CHAPTER - VIII

OBSERVATIONS AND CONCLUSION

It has been stated in course of study, that profitability of a firm, among other factors, depends largely upon efficient management of Working Capital. As such, the objective of the study had been to enquire into the position of working capital management in the five selected state owned and state controlled public sector enterprises under the Government of West Bengal which had been given the organisational form of government companies under section 617 of the Indian Companies Act, 1956. To be more precise, the specific purpose of the study had been to examine, on an exploratory basis, how far the low performance profile of the selected five state owned and state controlled enterprises of the Government of West Bengal, viz, The Durgapur Project Ltd., The West Dinajpur Spinning Mills Ltd., and West Bengal Electronics Industry Development Corporation Ltd. could be attributed to the inefficient management of Working Capital in them, among many other factors.

Accounting profitability in an operating enterprise is measured with the help of a cluster of ratios relating to sales and investments. The important ratios relating to sales are:

1. Gross Profit margin to sales
2. Net Profit margin to sales
3. The total operational expenses to sales

These ratios
relating to sales, as is known to all, explain how gross profit and net profit are related to sales on the one hand and to the costs and expenses on the other.

Our analysis of the profitability position of the selected five state owned and state controlled public sector undertakings in the State of West Bengal revealed that the performance of these Companies had been deplorable in terms of Gross profit to Sales ratio, Net Profit to Sales ratio and also in terms of cost of goods sold to sales ratio. Incidentally, it might be mentioned that the average gross profit to sales ratio in these undertakings over the period of present study covering the years between 1980-81 and 1989-90 had been (-) 0.31. When Gross Profit to Sales ratio was in the negative, one could not expect Net Profit to Sales ratio to be positive. As such, the average Net Profit to Sales ratio in the selected five state owned and state controlled enterprises had also been found to be negative to the extent of (-) 0.85 over the period under analysis. When cost of goods sold to sales ratio of these five undertakings were analysed, the same was found to be abnormally high with an average of 195.34 %.

The important profitability ratios relating to investment are: (i) Return on assets; (ii) Return on capital employed; and (iii) Return on shareholders' equity. When the objective of the third one is said to be narrow as it aims at measuring only return on funds contributed by the equity holders of a Company, the first two ratios are used to measure the efficiency in the
use of overall financial resources of a firm which remain committed to different types of fixed assets and current assets (Working Capital) among others. Investment in fixed asset is not open to manoeuvrability in the short run. But there is no such constraint in respect of investment in current assets, i.e. Working Capital because of its very nature. Investment in current assets, i.e. Working Capital, may be changed and varied even in the short period. This attribute of flexibility in the use of Working Capital becomes an important factor in improving the profitability of a firm through the efficient management of Working Capital.

For analysing the profitability position of the five companies selected for the study, we also worked out the profitability ratios on investment in these Companies. In particular, we worked out the ratio of Net Profit after interest and tax to Total Assets, the ratio of Return on Capital employed and also the ratio of Net Profit to shareholder's equity. From the aforesaid exercise, it had been found that profitability position in these companies had been far from being satisfactory. Incidentally, it may be mentioned that the ratio of Net Profit after interest and tax to the total assets had been positive only in the cases of two companies, viz. Durgapur Project Ltd., by a very small margin varying between 0.03% (WEBEL in 1981-82) and 4% (DPL in 1982-83). In the rest of the Companies under the present study, the ratio of Net Profit after interest and tax to Total Assets had been negative in all the years under analysis. As a result, the average ratio of Net Profit after interest and tax to total assets of these companies could not but
be negative to the extent of (-) 31.71% over the period under study.

When analysis was done in terms of ratio of Operating Income to capital employed, the same was also found to be positive only in the cases of two companies, viz, Durgapur Project Ltd. and West Bengal Electronics Industrial Development Corporation Ltd. And that too only for some years. In the case of DPL, in the years 1981-82 to 1983-84 and also in the year 1987-88 and in the case of WEBEL, in the years 1980-81, 1981-82 and 1987-88 to 1989-90.

In consequence, the average of this ratio for the five companies over the period under analysis could not but be found negative to the extent of (-) 13.18%.

The third criteria selected by us for the assessment of the profitability position of the selected companies was return on shareholders' equity. The analysis of the same revealed that this particular ratio was positive in the case of Durgapur Project Ltd. in the year 1982-83 to the extent of 15.13% and in the case of West Bengal Electronics Industrial Development Corporation Ltd. in the years 1980-81, 1981-82, 1988-89 and 1989-90 remaining within the range of 0.12% to 0.32%. In the rest of the companies under study, viz, Durgapur Chemicals Ltd., The Kalyani Spinning Mills Ltd., The West Dinajpur Spinning Mills Ltd., Net Profit on shareholders' equity did never turn into a positive figures. In consequence, the average of this ratio for the selected five companies had been found to a negative figures of (-) 87.73%. It may, therefore, be said
that operation of the selected five companies over the period of ten years between 1980-81 and 1989-90 instead of generating any new fund rather resulted in the erosion of the equity base of the companies to the extent of (-) 87.73% on an average.

