the objectives of the study. Various statistical techniques, such as simple correlation and multiple regression, growth rates, etc. were applied to analyze the financial performance evaluation. To test the significance of the results of the analysis, the t-test, F-test and chi-square test were also applied. For the purpose of the study, a few hypotheses were framed.

7.1. Findings of the Study

7.1.1 Production, Sales and Cost Trend

1. The production of iron and steel industry has marked an increasing trend throughout the period except in the year 1998-99. The mean value of production was Rs.44128.85 crores and its coefficient of variation was 51.13 per cent during the study period. The production has registered a compound growth rate of 1.87 per cent during the study period.

2. The sales turnover of iron and steel industry has marked an increasing trend throughout the period except in the year 2001-02. The mean value of sales was Rs.44084.56 crores and its coefficient of variation was 49.45 per cent during the study period. The sales turnover has registered the compound growth rate of 109.87 per cent during the study period.

3. The cost of production of iron and steel industry has marked an increasing trend throughout the period. The mean value of cost of production was Rs.34303.31 crores and its coefficient of variation was 39.02 per cent during the study period. The cost of production has registered a compound growth rate was 107.78 per cent during the study period.
4. The raw material expenses of iron and steel industry had an increasing trend throughout the period. The mean value of raw material expenses was Rs.15802.17 and its coefficient of variation was 51.07 per cent during the study period. The compound growth rate of these expenses was 109.52 per cent during the study period.

5. The wages and salaries expenses of iron and steel industry showed an increasing trend throughout the period. The mean value of wages and salaries expenses was Rs.5420.35 and its coefficient of variation was 26.73 per cent during the study period. The compound growth rate of these expenses was 102.79 per cent during the study period.

6. The manufacturing expenses of iron and steel industry had an increasing trend throughout the period. The mean value of raw material expenses was Rs.5365.01 and its coefficient of variation was 38.27 per cent during the study period. The compound growth rate of these expenses was 105.61 per cent during the study period.

7. The power and fuel expenses of iron and steel industry marked an increasing trend throughout the period. The mean value of raw material expenses was Rs.4635.44 and its coefficient of variation was 38.00 per cent during the study period. The compound growth rate of these expenses was 107.10 per cent during the study period.

8. The selling and administrative expenses of iron and steel industry indicated an increasing trend throughout the period. The mean value of selling and administrative expenses was Rs.2862.25 and its coefficient of variation was 30.45 per cent during the study period. The compound growth rate of these expenses was 100.98 per cent during the study period.

9. The miscellaneous expenses of iron and steel industry revealed an increasing trend throughout the period. The mean value of miscellaneous expenses was Rs.1521.62 and its coefficient of
variation was 31.94 per cent during the study period. The compound growth rate of these expenses was 103.66 per cent during the study period.

10. In the cost structure analysis reveals an increasing trend during the study period. The cost structure of the industry, the proportion of raw material cost with 44.38 per cent got the first place followed by employee cost with 15.22 per cent, manufacturing expenses with 15.07 per cent, power and fuel with 13.22 per cent, selling and administrative expenses with 8.04 per cent and miscellaneous expenses with 4.27 per cent during the study period.

11. To find out the difference between actual and trend values of production, sales and respective expenses. Chi-square test has been applied. The results of the analysis reveal that computed chi-square value is greater than the critical value. Hence, the hypothesis is rejected. It is concluded that “There is significant difference between actual and trend values of production, sales and respective expenses.”

7.1.2 Profitability

1. The industry average of operating profit margin ratio has recorded a high fluctuating trend. It ranged between 37.45 during the year 2004-05 and 5.81 during the year 2001-02. The mean value of industry average of operating profit margin ratio was 22.12 during the period of the study and among the selected companies it was highest of 28.08 gained by TISCO and its minimum of 16.53 obtained by ISPAT. On the basis of this ratio it can be concluded that the TISCO is consistency making profit throughout the study period.

