

CHAPTER 6
SUMMARY
AND
CONCLUSIONS

Cotton textile is one of the oldest, largest and firmly established industries in the organised industrial sector in India. This industry assumes national importance by virtue of its size, output, employment and exports. About 10 per cent of the total number of factories in the country are in the textile sector contributing about 20 per cent of the total industrial output. This industry provides direct employment to nearly 20 million people, besides providing indirect employment to several millions of people in the unorganised sector. Its share in the total value of exports is nearly 38 per cent.

The growth of the cotton textile industry over last several years had been phenomenal. The total mills in the organised sector had increased from 378 units in the year 1951 to 1166 units in the year 1994 registering an average annual growth rate of 4.85 per cent. Out of these, the

number of spinning mills have increased from 103 units with an installed capacity of 11 million spindles in 1951 to 896 units with more than 28 million spindles in 1994. As against this, the number of composite mills have reduced from 275 units in 1951 to 270 units by 1994.

Though the cotton textile industry in india has witnessed enormous growth in terms of number of mills, installed capacity, etc., the performance of the industry has been extremely unsatisfactory as the net profit margin ranged between 0.32 per cent and 7.06 per cent during 1985-86 to 1993-94. The unsatisfactory performance is due to the presence of various financial and non-financial problems. Among the financial problems imprudent management of working capital is mainly responsible for the poor performance of the industry. The authorities of the financial management are also of the view that inefficient and ineffective management of working capital not only leads a business firm to earn low rate of return on capital employed but also compels it to sustain continuous losses.

Present Study and Selection of Sample:

The present study focusses attention on the evaluation of the management of working capital in the selected public and private sector spinning mills in the Rayalaseema region of Andhra Pradesh. Six units, two from public sector and four from private sector, have been selected for the study, out of a total of thirteen units in Rayalaseema region.

The study of working capital management in the selected units assumes importance because of the high proportion of current assets in the assets structure of these units. On an average, about 68 per cent of total assets in public sector units constituted current assets, while the same was about 57 per cent in the private sector units. Further, the public sector units have been incurring losses in most of the years under study. Eventhough the profitability of private sector units is better than public sector units, it is also not satisfactory. Hence, management of working capital has a greater role to play in improving the performance of the selected units.

The following are the units selected for the study.

Private Sector units:

1. Super spinning Mills-B unit (SSM-B)
2. Cuddapah Spinning Mills (CSM)
3. Madanapalle Spinning Mills (MSM)
4. Yemmiganur Spinning Mills (YSM)

Public Sector units:

5. Anantapur Cotton Mills (ACM)
6. Tirupathi Cotton Mills (TCM)

Objectives of the Study:

The overall objective of the study is to analyse the size, liquidity and structure of current assets and evaluate the efficiency of working capital management and its financing pattern in the selected units. In particular, the study makes an indepth analysis of the management of inventory, receivables and cash by analysing their size, structure and operational adequacy aspects with a view to evaluate the degree of the efficiency with which each of these components was managed.

Scope and Period of the Study

The present study is restricted to evaluate the efficiency of overall management of working capital and its components, such as inventory, receivables and cash in the selected units of the cotton textile industry in the Rayalaseema region of Andhra Pradesh. This study is confined to the period from 1985-86 to 1994-95.

Methodology

a) Data Base: The main sources of data are the information published in the annual reports of the selected units. Other useful information has been drawn from Reports of Reserve Bank of India, Reports of Ministry of Textiles, Reports of Centre for Monitoring Indian Economy, Capital Market, Business India, Business World, Business Today, etc. In order to understand various management policies towards working capital management in the selected units, informal discussions with various managerial staff were also held.

b) Tools of Analysis: For the purpose of analysis, various accounting and statistical techniques were used. Among the Accounting techniques, Ratio Analysis and Funds Flow Statement are the two prominent techniques employed in the study. Among the statistical techniques, the Arithmetic

Mean (\bar{x}), Coefficient of Variation (c.v.), Test of Significance (t - test), Trend Indices, Simple Growth Rates, Coefficient of Correlation (r), Coefficient of Determination (r^2) and Linear Regression equation have been used for the purpose of analysis.

The main findings of the present study are summarised below.

