CHAPTER-9

CONCLUSIONS AND SUGGESTIONS
The TSPL, being an integral part of the steel industry, has been playing a significant role in India. Steel industry is considered as industry of industries, because steel is used as the basic metal in manufacturing various types of automobiles, transport equipements and other machineries, etc. As a result of this, Government of India has established the Tungabhadra Steel Products Limited (TSPL) as a public sector undertaking in the year 1960 to meet the country's requirements for manufacture of hydraulic structures, radial gates for construction of dams, reservoirs and hydro-electric power stations, etc. TSPL has made significant contribution to the country for effective national water management and control, irrigation development and hydro-electric power which are the important sectors for the nation's growth. Hence, to fulfil these needs of the country TSPL was started at Hospet in Karnataka. The TSPL, in addition to rendering excellent service to the economic interests of innumerable projects, has caused the winds of prosperity to blow across the regions of the country.

The TSPL is expertised in carrying out turn-key jobs with national and inter-national standards. For this purpose, it has invested huge capital in the form of infrastructure. TSPL has the privilege of serving the core sectors of hydro-power generation and irrigation continuously for more than 40 years with a paid up capital of Rs.70.90 millions, employees strength of 950 and turnover of Rs.400 million (1997-98).

However, in recent years, the TSPL has been suffering from several operational and financial problems, such as, erratic return on investment, poor productivity of financial resources, etc. As a result of this, the company is not in a position to earn a reasonable rate of return to its shareholders and then the
sales order book position of the TSPL is rather low. Since the TSPL is a public sector undertaking, it was expected to be an instrument of progress and prosperity of India; but unfortunately, it is encountered with a number of operational and financial problems. These problems have adversely affected the operational efficiency and financial soundness of the TSPL.

Against this background, a need was felt by the researcher to put the working of TSPL in India through a scanner. The present research study is a micro level study. It aims at analysing the trend in ROI and its components for the purpose of exploring the causative factors responsible for such a level of ROI by way of breaking operational and financial cost into different components.

CONCLUSIONS OF THE STUDY

The major conclusions findings of the study are as follows:

A) RETURN ON INVESTMENT:

1. A general decline is visible in the profitability of the TSPL under the study, it is more pronounced in the last three years of the study period.

2. The ROI of TSPL increased in the middle three years of the study period, thereafter, it declined. This decline can be attributed to the firm's inability to improve its EBIT in tune with the increase in the investment. The extent of decline is more pronounced during the last three years of the study period.

3. Though there was an increasing trend in the margin-on-sales, yet the amount of increase was marginal only. Such a downward trend coupled with poor investment turnover has brought down the ROI.
4. Investment turnover of the TSPL was less than one throughout the study period. Hence, the firm has failed to keep up a constant record in the utilisation of its assets. During the later years of the study, the sales were not good in relation to the size of its assets.

5. Fixed assets turnover of the TSPL reveals ineffective utilization of fixed assets. In other words, the investment policy in respect of fixed assets is not governed by the probable volume of sales to be effected.

6. The increase in the current assets of the TSPL has not been followed by corresponding increase in sales. This speaks of poor working capital management by the TSPL.

7. Return on net assets (RONA) of the TSPL has been decreased in the last four years of the study period. It was more pronounced in the last year i.e. 1997-98. This speaks of ineffective utilization of net fixed assets.

8. Return on shareholders equity (ROSE) of the TSPL was more during the early stage of the study, and then it turned out to be negative in the last year of the study. This indicates poor operating performance and faulty borrowings.

9. The components of ROSE registered a declining trend over the study period. However, the ROSE was negative in the year 1995-96 and 1997-98. This shows that investment policy of the TSPL is not governed by operational earnings capacity of the TSPL.

10. The capital efficiency of the TSPL was better at the beginning of the study period but it decreased in the last three years of the study owing to considerable increase in capital employed corresponding to its value added.

11. Working capital efficiency measures the ability of the company to use the
working capital on productive lines. The ratio of value added to working capital of TSPL has been showing an increasing trend. Hence, this speaks of better utilisation of working capital, when compared with value added.

12. Net profit margin-on-sales ratio of the TSPL registered a decreasing trend indicating thereby its inability of effective management of operating expenses.

13. The percentage of operating expenses to sales of the TSPL reveals that such expenses constitute a predominant share in the total sales for all the years of study.