2. The Industry average of net profit margin ratio has recorded a high fluctuating trend. It ranged between 25.28 per cent to (-28.58) per
cent during the period of the study. The highest average net profit margin was recorded by TISCO with 17.88 per cent, followed by RINL with 6.03 per cent and SAIL with 5.05 per cent. The negative average return was found in the companies like JSW, ISPAT and ESSAR. On the basis of this ratio it can be concluded that the TISCO is the most profitable.

3. The third measure of profitability, i.e., return on total assets indicates that the industry average has recorded a high fluctuating trend. The return on assets ratio ranged between 27.15 per cent during 2004-05 and 0.61 per cent during 1998-99. The highest average return on assets ratio was recorded by the TISCO with 17.07 per cent, followed by SAIL with 14.82 per cent, RINL with 10.19 per cent, JSW with 7.95 per cent and the lowest return on asset ratio was 4.68 per cent obtained by ISPAT. On the basis of this ratio the TISCO is most profitable.

4. The return on networth ratio is the fourth measure of profitability which indicates that the industry average of all six companies taken together declined from 2.46 per cent in 1997-98 to (-12.47) per cent in 2000-01. This turned out to be a positive aspect, thereafter, to 18.84 per cent during the year 2006-07. The average return on networth ratio was 13.55 per cent, which is the highest in ESSAR with 52.73 per cent followed by TISCO with 22.71 per cent, RINL with 4.47 per cent, SAIL with 4.16 per cent, JSW with 1.70 per cent and ISPAT with (-4.46) per cent. Among all the selected companies there was high fluctuation except in TISCO. On the basis of this ratio it can be concluded that TISCO is better to earn consistently positive return during the period of the study.

5. Finally, the profitability measure i.e., the return on capital employed indicates that industry average has been fluctuating trend during the
period of the study. The mean value of industry average was 10.92. Among the selected companies the highest average return on capital employed was recoded by TISCO with 17.65 per cent, followed JSW with 12.04, SAIL with 10.70, RINL with 9.57 per cent, ESSAR with 7.79 per cent and ISPAT 7.56 per cent. On the basis of this ratio it can be concluded that TISCO is the most profitable.

7.1.3 Financial Strength

1. The standard current ratio in a business enterprise is 2:1 but, due to peculiar position of iron and steel industry, it cannot be taken as standard norms in the industry. The industry average of current ratio was 1.11 during the period of the study. In iron and steel, the standard current ratio is 1.11 on the basis of the average of the selected companies. The position of RINL and ISPAT with current ratio of 1.71 and 1.15 respectively may be termed as quite good as these are quite near to the norms chosen for analysis.

2. The Quick ratio indicates that the industry average has recorded an increasing trend during the period of study. The mean value of industry average was 0.95 which was lower than the standard norm of 1:1 throughout the period of study. The average quick ratio was the highest in RINL with 1.44, followed by ISPAT with 1.08, ESSAR 1.03, TISCO with 0.75, SAIL with 0.73 JSW with 0.64.

3. The debt-equity position of the iron and steel industry shows a fluctuating trend during the period under study. The respective mean value of industry average was 3.29 among all the selected companies the ESSAR with 7.40, followed by, ISPAT with 4.89, JSW with 3.60 SAIL with 2.41, TISCO with 0.92 and RINL with 0.50. Thus, RINL, TISCO and SAIL recorded a lower percentage of debt-equity ratio than average figure of the combined position.
4. The interest coverage ratio of all the selected companies taken together for the period was 8.37 times. This shows a high fluctuating trend. The highest interest coverage ratio on the basis of average was 29.33 times in RINL, followed by TISCO with 11.08 times, SAIL with 6.36 times, JSW with 1.77 times, ESSAR with 0.92 times and ISPAT with 0.78 times. Thus, the factor of safety was not even 100 per cent in the ISPAT and the ESSAR.