CHAPTER - 2

Working Capital Management-Overall Analysis:

Working capital is essential for the smooth running of any business. In the absence of adequate working capital, the fixed assets can not be utilised properly. As already stated, inadequate working capital not only leads to production interruption, but also impairs liquidity. On the other hand, excess working capital impairs the firm's profitability eventhough it strengthens the liquidity. Therefore, the amount of working capital in a firm should be neither more nor less than what is required. As the profitability and liquidity of a firm are directly influenced by the way its working capital is managed, the main objective of working capital management is to achieve a trade-off between liquidity and profitability. These aspects have been examined in this chapter.

In the cotton textile industry, it was found that, on an average, nearly 60 per cent of total assets was in the form of current assets. The growth rate of current assets have recorded 436.79 per cent over the base year. Among the selected units, on an average, TCM and YSM have higher proportion of current assets and CSM and SSM-B have lower proportion of current assets compared to the industry. The other two units (MSM and ACM) have more or less the same proportion of current assets compared to the industry. However, in all the selected units, the proportion of current assets to total assets has been showing an increasing trend during the study period. The rate of increase was the highest in ACN and the Lowest in TCM. This was due to high rate of growth in current assets than that of to fixed assets. This unhealthy trend in the size of current assets has resulted in low profitability in the selected units, especially in public sector units, which have been incurring losses continuously. It was also observed that the growth in current assets of the selected units was not in tune with the growth in sales in most of the years under study.

In spite of high level of investment in current assets in the selected units, it was observed that the management of liquidity in these units was not on sound lines. Among the ratios, which indicate the liquidity position (current ratio, quick ratio and cash position ratio), it was found that only current ratio was more than the norm, on an average, in all the selected units, except in ACM. The quick ratio and cash position ratio which are the better indicators of liquidity position were below the norm in most of the years under study. Though in the initial years of the study period the industry could maintain adequate level of quick ratio, in recent years it was less than the norm. Individually, the quick ratio of all the selected units was below the norm in most of the years under study. This was due to high proportion of inventory in the current assets of the selected units, which has adversely affected their liquidity position. The cash position ratio, which was just 0.13 times, on an average, in the industry also revealed that the selected units have failed in maintaining adequate level of cash to meet its short term maturing obligations. In particular, the cash position was tight in the public sector units, where in most of the years cash position ratio was just 0.01 times or less than that level.

The composition analysis revealed that the major element of current assets was inventory (57.31 per cent) followed by receivables (36.69 per cent), cash (4.51 per cent) and other current assets (1.49 per cent), on an average, in the industry. In all the selected units, more or less the same composition could be observed, except in TCM, where the proportion of receivables dominated the current assets structure. Among the selected units, SSM-B and TCM have accounted for the highest and the lowest proportion of inventory.

The current assets turnover ratio, which indicates the overall efficiency of utilisation of the investment in current assets, revealed that in no year the industry could achieve more than 3 times of turnover. In case of individual units also more or less the same situation existed. The net working capital turnover ratio, which has been used to know the real efficiency in the utilisation of investment in working capital, increased from 3.75 times to 5.61 times in the industry during the study period and on an average, it was 4.40 times. Among the selected units, in three units (TCM, SSM-B and MSM) this ratio was below than the industry, on an average. Eventhough the average ratios of the other units (ACM, YSM and CSM) were more than the industry, on an

average, a declining trend was observed in CSM. Therefore, it can be concluded that the management of the selected units have not been sufficiently active in the utilisation of overall current assets as well as working capital.

Correlation analysis revealed a high degree of correlation between current assets and sales both at the industry and at the individual unit level. Regression equation revealed comparatively high value of parameter 'b' in CSM and TCM, which indicates high sensitivity of current assets to changes in sales in these units. Though the value of 'b' was the highest in CSM, its negative value of parameter 'a' indicates that it could reduce the size of current assets to that extent. Comparatively high value of 'a' in TCM, MSM and YSM indicate their inability in reducing the size of current assets to that extent. On the whole, it may be concluded that the selected units have to put in serious efforts to control their investment in current assets.

The analysis of financing of current assets revealed that the industry has heavily depended on long term sources, which also included bank borrowings, to finance major portion of current assets. Individually, all the

selected units, except ACM, have been following the same conservative policy. This implies that the industry has been giving much importance to the liquidity at the cost of profitability.