B) ANALYSIS OF TOTAL COST AND EFFICIENCY:

Total cost of the TSPL includes the cost of material, productive labour, manufacturing overheads, administrative overheads, selling and distribution overheads.

1. Total cost of the TSPL constitutes a major share in total revenue earned by the TSPL. Hence, it implies that the efficient and effective cost management goes a long way in improving operational profitability.

2. Material cost of the TSPL constitutes a lion's share in the total cost. Hence, it may be said that the material management is not effective and there is lack of consistency in controlling the material cost. Further, the material cost has been contributing at a declining rate towards TSPL's profitability.

3. Productive labour cost of the TSPL includes labour cost and employees' remuneration and benefits. The productive labour cost increased at a faster rate than the total cost. This speaks of the ineffective control over the productive labour cost. Further, there is no definite association between the
productive labour cost and the sales which affects the operating profitability.

4. Ratio of percentage variation in manufacturing overheads to percentage variation in total cost indicates that production overheads are increasing at a higher rate than the total cost. Hence, this speaks of ineffective control over the manufacturing overheads and such overheads do not have a definite association with sales.

5. Administrative overheads of the TSPL include rent, rates and taxes, postage, telegrams, travelling expenses, etc. Administrative overheads of the TSPL have shown an increasing trend throughout the study period. This speaks of the company's ineffective control over the administrative expenses.

6. The size of the selling and distribution expenses of the TSPL is less as compared to other costs. However, this expenditure has shown an increasing trend over the years. Hence, the company is unable to control these costs effectively. Further, it reflects that selling and distribution overheads also have been claiming an increasing share in the revenue over the period indicating thereby their ineffective control.

C) ANALYSIS OF FACTORY COST AND EFFICIENCY:

Factory cost of TSPL includes the material cost, labour cost and factory overheads.

1. An analysis of the composition of factory cost of the TSPL has revealed that factory cost occupies a lion's share in the total cost incurred by the company. Hence, it may be said that effective management of factory cost is essential ingredient of total cost management.
2. Material cost occupies a major share in the factory cost of the TSPL. The ratio of this was more than one in most of the years of study period. This implies that material management of the company is not satisfactory. Hence, is concluded that material cost management assumes a special significance in factory cost management in view of its larger size in the factory cost.

3. Work-in-progress turn over ratio of the TSPL was very low because of the long production period. By the increase in the size of the working capital blocked in work-in-progress, a negative impact is made on the ROI of the TSPL.

4. Productive labour cost of the TSPL has shown an increasing trend as compared to its production value. This indicates that the firm is not able to control these costs to the fullest extent.

5. Productive labour cost to value added of the TSPL has shown a constant trend with little variation. This also reveals that productive labour cost is a major element in the value added and needs proper attention and control.

6. Manufacturing overheads incurred by the TSPL did not have any positive impact on its production value till the middle of the study period. However, such overheads registered a decline in the later years of the study. This signifies that there has been a decline in the share of manufacturing overheads in the production value.

D) ANALYSIS OF MARKETING COST AND EFFICIENCY:

The marketing cost of the TSPL include sales commission, advertising and publicity, bad debts and doubtful debts, distribution expenses and other marketing expenses.
1. The size of the marketing cost as a percentage of sales and total cost has registered an increasing trend which implies failure to control these costs. Further, there is no definite relationship between the marketing costs incurred by them and the total sales.

2. The sales commission is an important element in the marketing cost of the TSPL because it holds an important share in the marketing cost. It has witnessed an erratic trend during the study period. This signifies that sales commission expenses need managerial attention as a part of total cost management.

3. Sales commission incurred by the TSPL has been less productive. This speaks of the lower productivity of the cost incurred for promoting more sales.

4. Bad and doubtful debts have shown an increasing trend during the study period. Hence, the credit and collection policy of the company is not sound.

5. Distribution expenses occupy a major share in the marketing cost of the TSPL. Such expenses have shown an increasing trend. Hence, high share of distribution expenses gives a signal for proper logistic management so as to keep the distribution expenses at a fair rate.

6. The ratio of percentage variation in distribution expenses to percentage variation in sales of the TSPL has shown an increasing trend. This indicates that the TSPL was unable to control these costs properly.

E) ANALYSIS OF MANPOWER COST AND EFFICIENCY:

Total manpower cost incurred by the TSPL includes productive
1. The size of total manpower has shown an increasing trend.

2. Productive manpower cost occupies a lion's share in the total manpower cost of the TSPL. Hence, it needs more managerial attention for the purpose of better control of manpower costs.