In explaining the bearing of working capital management on the profitability of a firm it was stated in the study, that the measurement of profitability is \[ \frac{\text{Net Profit}}{\text{Capital employed}} \] which is derived from \[ \frac{\text{Net Profit}}{\text{Sales}} \times \frac{\text{Sales}}{\text{Capital employed}} \], when capital employed is construed as fixed capital plus Net Working Capital. On the basis of this definition of capital employed, the second part of the ratio becomes \[ \frac{\text{Sales}}{\text{Fixed Capital} + \text{Net Working Capital}} \].

Scope for increasing efficiency of fixed capital is limited, as one of the major factors for the same is technological changes and their adoption which is slow to occur. Therefore, profitability of an enterprise, depends largely upon efficient management of its working capital.

The first part of the ratio is \[ \frac{\text{Net Profit}}{\text{Sales}} \]. This can be written as \[ \frac{\text{Sales} - \text{Cost of Sales}}{\text{Sales}} \] presuming that there is no other expenses. This ratio can be increased either by increasing sales or by reducing cost of sales. Increase in sales is associated with increase in variable costs. The components of these variable costs are expired costs i.e. expenses in respect of direct and indirect raw materials consumed in the production, payment for labour and payment for variable overheads, volume of which can be
effectively reduced through efficient management of working capital. Here in lies the bearing of Working Capital Management on the profitability of an enterprise. As such, for maintaining and improving profitability of an enterprise, its Working Capital has to be managed efficiently.

The first step in the efficient management of working capital is the correct estimation for the same, so that, investment in working capital is neither in excess nor inadequate. Inadequate investment in working capital is not desired as it leads to low liquidity, low profitability and under utilisation of production capacity. Similarly excess investment in working capital is to be avoided as it leads to idle working capital, excess cost and low profit. When causes of inadequate investment in working capital are shortage of liquid fund, under investment on inventories and receivables etc., excess investment in working capital arises from over investment in inventory, over investment in receivables, holding of excess cash balances and over investment in marketable securities. If excess investment in working capital arises from over investment in items of current assets like inventory and debtors, it may even impair liquidity of the business.

The determinants of the working capital requirements of a firm are varied. The varied factors for the purpose of analysis are generally classified into two broad groups, viz, internal and external. Internal factors are mainly the turnover rates relating to inventory, receivables, payables and the credit standing of the firm. The higher the turnover rates, the better the credit
standing, the lower would be the requirements in respect of investment in working capital. Leverage analysis also helps significantly in rationalising over all investment in working capital.

The external factors influencing investment in working capital are the nature of the business, time lag in the manufacturing process, range of products manufactured and the cyclical fluctuations of the business. The other factors influencing working capital investment of a firm are contingencies, profit earned, cash-flow, depreciation and dividend policies, availability of transport and communication facilities and the Government policy decision regarding business.

In the functional area of financial management, working capital management is accorded a distinct place. The reasons for this distinctive place of working capital management are, its share in the composition of total assets, inability to substitute its holding in any other forms and close relationship between growth in sales and increase in current assets holding.

It has been stated in the present study, that the management of Working Capital has two aspects, viz, structural and financial. In the structural side, the problem is essentially one of predicting the precise level of investment in working capital and its optimum allocation among different components of current assets.

The precise level of investment in Working Capital depends on two factors, viz, managements attitude towards risk
and factors that influence the requirement of investment in different components of current assets for supporting a given volume of output. As developed by E.W. Walker, there is also a set of guiding principles in this respect known as Four part theory of working capital management. These principles underscore the element of risk associated with the changes in the volume of investment in Working Capital along with the changes in the volume of sales, the basis for increasing investment in each component of Working Capital, risk behavior associated with use of different sources of finance for Working Capital purposes and lastly, the importance of matching of payables with the flow of internally generated funds in the interest of solvency and risk associated with the deployment of funds for financing Working Capital investment.

With these in the background, the present study revealed that so far as the investment in working capital in the selected five companies under the ownership and control of the State Government is concerned, the Working Capital investment showed an increasing trend in relation to the base year, i.e. 1980-81 except in one company, namely, West Dinajpur Spinning Mills Ltd. In this company, in two successive years, viz, 1988-89 and 1989-90, the working capital investment showed a decreasing trend. The increasing trend in working capital investment in the other companies continued unabated even when net working capital in some of these companies turned into negative. This exposed the companies to the high degree of risk since negative working capital denotes diversion of short term funds for investment in long term assets.
For making the trend analysis of working capital investments in the companies under study the statistics tool of least-square method had also been used in the present exercise. It revealed that trend value of working capital in all the companies under analysis differed significantly, both in the positive or negative. This suggests that there is scope for improvement in the quantum of working capital investment in these companies to the relief of at least cost of capital.