The utilisation of bank credit in the selected units when compared with the maximum permissible bank credit suggested by the Tandon Committee revealed that only one unit (YSM) has exceeded the limit as per the first method. However, the excess borrowings were recorded in ACM, CSM and MSM as per the second method. Both SSM-B and TCM have exercised an effective control on bank credit and remain within their limits throughout the study period. On the whole, it may be said that the utilisation of bank credit is not ideal and has not been kept under control in most of the units under study. Hence, YSM, ACM, CSM and MSM are required to reduce the level of bank borrowings as a source of working capital finance even to satisfy the second alternative suggested by the Tandon Committee. An ideal situation would be a gradual shift of the units to the third method of financing under which they will have to finance from their own sources the entire core current assets plus a minimum of 25 per cent of the balance of current assets, determined on the basis of norms laid down for inventories and receivables.

There is no escape for these units from their present position but to strengthen their financing from long term internal sources further.

CHAPTER - 3

Inventory Management

Inventory occupied the first place in the composition of current assets in all the selected units, except TCM. Its proportion averaged about 58 per cent in the industry and fluctuated between 48.48 per cent and 65.31 per cent during the study period. Among the selected units, the inventory proportion was the highest in SSM-B (72.78 per cent) and the lowest in TCM (38.78 per cent), on an average.

In order to know whether the investment in inventory is adequate or excessive two ratios, namely, inventory turnover ratio and ratio of inventory to net working capital were used. The inventory turnover ratio declined from 4.40 times to 3.87 times in the industry. Same trend was observed in the case of the individual units also. This indicates that the level of inventory in the selected units was very high and has been showing increasing trend. As inventory turnover ratio does not clearly indicate the extent of over investment in inventory, it was supplemented

by the ratio of inventory to net working capital. This ratio was 111 per cent, on an average, in the industry which was more than the norm (75 per cent). All the selected units, except TCM, have high level of inventory to net working capital compared to the norm. Though the average ratio of TCM was less than the norm, its inventory level in the recent years exceeded the norm. On the basis of both these ratios it can be concluded that the inventory levels were fairly high in all the selected units.

In order to know the components of inventory which are carried excessively, the analysis of the structure of inventory in the selected units was made.

Structural analysis revealed that raw materials occupied first place. Its proportion increased from 42.40 per cent to 60.48 per cent in the industry. Among the selected units, SSM-B, MSM, ACM and TCM, on an average, carried high proportion of raw materials inventory compared to industry. The operational adequacy of raw material inventory which was increased in terms of months' value of consumption revealed that all the selected units, except YSM, had exceeded the safe limit of two months requirement of raw materials in stock suggested by the Tandon Committee.

The proportion of work-in-process inventory fluctuated between 9.17 per cent and 15.75 per cent in the industry. Among the selected units, high proportion of work-in-process inventory could be observed in CSM and YSM compared to industry. Measured in terms of months' cost of production, the industry has succeeded in controlling work-in-process inventory to the acceptable level, i.e., 0.50 months' cost of production. However, individual units like CSM and SSM-B have carried more than the acceptable level, on an average, during the study period. Therefore, these units have to reduce their work-in-process inventory by reducing their manufacturing cycle.

The proportion of stores and spares was 8.36 per cent in the industry, on an average, during the study period. Among the selected units, YSM and TCM have high proportion of stores and spares inventory, on an average, compared to industry. Measurement of stores and spares inventory in terms of months' value of consumption revealed that it fluctuated between 6.85 and 13.70 months' value of consumption in the industry registering an average of 9.94 months' value of consumption. This was considerably higher than the norm of 2 months' requirement. Among the selected units also high level of stores and spares inventory could be

observed during the study period. In CSM and MSM, more than 21 months' requirement could be observed, on an average. Therefore, it can be concluded that the selected units have been carrying high level of stores and spares inventory.

The proportion of finished goods inventory has fluctuated between 12.45 per cent and 29.73 per cent registering an average of 21.67 per cent in the industry. The proportion of finished goods is next to raw materials in the total inventory. Individually, the proportion of finished goods inventory was more in YSM and ACM compared to industry. Measured in terms of months' value of sales, the industry carried 0.71 months' value of sales, on an average, which is lower than the acceptable norm of one month value of sales. The same situation could be observed among the individual units also during the study period. Thus, no overstocking existed in this component. This was due to the high level of demand for the yarn produced by the selected units.

From the above observations, it can be concluded that the size of inventory was excessive in the selected units mainly due to high level of raw material and stores and spares inventory. This has adversely affected their

liquidity position. The profitability of the units has also been affected due to additional investments blocked up in these components.