7.1.4 Operational Efficiency

1. Inventory turnover helps in determining the efficiency of the management in an enterprise and gives the rate at which inventories are converted into sales and then into cash. The industry average of Inventory turnover ratio was 6.66 times. The average inventory turnover ratio was the highest in the JSW with 9.62 time followed by TISCO with 8.17 times, ISPAT with 7.87 times, ESSAR with 4.90 times, SAIL with 4.73 times and RINL with 4.70 times. JSW, TISCO and ISPAT showed a better utilization of inventory in comparison to the other companies under study.

2. Debtors’ turnover measures the efficiency of credit collection and credit policy. The industry average of Debtors turnover ratio was 16.41 during the period of the study. This ratio reveals that mean value of RINL (41.73) and TISCO (14.28) has been higher that of industry average position. However, among the selected companies like JSW (13.59), SAIL (12.59), ESSAR (8.77) and ISPAT (7.53) has been lower than the industry average during the period under study.

3. In order to test the efficiency with which working capital is utilized, the working capital turnover ratio is calculated. This ratio is used to see if there is adequacy of working capital and whether or not
working capital has been effectively utilized in making sale. The mean value of industry average of working capital turnover ratio was 40.13 times and in all the selected companies there was a positive sign of this ratio except in SAIL and JSW. Among the companies the highest mean value of this ratio was 9.92 times gained by ISPAT followed by ESSAR with 2.29 times and then it was the lowest of (-65.95) with SAIL and JSW the (-39.08).

4. In another measure of the efficiency, the mean value of total assets turnover ratio of industry average was 0.68 during the period under study. The ratio in SAIL, TISCO and RINL was higher than that of industry average position during the period under study. However, among the selected companies like ISPAT, JSW and ESSAR had been lower than the industry mean value during the period under study. Among all the selected companies it was maximum of this ratio of 1.09 gained by SAIL and its minimum of 0.39 obtained by ISPAT.

5. In the final measure of operating efficiency i.e., fixed assets turnover ratio indicates that mean ratio of industry average was 0.68 during the period under study. The ratio in TISCO, SAIL and RINL has been higher than that of industry average position. However, among the selected companies like ISPAT, JSW and ESSAR it has been lower than the industry average during the period under study.

7.1.5 Determinants of Profitability

1. In TISCO, the co-efficient of multiple determinations ($R^2$) signifies that 99.6 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values shows that operating ratio, inventory turnover and fixed assets turnover have
positively influenced the profitability, while size, leverage and liquidity have negatively influenced the profitability. Fixed assets turnover and liquidity have significantly influenced the ROI at 0.05 level. Size has significantly influenced the profitability at 0.01 level. Remaining variables have not significantly influenced the profitability. The F value (124.827) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the hypothesis “There is no significant linear effect on profitability by the independent variables” is rejected.

2. In SAIL, the co-efficient of multiple determinations ($R^2$) signifies that 99.6 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values show that operating ratio, inventory turnover and fixed assets turnover have positively influenced the profitability, while size, leverage and liquidity have negatively influenced the profitability. Fixed assets turnover and liquidity have significantly influenced the ROI at 0.05 level. Size has significantly influenced the profitability at 0.01 level. Remaining variables have not significantly influenced the profitability. The F value (124.827) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the hypothesis “There is no significant linear effect on profitability by the independent variables” is rejected.

3. In ESSAR, the co-efficient of multiple determinations ($R^2$) signifies that 95.6 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values show that operating ratio, inventory turnover and size have positively influenced the profitability, while fixed assets, leverage and liquidity have negatively influenced the profitability. Size, Leverage and Inventory turnover have significantly influenced the ROI at 0.05
level. Remaining variables have not significantly influenced the profitability. The F value (5.927) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the hypothesis "There is no significant linear effect on profitability by the independent variables" is rejected.

4. In ISPAT, the co-efficient of multiple determinations ($R^2$) signifies that 91.4 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values shows that operating ratio, inventory turnover and liquidity have positively influenced the profitability, while size, leverage and fixed assets turnover have negatively influenced the profitability. Operating ratio has significantly influenced the ROI at 0.05 level. Inventory turnover has significantly influenced the profitability at 0.01 level. Remaining variables have not significantly influenced the profitability. The F value (14.752) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the hypothesis "There is no significant linear effect on profitability by the independent variables" is rejected.