3. The non-productive manpower cost is less significant as compared to the productive manpower cost of the TSPL. However, the percentage of non-productive manpower cost has shown an increasing trend. This indicates that the TSPL has been ineffective over the study period in managing this cost.

4. The productivity of the manpower cost in terms of production value exhibited a indefinite trend, however, it was more than one in the years 1989-90, 1990-91 and 1993-94. In some years, the manpower cost increased in spite of decline in production value. This indicates that there is lack of control over the manpower cost in tune with production value.

5. Average sales per employee has shown an increasing trend over the study period. Hence, it speaks of a general increase in the efficiency of the manpower resources of the factory over the years.

6. The TSPL has understood the importance of employees welfare in manpower management, which is evidenced by the labour welfare amenities provided for the benefit of the manpower resources working in the TSPL. The employees welfare expenses have been increasing year by year; indicating thereby a significance of the labour welfare measures undertaken by the TSPL for the successful management of human resources.

7. Labour welfare measures undertaken by the TSPL are expected to bring
improvement in the productivity of the manpower resources in the production. However, when the effects of the welfare measures undertaken by the TSPL on the production of steel products is brought under microscope, it reveals that the labour welfare measures have not been more effective to increase the production.

F) ANALYSIS OF FINANCIAL COST AND EFFICIENCY:

Financial cost incurred by the TSPL is the sum of interest expenses incurred on the funds borrowed.

1. Total risk of the TSPL is a product of operating risk and the financial risk. This risk has recorded a rising trend over the study period owing to the considerable increase in the financial risk.

2. The total risk coverage ratio of the TSPL reveals the inability of the company to cover the total risk because of decline in the size of margin during the study period. In the years 1995-96 and 1997-98, the size of the gross margin was less than the size of the total risk. This highlights that the company's earning was inadequate to cover the total risk.

3. Though the size of the fixed operating risk was less in the beginning years of the study; but thereafter, it registered an increasing trend. As a result, the major portion of the contribution was swallowed by the fixed operating cost.

4. Though the TSPL has functioned above the operating break-even-point during the study period, yet the size of the margin covering the fixed operating risk has been declined on account of the depleting size of the contribution on one side and rising fixed operating risk on the other.
5. TSPL has been operating the above financial BEP through out the study period except in the years 1995-96 and 1997-98. During these two years the financial risk has out-crossed the earnings capacity and led to negative earnings. The size of the financial margin declined over the study period on account of the decline of EAIT on one side and the increase in the financial risk on the other.

6. The size of the TSPL's debts are seven times more than the shareholders' equity. Heavy financial risk unjustified by the level of earnings has adversely affected the TSPL's progress. The factory seems to have landed itself in a debt trap.

7. The proprietor's share in the earnings of the TSPL has been very less. This speaks of poor financial stake of owners. A major portion of the total assets is financed by debt capital, which has given birth to high level of financial risk.

8. The ratio of the ROI to the borrowings of the TSPL exhibits an unfavourable trend through out the study period mainly because of large decline in ROI in spite of increase in the rate of borrowings. This indicates the non-profitable utilization of funds obtained at high cost.

9. Current assets to fixed assets of the TSPL are very high through out the study period except in the last year i.e. 1997-98. This implies that the company is following conservative policy to have greater liquidity and lower risk. Lack of harmonization between the current assets' expansion policy and the fixed assets' expansion policy would affect the profitability of the company.

10. The working capital policy is not governed by the nature of changes in the sales volume. This is evidenced by the ratio of working capital to the sales of the TSPL.
II. SUGGESTIONS:

ROI of the TSPL is ultimately depends upon both operating profitability (which, in turn, affected by factory cost, marketing cost, manpower cost, etc.) and investment turnover (which, in turn, affected by investment policy relating to fixed assets and current assets). Financial cost is the function of prudence of financing policy. Hence, ROI is a mathematical result of simultaneous operations of several variables like cost, investment, production, turnover, etc. In the light of analysis of the factors which influence the level of ROI and the findings emerging therefrom, the following suggestions have been made for improving operating and financial health of TSPL:

1. **Adoption of Strategic Cost Management Philosophy**:

   As the total cost is constituting a major portion of the TSPL's revenue, there is ample scope for improving operational profitability through a systematic management of costs. TSPL should set a cost target for operating its plant at a level of operation. It has to measure the actual level of cost incurred and find out the gap between the cost target and the actual cost. For bridging such undesirable gap, it has to formulate strategies for incurring the cost only upto the target.

