CHAPTER VI

FINDINGS, SUGGESTIONS AND CONCLUSION
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6.1 INTRODUCTION

In this chapter, a summary of the study is provided in the beginning. Then, the findings are described in detail. It concludes with a commentary on the scope for future research.

6.2 SUMMARY

This research study aims at finding the pattern of movements in current assets, current liabilities and other non-current items. Engineering industry and the sub sectors constitute the basis for this study. The Reserve Bank of India data on the corporate sector in India have been used in this study. The engineering industry was chosen because of its large size and the long history of performance. The summary financial data was available in the form of combined profit and loss account and combined balance sheet. A set of financial ratios were also available and further statistical analysis was applied to interpret the data.

The main objectives of the study included an analysis of trends in current assets, study of interrelationship between liquidity and profitability and pattern of working capital financing trends.
Simple percentage analysis was adopted in studying the structure of working capital. Mean values, standard deviation, coefficient of variation, correlation and regression analysis have been used in the studies. In order to develop a model for estimation of working capital, exponential smoothing model was adopted.

Based on the analysis of financial data, several tables were prepared. From these tables inferences were drawn. The relevant findings are discussed below.

6.3 FINDINGS

6.3.1 TOTAL ASSETS

The total assets of engineering industry witnessed an overall improvement. Two sub sectors — foundry and electrical equipments recorded higher growth than the industry average. Further, the growth was found to be consistent throughout the ten year period. A similar trend was also observed in the growth of net fixed assets during the study period.

6.3.2 TOTAL CURRENT ASSETS AND ITS COMPONENTS:

The investment in current assets in the motor vehicle manufacturing industry is longer than other sectors. The lowest average was found in ferrous products sector. The growth rates of the total assets differ across various sectors of engineering industry.
Inventory size as well as growth rates during the study period varies considerably among the sectors of engineering industry. Foundry and electrical equipments manufacturing firms recorded high growth rates in inventories. However, motor vehicles manufacturing industry possessed a higher average of inventory compared to others. Electrical equipments sectors is another group where inventory dominates in the total current assets.

Receivables or debtor balances is high in motor vehicle manufacturing industry. Added to this is the loans and advances of firms. Motor vehicles sector has the highest average of loans and advances. The growth rates in receivables or debtors, however, differ among the sectors as observed in the case of the financial variables.

Motor vehicles manufacturing industry is the largest saver among the constituent sector in the engineering industry because the average value of its investment is at a higher value.

As regards the size of cash holdings, motor vehicle manufacturing sector again has the highest average than others. Ferrous products industry has the low average value of cash balance.

6.3.3 CURRENT LIABILITIES AND ITS COMPONENTS

The size of current liabilities is relatively high for the motor vehicles sector. Trade dues of this sector is the highest compared to
## APPENDIX - 1 (E)

### TOTAL ASSETS: ELECTRICAL EQUIPMENTS MANUFACTURING INDUSTRY

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### NET FIXED ASSETS: FERROUS INDUSTRY

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other sectors. Electrical equipments manufacturing sector is yet another major user of trade dues. However, when it comes to bank borrowings, ferrous products sector is the major beneficiary. It is evidenced by the larger average of bank borrowings for this sector.

6.3.4 NET WORKING CAPITAL AND TURNOVER

Electrical equipments and machinery sectors have higher average figures of net working capital. Motor vehicles manufacturing and electrical equipments manufacturing sectors have higher average sales turnover.

6.3.5 STRUCTURAL ANALYSIS OF WORKING CAPITAL

A time series analysis of the structure of working capital was done by selecting six components. It led to the following findings.

6.3.5.1. Electrical equipments industry has the highest percentage of total assets in the form of current assets and foundry industry has the lowest percentage. Current assets dominate the total assets in the asset structure of the engineering industry.

6.3.5.2. Cash as a percentage of total current assets has decreased over the study period.

6.3.5.3. A consistent decrease in the inventories as a percentage of total current assets has been observed during the study period.

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6.3.5.3. Debtors level has shown mixed trend across the engineering industry. Loans and advances dominate the asset structure in electrical equipments manufacturing sector and foundries sector.

6.3.5.5. Motor vehicles manufacturing firms had larger percentage of their assets in the form of investments. On the contrary, ferrous industry had the lowest proportion of its total assets in investments.

6.3.6. OPERATING CYCLE TIME

Based on the balance sheet data and income statement data, the operating cycle time was computed. It is found that machinery sector has larger raw material storage period, work in progress period. Ferrous and foundry sectors possess longer finished goods storage period. Debtors collection time is high in electrical equipments sector. Creditors payment period is high a foundry industry. The analysis showered a higher overall operating cycle time (net) for the ferrous products segment.