5. In RINL, the co-efficient of multiple determinations ($R^2$) signifies that 97.2 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values shows that operating ratio, size and fixed assets turnover have positively influenced the profitability, while inventory, leverage and liquidity have negatively influenced the profitability. Size, leverage and liquidity have significantly influenced the ROI at 0.05 level. Fixed assets turnover has significantly influenced the profitability at 0.01 level. Remaining variables have not significantly influenced the profitability. The F value (9.681) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the
hypothesis “There is no significant linear effect on profitability by the independent variables” is rejected.

6. In JSW, the co-efficient of multiple determinations ($R^2$) signifies that 97.2 per cent of variation in profitability has been explained by the independent variables. The regression coefficient values show that size, inventory turnover and fixed assets turnover have positively influenced the profitability, while operating ratio, liquidity and leverage have negatively influenced the profitability. Leverage, liquidity and fixed assets turnover have significantly influenced the ROI at 0.05 level. Remaining variables have not significantly influenced the profitability. The F value (9.681) reveals that the estimated regression equation is statistically significant at 0.05 level. Hence the hypothesis “There is no significant linear effect on profitability by the independent variables” is rejected.

7.1.6 Financial Health

1. The mean value of Z score of TISCO is 2.35 during the study period. The financial health of TISCO has been in Bankruptcy zone for 5 years (1997-98 to 2001-02), while it has been in healthy zone during the year 2003-04 and 2006-07. The remaining years 2003-04, 2004-05, and 2005-06, it has been that too healthy zone. Variable-wise analysis reveals that during the study period, the firm has registered a poor working capital, low leverage and cumulative retained earnings. It can be concluded that the financial health of TISCO is satisfactory during the year from 2002-03 to 2006-07.

2. The mean value of Z score of SAIL is 2.55 during the study period. It has been in Bankruptcy zone for 6 years during from 1997-98 to 2002-03, while it has been too healthy zone for 4 years during from
2003-04 to 2006-07. Variable-wise analysis reveals that during the study period SAIL has registered a low working capital and cumulative retained earnings. It can be concluded that financial health of SAIL is poor during study the period except from 2003-04 to 2006-07.

3. The mean value of Z score of ESSAR is 2.34 during the study period. It has been found that Z score in Bankruptcy zone for 7 years during from 1997-98 to 2003-04, while it has been in the too healthy zone for 3 years during from 2004-05 to 2006-07. Variable-wise analysis reveals that low cumulative retained earnings, working capital and profitability. It can be concluded that financial health of ESSAR was not satisfactory during the study period except from 2004-05 to 2006-07.

4. The mean value of Z score of ISPAT is 0.99 during the study period. The financial health of ISPAT has been in Bankruptcy zone throughout the study period except 2005-06, while it has been in too healthy zone during the year 2005-06. Variable-wise analysis reveals that during the study period, the firm has poor performance of working capital, cumulative retained earnings, profitability and leverage position. It can be concluded that the financial health of ISPAT is not satisfactory during the study period.

5. The mean value of Z score of RINL is 6.55. It has been in too healthy zone for 7 years during from 2000-01 to 2006-07, while it has been healthy zone for 3 years during 1997-98, 1998-99 and 1999-00. Variable-wise analysis reveals that high debt equity position and total assets turnover to reach the healthy and too healthy zone during the study period. It can be concluded that the financial health of RINL was satisfactory throughout the study period.
6. The mean value of Z score of JSW was 1.06. It has been in bankruptcy zone for 8 years during from 1997-98 to 2002-03 and 2005-06, while it has been healthy zone for 2 years during 2004-05 and 2006-07. Variable-wise analysis reveals that poor working capital position, low cumulative earnings and profitability. It can be concluded that the financial health of JSW was very poor throughout the study period.