Efficient working capital management also depends much on correct forecasting of working capital requirements. The commonly used techniques for the purpose are: The Balance Sheet Approach, The Cash Working Capital Approach or Operating Cycle Approach and The Regression Analysis Method.

The Balance Sheet Approach is simple and less complicated. It had been pointed out in the present study that under this approach, the difference between current assets & current liabilities is taken to be the working capital requirement. From experience, it is now found that though the method is easy to calculate, it cannot lead to correct estimation of working capital requirements as in the estimation, some items are taken into consideration which require no deployment of working funds.

Operating cycle approach, alternatively known as cash working capital approach is another much widely used method for forecasting working capital requirements. Under the approach, the working capital requirements for a period is sought to be determined with reference to the length of the net operating cycle.
and the operating expenses needed for the period. The length of the net operating cycle, is taken to be the number of days involved in the different stages of operation commencing from purchase of raw materials and ending up with collection of sale proceeds from debtors against which the number of days credit allowed by suppliers is adjusted. The number of operating cycle in a period is determined by dividing the number of working days in an accounting year by the length of net operating cycle. Once the number of operating cycle is ascertained, the actual working capital requirements can be calculated by dividing the total operating expenses for the accounting period by the number of operating cycle in that period. Estimation of working capital requirements under operating cycle approach has the distinct advantage of accuracy since non-cash items do not figure in the estimation.

The Regression analysis method is the third approach in the matter of forecasting of working capital requirements. Under this approach, working capital projection is made by establishing the average relationship between sales and working capital and its various components over the past years. The analysis can be carried out through the graphic portrayals such as scatter diagram or through mathematical formula. The relationship between sales and working capital may be found simple and direct, indicating complete linearity. It may be complex in different degrees involving simple line of regression or simple curvilinear regression and multiple regression situations. This method is suitable for simple as well as complex situation.
Investigation on the practices followed for forecasting the working capital requirements in the companies under study, revealed that these companies forecast their working capital requirements under the traditional Balance Sheet Approach. They did never try the Operating Cycle Approach or the Regression Analysis Method for forecasting their working capital requirements. In consequence, there had been mostly over investment in working capital in these companies, to the peril of their cost of funds and profitability. There were also the instances of under investment in working capital as well in some of the companies, under study. In support of this contention, in the present exercise, three tables were prepared viz, 16,17 & 19, depicting working capital requirements in the selected five companies under each of the methods. On the question whether there was over investment or under investment in working capital, in these companies, the point that emerged from the analysis had been that in respect of forecasting the amount of working capital in the companies under study, the position was never the best possible one. And there was ample scope for streamlining the working capital investment in these companies. This would have not only substantially reduced their cost of capital but also could have been a step forward for improving their profitability.

Besides correct forecasting of working capital requirements, in the structural aspects of working capital management, there is also the question of optimum allocation of working capital among its different components.
The different components of working capital are inventory, debtors, bills receivables, Cash & Bank balances, short-term investments, advances and prepaid expenses etc. There is as yet no prescribed quantitative norm about the desirable share of each component in the overall structure of working capital in an operating enterprise. It is only from the analysis of the same that one can identify the importance that each component plays in the overall composition of working capital in a company. This serves well to locate the strategic item of control for effective management of working capital.

In Table 19 to 23, of the present exercise, an attempt had been made to analyse this structural composition of the working capital in the selected sample companies, in seriatim, in order to examine the trend in this regard. The objective had been to locate the strategic item of control for streamlining the working capital management.

Analysis revealed that on the basis of average share, the order of importance of the different components of working capital in Durgapur Project Ltd. had been - Sundry Debtors (35 %), Inventory (25 %), Loan & Advance (17 %), Advances to Contractors (9 %), Cash & Bank Balances (8 %) and other Current Assets (6 %). Therefore, the strategic item of control for effective working capital management in the company had been Sundry Debtors.

In Durgapur Chemicals Ltd. on the basis of average share if each item in the overall composition of working capital, the order of importance of the different components of working capital had
been Inventory (45%), Cash and Bank Balance (21%), Loan & Advances (17%), Sundry Debtors (16.5%) and other Current Assets (0.5%). Therefore, the strategic item of control for effective working capital management in the company had been inventory.