The correlation analysis revealed a high degree of correlation between inventory and sales both at the industry level and units level, except in ACM. Further, regression analysis revealed that comparatively high value of parameter 'b' in CSM, ACM, TCM and SSB-B indicates high sensitivity of inventory of these units to changes in sales. The negative value of parameter 'a' in SSM-B and CSM indicates their advantageous position to that extent and the highest positive value in MSM indicates its disadvantage position. This analysis supports our earlier conclusion and points to the need for effective control on the inventory in the selected units.

Thus, the problem of inventory in the selected units is related more of overstocking rather than understocking. Since the major raw material required for the selected units is raw cotton, the production of which is seasonal and also subjected to high fluctuations due to changes in the climatic conditions, it is inevitable for the selected units to maintain high level of safety stocks for

their uninterrupted production operations. The overstocking in raw material to a large extent can be reduced by improving the relationships with the suppliers of raw cotton. The overstocking in stores and spares which is a maintenance inventory was mainly because of existence of highly depreciated machinery in the selected units. It can be reduced by replacing the old and worn out machinery on the one hand, and developing ancilliary units which will take up the maintenance and repair works and burden of carrying the inventory of stores and spares on the other.

CHAPTER - 4

Receivables Management

After inventory receivables constituted a major portion in the current assets in the industry. Its proportion was 37.95 per cent, on an average, and varied between a minimum of 32.20 per cent and a maximum of 48.41 per cent in the industry during the study period. Among the selected units, the highest and the lowest proportions were recorded in TCM and SSM-B respectively. In most of the units, its proportion has been showing decreasing trend during the study period.

To know the efficiency of receivables in generating sales, the ratio of receivables to sales has been calculated. This ratio revealed that receivables constituted a high proportion of sales in the industry (21.73 per cent on an average) thereby indicating that its use was woefully low. The lowest ratio of receivables to sales in SSM-B revealed that it was able to have comparatively good utilisation of receivables, whereas the highest ratio in TCM showed very poor performance on this account.

The structural analysis of receivables points out that, contrary to the policy of making minimum investment in loans and advances, the private sector units invested much of the amounts of receivables in this component. On an average, loans and advances amounted to 64.21 per cent of receivables in the private sector. Quite an opposite situation was observed in the case of public sector units, which have higher proportion of the debts (75.12 per cent on an average) than the loans and advances (24.88 per cent on an average). This indicates that the public sector units have been successful in making minimum investment in loans and advances.

Slow turnover of debtors (6.94 times on an average) and the resultant high collection period (73 days on an average) in public sector revealed that the debtors were not properly managed in these units. This indicates lack of commercial prudence of these units in granting credit. Comparatively a better situation existed in private sector which have recorded a debtors turnover of 29.01 times and a collection period of 20 days on an average. In spite of low debtors turnover and high collection period in public sector units, the ageing schedule revealed that the proportion of the debts outstanding over six months was just 1.61 per cent compared to 2.89 per cent in the private sector.

A high degree of correlation existed between receivables and sales both in the industry and in the individual units. Among the selected units, except YSM, all other units have high degree of correlation between these variables. High value of parameter 'b' in CSM and TCM in regression equation indicates high sensitivity of receivables in these units to changes in sales. But, CSM with its negative value of parameter 'a' is in an advantageous position against TCM which has highest positive value of parameter 'a'. This analysis points out to the need for an effective control on the investment in receivables in all the selected units.

On the whole, it can be said that the efficiency of debtors management in public sector units is relatively poor. However, this inefficiency can not be totally attributed to the individual units as they are compelled to sell their output to the composite mills under the perview of their parent company (NTC), most of which are sick. Thus, low debtors turnover is an inevitable outcome in these units. One of the important solutions for public sector units in the regard is to open up their sales to private composite mills and improve their debtors turnover by insisting on prompt payment. Further, to promote collection efficiency, the periodical reports of the overdues may be prepared by the concerned departments for taking suitable action.

On the basis of high ratio of receivables to sales, it was earlier concluded both the public and private sector units have not succeeded in utilising receivables as an effective tool for generating sales. But important observation is that, while the loans and advances in private sector were mainly for improving their production capacities, the same in public sector were mainly for acquisition of raw materials and advances to employees. Thus, loans and advances in private sector were given for productive purposes, while the same is for unproductive purposes in

public sector. The investment in loans and advances of these units can be minimised to some extent by insisting on the payment of cost of credit on loans and advances. Efforts should also be made by the public sector units to convince outside agencies not to insist on blocking up of heavy funds with them in the form of deposits for long spells.