2. **Exploration of Cost Drivers through the Application of Activity-Based Costing System**:

   Production of any product requires performance of a series of activities, such activities consume resources; which, in turn, require money. Hence, an activity is a cost driver. In order to control costs or reduce it on permanent basis, TSPL should explore the activities which have directed the cost in an
unfavourable way or the activities which have added value to the material. All the activities, in respect of which cost is incurred but which have not added any value to the materials, should be dispensed with.

3. **Periodical Cost Review**:

TSPL has to stock the levels of different costs components relating to different functional areas like production, marketing, finance, manpower, etc; so as to trace-out the direction of their movement. It has to verify whether the production-based (i.e. variable) cost components are varying in consonance with the level of production or not. Similarly, it has to find out whether period-based (i.e. fixed) cost components have remained stable in spite of increase in the level of production upto installed capacity. Further, it has to find-out which cost component needs managerial control and which cost component needs operational control. This system of review of costs at regular interval will go a long way in arresting the operational cost and in improving operational profitability and investment profitability.

4. **Designing a Sound Steel Purchase Policy**:

Steel is a special kind of raw material to purchase on account of large variations in quality due to its inherent geographical specialization and frequent fluctuations in prices. The quality of the steel which becomes the integral part of the finished product plays a vital role in the creation of demand as well as the quality assurance. Hence, the company should design a sound steel purchase policy in order to overcome the severe competition from the private sectors. It may be said that the management of the total cost will be more cost-effective provided management of material cost is effective.
5. **Effective Control Over the Operating Expenses**:

Operating expenses occupy a sizeable share in total revenue earned by the TSPL. Margin-on-sales can be improved only by controlling the operating and non-operating expenses effectively. It may be highlighted that effective and efficient management of total cost is the only solution for improving operational profitability of the TSPL. Hence, the TSPL is required to have effective control over the operating expenses in the years to come.

6. **Fixation of Budget Limits for Effective Control Over Manufacturing Overheads**:

   The manufacturing overheads, though their share is smaller in the total cost of the TSPL, have recorded a steep rise in later years of the study. The company is to give more attention to the various elements of the manufacturing overheads and evolve measures like fixing budget limits, etc; to control them.

7. **Up-dating Technology**:

   Any organisation derives its existence from the environment. The organisational mission, objectives and goals are governed by environmental opportunities and threats. Though the TSPL is reputed and recognised for manufacture and supply hydro mechanical equipment with quality, there is serve competition in the market. Some of the existing machine tools have become old, technological changes are taking place. The situation requires careful analysis to sustain and achieve higher growth rates and better results.
8. **Improvement of Tools and Technology**:

Though the TSPL is able to design manufacture and installation its major products based on its own capabilities, the situation is not creative due to changes in tools and technologies at a faster rate. The analysis of the existing tools and technologies of the company indicates that some of the machine tools and equipments available in the TSPL have become old and some are obsolete. 40% of its major machines tools are about 20 years old and 20% are 15-20 years old and 20% are 10-15 years old. Therefore, the management should give proper attention to improve the efficiency of production by replacement and modernisation of the machines tools and equipment with latest productive ones.

9. **Products Improvement and Market Extension**:

The sales order book position of the company is rather low till recently. Hence the company has to make its efforts in the following areas to cope up with above environment:

a) Identify and take up turnkey packages with the association of the other companies either locally or from abroad and execute them jointly.

b) Establish customer contracts at pre-tendering stage and constant follow up.

c) Improve market strategy.

d) Identify new products diversification.

10. **Labour Productivity Drive**:

Relatively low percentage of labour cost in the total manufacturing cost does not mean that the company has been able to arrest the size of labour cost.
In fact, the rate of increase in labour cost is far more than the rate of increase in the precaution. This fact exhibits that the labour productivity has been declining over the period. Therefore, there is a need to initiate measures to improve the productivity of labour and develop the skills of the manpower.

11. **Human Resources Development Plan**:

In tune with the growth of the business of the TSPL, diversification, technological upgradation, modernisation and organisational changes, the manpower skills required are to be identified and developed. In order to remove the imbalances in different departments due to retirement technological changes, computerisation and modern management practices, a comprehensive training and skills development programme is to be undertaken.