6.3.7 TREND EQUATIONS

The explanatory power of trend equations developed for the various financial variable is considerably high except a few cases where the models were found to be less significant.
6.3.8 WORKING CAPITAL FINANCE

Automobile manufacturing sector uses trade credit as a major source of financing than the other industrial sectors. The use of trade credit as a form of financing does not show much variations over the study period.

Ferrous products industry uses a greater proportion of bank borrowings to finance its current assets. There is a consistency in the use of bank borrowings in the study period.

Provisions constitute a smaller proportion of current assets in the engineering industry.

Industries which use long term funds for working capital have a positive net working capital. The percentage of these long term sources in current assets is 70 percentage which is a higher ratio. These sectors depend on bank borrowings to a lesser degree. Machinery manufacturing industry and electrical equipments manufacturing sectors have extensively used ling term sources of funds.

6.3.9 REGRESSION RESULTS

The inter relationship between key working capital variables was examined by applying regression analysis. The results of regression lead to the following conclusions:

6.3.9.1 Current assets: The level of current asserts depends to a greater extent on the level of sales.
6.3.9.2 Net working capital: In majority of the sub groups of engineering industry it was found that the amount of net working capital is influenced by the amount of sales.

6.3.9.3 Inventories: Inventories depend to a greater extent on the level of sales. This is same for all the sectors within the engineering industry.

6.3.9.4 Trade credit: The amount of trade credits (trade dues) depends on the level of sales.

6.3.9.5 Bank borrowings and Sales: Excepting the motor vehicle manufacturing industry, the inter relationship between bank borrowings and sales was found to be significant, for all the industry groups.

6.3.9.6 Bank borrowings and Inventory: Bank borrowings as a source of financing inventory was found to be a major influencing factor. The relationship was found to be statistically significant in the analysis.

6.3.9.7 Trade dues: Equally important source of financing inventory was found to be trade dues. The interrelationship between inventory and net working capital is also strong.

6.3.10. LIQUIDITY – PROFITABILITY INTERRELATIONSHIP

The study aimed at relating liquidity with profitability and turnover of the firms. The relationship of turnover ratios with that of overall profitability and margin on sales was also examined as a supplementary analysis.
Liquidity management was examined through an analysis of financial ratios. Despite their limitations that arise from the financial statements, the ratios provide a bird’s eye view of the liquidity position. Three groups of ratios — Liquidity ratios, Asset turnover ratios and Profitability ratios — were used in the present research.

6.3.10.1 Summary of financial ratios. There was pattern in the behaviour of these ratios across the sub sectors of the engineering industry. Ferrous and motor vehicle manufacturing industry which scored low on profitability ratios indicated lower liquidity ratios. Machinery sector showed higher profitability as well as higher liquidity ratios. Only the foundry sector showed low profitability ratios and high liquidity ratios.

6.3.10.2 Liquidity and profitability: Correlation analysis showed that the inter relationship between liquidity ratios and profitability ratios Profitability ratios are not significant in electrical, motor vehicles manufacturing sectors. Foundry and ferrous sectors showered significant associations.

6.3.10.3 Liquidity and Turnover: Asset turnover ratios and liquidity ratios were found to be not significant in two cases: machinery and motor vehicle manufacturing sectors. However, it was significant in the other sectors.
6.3.10.4 Impact of Profit margin and Asset turnover: Machinery sector's overall profitability is mostly influenced by profit margin rather than asset turnover. This is shown by the significant association of profit margin ratio and insignificant association of turnover ratio against the overall profitability ratio.

On the contrary, the ferrous sector results shows that the asset turnover is significant than profit margin in influencing overall profitability. Foundry, electrical equipments and motor vehicle manufacturing sectors showed that the asset turnover as well as profit margin impact on the overall profitability in a significant manner.

6.4 SCOPE FOR FUTURE RESEARCH

Working capital related issues have been investigated in this study by taking only the engineering industry data. However, scope exists for future research in a cross sectional comparison of several industry groupings. Attempts can also be made to enlarge the scope of this research by considering the cash flow statement data so as to bring out the role of operating cash flows, investment and financing cash flows.
6.5. CONCLUSION

Working capital management envisages the need for better management. Whatever may be the type of industry, a planned working capital management advances for improvement in financial aspects. Due to industrial recession globally, each one are concentrating on core industries. To relieve from the recession every country is taking their own policies and procedures.

The profitability-liquidity linkage among the corporate sector in India especially in engineering industries, depends upon the working capital base. The main aim of engineering industries should be on working capital forecast, to ensure industrial development and for the betterment of standard of living of the general public.