7.1.7 Value Added

1. EVA of all the selected iron and steel companies has negative values during the period between 1997-98 and 2001-02 except in TISCO. During the period, the selected companies have not been able to generate the shareholders value. In TISCO, the EVA has continued to be strongly driven by robust business performance. The industry average of EVA has recorded a high fluctuating trend. It ranged between Rs.24.22 crores during the year 2004-05 and (Rs.-7.24) crores during the year 2001-02. The mean value of EVA was Rs.22.12 crores during the period of the study and among the selected companies it was highest of Rs.1316.26 crores gained by TISCO and its minimum of (Rs.-16.81) crores obtained by ISPAT.

2. The actual and trend value of economic value added as percentage of average capital employed (EVACE), chi-square test has been applied to test the hypothesis, “There is no significant difference between the actual and trend values of EVACE”. Among all the selected companies, computed chi-square value is greater than the critical value. Hence, the hypothesis is rejected. It is concluded that “There is significant difference between the actual and trend values of EVACE”
3. MVA of all the selected iron and steel companies has negative values during the period between 1997-98 and 2001-02. The industry average of MVA has recorded a high fluctuating trend. It ranged between Rs.263.72 crores during the year 2006-07 and (Rs.-18.52) crores during the year 2000-01. The mean value of MVA was Rs.149.91 crores during the period of the study and among the selected companies it was highest of Rs.16401.41 crores gained by SAIL and its minimum of (Rs.-322.71) crores obtained by ESSAR.

4. The actual and trend value of market value added as percentage of total assets invested (MVATA), chi-square test has been applied to test the hypothesis, “There is no significant difference between the actual and trend values of MVATA”. Among all the selected companies, computed chi-square value is greater than the critical value. Hence, the hypothesis is rejected. It is concluded that “There is significant difference between the actual and trend values of MVATA”.

5. Finally, we examine the relationship between shareholders wealth and financial variables in the case of iron and steel companies in India. The selected financial measures like EVA, EPS, ROCE, NOPAT and RONW have been compared with MVA. The multiple regression analysis has been carried out and the results revealed EPS as the most significant related variable with MVA followed by ROCE and NOPAT.

7.2 Suggestions

Keeping in view the above observations and findings of the study the following points are suggested to improve the financial performance in the selected iron and steel companies in India.
1. The main problem before the iron and steel industry is of mounting trend of cost. All the components of costs are increasing continuously year by year which affects the financial performance of the Industry. Therefore, it is the need of the hour that the iron and steel industry shows better performance by reducing the operating cost. For controlling the cost in industry standard costing system should be introduced to improve their performance.

2. The study has revealed that the long term financial strength of the iron and steel companies is not satisfactory. The commercial operation and financial strength have continued to be weak. To improve the financial position of the iron and steel industry it is suggested that the capital of the companies should be restructured by a part of the loan capital into equity capital. This will have the advantage of relieving the burden of interest payment. Thus, the share capital will help the companies to earn a surplus. Conversion of loan into equity capital will not only reduce the interest burden, but also relieve the companies in the matter of repayment of loans to creditors. This will improve the financial performance, thereby enabling them to raise enough internal sources to finance their expansion programmes.

3. There has been a positive significant relationship between steel prices and inflation of whole sale price Index. During the high inflation period, the Government asked the steel producing companies should to reduce the steel prices, to help to control inflation. In the same way, the Government assisted with some sort of cash grants say concession of sales tax, less power tariff, reduce railway wagons charges, to revamp the already loss making steel plant. The Government may give cash grant to those undertakings which have
reduced accumulated losses and which are likely to improve their prospects in future.

4. The working capital position and short-term financial position in the iron and steel industry is poor. There are certain difficulties in managing working capital in iron and steel industry for several reasons. The firms should monitor their liquidity position so as to trade off between liquidity and profitability. Appropriate measures may be taken to improve their position to enhance the liquidity or risk free position.

5. About 35 per cent of inventory has contributed to current assets. There should be a proper planning of inventory management is to specifically improve large scale iron and steel industry. It could be achieved by the proper application of inventory control system, such as, EOQ, JIT, ABC analysis etc., and improvement of their sales management so as to reduce stock piling of finished goods.