CHAPTER - 5

Cash Management

In order of importance, cash occupies third place among the various components of current assets in the industry. Its proportion in current assets was 4.51 per cent, on an average in the industry. Among the selected units, the proportion of cash held was the highest (6.58 per cent) in YSM and the lowest in ACM (1.58 per cent), on an average, during the study period. High rate of fluctuations was observed in the proportion of cash to current assets. The same position was also revealed by cash to sales ratio during the study period as it fluctuated between a minimum of 0.74 per cent and a maximum of 6.67 per cent in the industry during the study period. On an average, it was the highest in YSM (3.28 per cent) and the lowest in ACM (0.71 per cent). Moreover, this ratio also showed high fluctuations both in the industry and in the selected units. This indicates that

the selected units have not followed any specific policy regarding the size of cash during the study period.

The composition analysis revealed that cash balance in this industry represent cash in hand, cash at bank, cheques in hand and cash in transit. Out of these modes of keeping the cash, cash in bank in the form of current account and deposit and cash in hand are the most popular and constituted about 75 per cent of cash balance in the industry. The proportion of cash kept in bank in the form of deposits, which is a desirable mode, was only 20.86 per cent, on an average, in the industry. Among the selected units, private sector units kept high portion of cash in bank deposits (33 per cent) compared to public sector units (6 per cent), on an average, which indicates the better cash management in the private sector.

The analysis of operational adequacy of cash balance revealed that the cash balance held in the industry was inadequate because the maximum coverage was only 15 days operational requirements, on an average. Moreover, this ratio has been showing a decreasing trend. In both the public sector units, the cash balance held was much below the operational requirements. The cash is sufficient for

only 3 days operational requirements in ACM while the same was 21 days in TCM, on an average. The coverage of operational expenses by the cash balance held by private sector units ranged between a minimum of four days in SSM-B and a maximum of 12 days in YSM, on an average. Thus, it can be concluded that operational adequacy of cash in the selected units was very poor.

The analysis of liquidity in the technical sense was measured by current ratio, quick ratio and cash position ratio. This analysis revealed that both quick ratio and cash position ratio, which are qualitative ratios, were less than the acceptable norm both at the industry and unit level in most of the years under study. Therefore, it can be concluded that the technical liquidity in the industry was unsatisfactory. The actual liquidity, which was measured in terms of current liabilities coverage ratio (net profit to current liabilities ratio) and cash flows to current liabilities ratio also revealed an unsatisfactory liquidity position in the industry. In the public sector units, due to losses in most of the years under study, both these ratios turned negative. In private sector units slightly a better position could be observed in this regard.

The fund flow position of the industry was also not satisfactory as the funds from operations could not cover the working capital and fixed capital requirements in most of the years under study. Among the selected units, the private sector units have succeeded in generating adequate funds from operations to finance its working capital requirements and also a part of fixed capital requirements at least in some of the years. The public sector units heavily depended on external sources even to finance their working capital requirements in most of the years.

Thus, the problem of cash management in the selected units was not of excessive cash balance but inadequate cash balance. This points to the need for streamlining cash inflows and outflows in these units by improving their debt collection efficiency, sticking to the schedule of payment, stretching the payment wherever possible and by reducing their investment in inventories. Effective measures in this direction will not only improve their liquidity position but also reduce their dependence on external borrowings for meeting their operational requirements.

The overall analysis of working capital management revealed that the selected units completely missed the efficiency of the use of working capital which happens to be one of the important conditions for running a business firm into adequate profits. While the sizeable investment in current assets has affected the net profit margin, lack of quality in the composition of current assets affected the liquidity. The conservative policy of the units in financing current assets and excess dependence on bank credit, low rate of turnover of various components of current assets points to an urgent need to be brought about in the attitude of the management of these units towards working capital.

Strengthening of internal resources, adopting a policy of financing only permanent working capital by long term funds, observing the ideal norms suggested by the Tandon Committee regarding the extent of reliance on bank credit, bringing about an effective coordination among the key departments like purchasing, sales, production and finance in order to reduce the sizes of different components of current assets - are some of the measures to be taken by the selected units to improve their overall efficiency of working capital management.