12. **New Orientation to Labour Welfare Measures**:

Labour welfare measures, so far undertaken by the company, have not been sufficient to make positive contribution to the productivity of the manpower resources of the company. The company should redesign its employees welfare measures and give a new orientation to them. Ultimately, these measures should improve the efficiency of the employees, reduce absenteeism and labour turnover and fetch higher returns to the company on the production, marketing and other fronts. The employees should feel proud to identify themselves with the company and be prepared to give their best. Adequate housing facility, subsidised supply of food grains, well-equipped hospital, school having good teaching staff, scholarships for the children of workers, library, well equipped sport and other recreation facilities, etc., may be thought of depending upon the financial position of the company.
13. **Improvement in EBIT for covering high Financial Risk**

Trading on equity is an important yardstick in case of profit earning companies and it magnifies the earnings of the shareholders. But in the low profit or loss incurring concerns, it adds to the financial burden and may finally lead to liquidation. The TSPL under study is deeply entrenched in a vicious debt-trap. Additional borrowings are resorted in order to replenish working capital due to heavy losses, hence the TSPL is required to stop this trend. The existing level of financial risk cannot be eliminated until the debt is repaid. Increasing the equity base of the TSPL for minimising the level of financial risk may not be a correct measure under the current conditions characterised by heavy operating losses. Therefore, all-round improvement in the working of the TSPL is needed.

14. **Integration between Financial Policy and Investment Policy**:

TSPL is suffering from heavy burden of debt. Financial risk is high. There is no correspondence between its borrowing policy and earning capacity. Therefore, in order to improve its financial health, the TSPL has to see that the cost of funds borrowed is not exceeding the size of its earnings. Size of investment and earnings must decide the size of funds to be raised.

15. **Linkage between Strategic and Tactical Investment Decisions**:

It is found in the study that there is no relationship between the expansion of investment in fixed assets and the expansion in current assets. In view of this, the return on investment is adversely affected. If heavy long term investment decision is not coupled with optimum working capital decision, size of production and sales would adversely be affected for want of circulating
capital. Cost of capital goes up and return on assets will not be corresponding increasing. Therefore, the TSPL has to establish a fair linkage between fixed assets management and current assets management.

16. Risk-Return Trade-Off Principle for Working Capital Management:

It is also found that there is no fair relationship between the volume of sales and the size of current assets. If the rate of increase in current assets is more than the rate of increase sales, the profitability will suffer because of more liquidity. Hence, the TSPL has to take its decision relating to working capital and its components like inventory of raw-materials, work-in-progress, etc; in the light of its capabilities or potentialities to use them at optimum or profitable level.

17. Incorporation of Business Process Re-engineering Policy:

TSPL is loaded with both heavy operating cost and high level of financial cost. Therefore, it is fair on the part of TSPL to analyse its operational actions in all the functional areas like material purchase, production, selling, distribution, administration, etc., and also the financial operations for the purpose of exploring unwanted operations and re-designing the procedures of performing the desirable operations. Such a screening procedure would definitely bring down the level of operation cost and improve both operational and investment profitability.

18. Scientific Inventory Management:

It is found that the material cost is constituting a sizeable portion in the factory cost of the TSPL. Therefore, the TSPL has to undertake material cost control and cost reduction measures like value analysis, fixation of inventory
levels, optimum size of material purchase orders, material requirement planning, etc; so as to increase the material cost effectiveness.

19. Management Audit:

TSPL is a public sector undertaking. Therefore, it must be subjected to management audit. All the managerial actions must be verified at regular interval so as to verify the involvement of managerial team in the promotion of operational and financial well being through the better - decision-making system.

20. Professionalization of Management:

Operational cost effectiveness and value addition aspects of any business activity are mainly depend upon the degree of materials main-traits and job-traits. Mismatching between the two would result in high cost and low return. Hence, the TSPL has to ensure a total transformation in work styles of manpower by way of professionalizing its management team. Existing manpower should be suitably trained and developed. New manpower to be injected into the organization should possess the professional traits required for the running a commercial enterprise on the principle of operational viability and financial feasibility.

To sum up, it may be said that sound cost management philosophy in respect of TSPL's main areas of operational management such as material management, production management, manpower management, marketing, general administration, etc; and prudent financial management governed by risk-return principle in all the financial decision making areas like investment in fixed assets, investment in current assets, financing of fixed assets, financing of current assets, etc; would go a long way in improving operational and investment profitability of the TSPL in the years to come.