6. The leverage and profitability has negative association with the sample units. Basically, iron and steel industry is a capital intensive industry. The effective leverage management can gear up the debt equity ratio which influences the cost of capital and its associated risk. The sample units should take restructuring or modify its capital structure. An optimum capital structure should be used and it which to minimize the cost of capital and enhance the shareholders wealth.

7. There has been direct relationship between earning per share and market value added. EPS is the strongest determinants of MVA after EVA of all the sample units except in ESSAR and JSW. So, the firm should try to maximize the profit and to minimize the cost of production. The value of a company shares depends largely on its networth which itself depends on earning per share. The companies should follow a policy which increases the earning per share in long
run. This will automatically lead to maximization of the market value of firm.

8. The financial health of select iron and steel companies is in bankruptcy zone, for financially sick during the first five years of study period and turn to positive signal to health and too healthy zone. Finally, the Z score trend was downwarded during 2006-07. Necessary steps to be taken to improve their ‘Z’ scores. Further, iron and steel companies should plan to have improved adequate working capital and profitability position. The capital structure affects the profitability and also cumulative retained earnings.

9. Though the sample units are large in size and have invested in larger amount in total assets it is incurring losses. There has been a positive relationship between the size of the firm and profitability. Hence, the firm can try to attain economical size of operation to enhance the profitability.

10. Modernization and automation are necessary to improve productivity and profitability, because in selected companies where modernization implemented it shows positive growth in profitability. So in that aspects, SAIL, ESSAR and ISPAT has negative influence between fixed assets turnover and profitability. Hence, this companies need to be modernized to obtain better operational efficiency.

11. Blast furnace stoves in Indian industry usually operate in the temperature range of 900°C and hardly touch high thermal efficiency level of 1200°C. With better designs, it is possible to achieve 1300°C stove temperature as already existing in other countries. This will reduce coke consumption drastically.

12. In India, most of the plants in operation are not scientifically optimized. There is need for greater use of inducing IT based control
system for optimization of plant operations which would reduce the cost of production.

13. India should not export high Fe content iron ore, rather export finished steel which is comparatively more value added, after meeting domestic demand. This will reduce coke consumption and energy requirement in iron making reduce import of iron ore and will ultimately lead to low cost of steel production. Scarcity of good quality of iron ore in the world market is envisaged in near future.

14. New iron ore and coal mines should be developed to meet demand for future consumption. The Ministry of Steel and NMDC should jointly take appropriate measures to find out new iron ore and coal mines in India to meet the demand of future consumption.

15. In Japan which has no raw material for steel industry is able to export over 29 million tonnes of steel because of it technological competence. Training and development of plant professionals need to be given top priority. The traditional working should be replaced with more scientific and standardized practices.

7.3 Conclusion

The country has vast potential in mining and ferrous metallurgy, as symbolized by large coal and iron ore mines and the steel plants. The demand for finished steel is expected to reach a level of 100 million tonnes and mining capacity to the level of 250 million tonnes during the next two decades. To meet the domestic demand and also increased steel exports, more finished steel of international quality and price will have to be produced. For this, new units will have to be set up based on internationally competitive technology, apart from upgrading and modernization of the existing units. The profitability of the iron and steel company improved
during the last five years mainly due to higher production as well as sales of saleable steel, coupled with improvement in product-mix, productivity and techno economic parameters as well as higher sales realization, inspite of increase in costs and railway freight on Inputs.

Growth in steel is normally directly related to GDP. Some analysts actually believe that the Indian steel industry would grow at a faster rate than what can be expected from the GDP (the amount of steel required to produce one unit of gross nation output) is likely to increase. Since the Indian steel industry has tremendous growth potential, and the per capita consumption is bound to grow at a much faster rate, matching capacity additions in relation with domestic demand will be needed. Thus, the dreams of our planners to accelerate the economic growth in the country by effecting increased steel production of reasonable cost are still possible to be translated into reality.