In the West Dinajpur Spinning Mills Ltd., the order of importance of the different components of working capital had been inventory (36%), Loan & Advances (24%), Sundry Debtors (20%) and Cash & Bank Balances (20%). Therefore, the strategic item of control for effective working capital management in the company had been inventory.

Analysis of working capital composition in the West Bengal Electronics Industry Development Corporation Ltd. on the basis of average share of each item in the total current assets of the company showed that strategic item of control for the company had been Loans & Advances accounting for 49% of the total investment in Current Assets followed by Cash and Bank Balances (33%), Sundry Debtors (7%), Inventory (1%) and other items such as Investment Suspense (6%), Research and Development (4%).

In the present exercise it was stated, that, as an indication of effectiveness and efficiency in the management of working capital, the rate of increase in working capital investment in relation to increase in sales could be used as an index for measuring effectiveness and efficiency. Increase in volume of sales causes an increase in investment in working capital. Management of working capital is presumed to be efficient when
rate of increase in working capital investment in relation to increase in sales is less than one. On the basis of this hypothesis, an attempt was made in Table 24 of the present exercise to project the behaviour of working capital in relation to increase in sales in the companies under our study. It revealed that in these companies increase in investment of working capital had been always disproportionately higher than increase in sales. This served to indicate that in respect of allocation of funds for investment in working capital, of the companies under analysis, there was no optimality.

No analysis for the appraisal of effectiveness and efficiency in the management of working capital is complete without an evaluation of an effectiveness and efficiency of the management of the different components that form the working capital (gross) of an operating entity. In the present study, an attempt was, therefore, made, to make a critical analysis of the present level of efficiency in the management of different components of working capital in the selected few public sector undertakings under the ownership and control of the State of West Bengal. The analysis of the published annual reports of the companies under study and also the replies to the questionnaires issued to the selected companies revealed, as already stated, that the important components of working capital in these companies were Inventory, Sundry Debtors, Cash & Bank Balances, Loans & Advances, Advance to Contractors and others.
The study revealed that inventory as a component of working capital accounted for more than 60% of the total investment in current assets in the selected companies. For the purpose of this analysis inventory was presumed to include raw materials, work-in-progress and semi-finished goods, finished goods, stores and spares, miscellaneous goods and others. It was, further, presumed that all these components of working capital need not necessarily be present in the composition of inventory of the companies under study.

As a component of inventory, raw materials is stored to provide for an uninterrupted flow of production to obtain quantity discounts, to gain economy of bulk purchase and to provide against seasonal fluctuation in supply. Stores & Spare Parts inventory are held to provide against sporadic and unpredictable breakdowns. Work-in-progress results from the incompletion of the processing necessary to give final shape to goods before they are ready for sale. Finished goods are held for providing "offshelf" delivery, building up a protective buffer catering to economic production lots and absorption of sales rate changes.

When under investment in inventories, positively retards the rate of return on investment, excess inventory accumulation for making speculative gains is to be cautiously avoided, since inventories represent a major transitional stage in the flow of working capital.

Once rationale for holding different components of inventory had been outlined, it was also stated in the present
study that investment in inventory depends on the average inventory of an item is the safety or buffer stock plus half the order quantity. Investment in inventories not only causes tying up of funds in stock but also leads an enterprise to bear the crashing burden of inventory carrying costs and inventory ordering costs.

The success of inventory control methods depends much upon the efficiency and swiftness of the materials management department in this regard. Materials management is now considered to be a distinct field of study. Empirical studies have found that an efficient purchasing and stores department along with a proper system of indenting and disposal of stocks can greatly contribute to reduction in the size of inventory much to the improvement of profitability of a firm.

As projected in Table 25, the present study revealed that the size of inventory in each of the selected companies as well as their total taken together had a tendency to rise. Between the years 1980-81 to 1989-90 the inventory holding by the selected companies had increased by 2.5 times.

Inventory behaviour in the selected companies had also been analysed in terms of progressive base-year percentage growth. The same as projected in Table 26 of the study, indicated that the pace of growth of the total inventory had been more steep from 1980-81 to 1983-84 as compared to the period 1984-85. What was more interesting is that in the year 1984-85 the
growth in inventory in terms of progressive base year percentage had been negative.

The year-wise volume of sales in the selected sample companies had been analysed and projected in Table 27 of the present exercise in terms of progressive base year percentage of growth of total sales. It was found from the analysis that the rapid rise in the size of the total inventory was much due to increase in sales excepting in the two years namely 1984-85 and 1985-86. Further, the rate of increase in the volume of sales had been higher in the initial years of the present study.

An index of efficiency in the management of working capital in a company, is the sales-inventory relationship in the form of an inventory turnover ratio. A projection of inventory turnover ratio in terms of months value of sales had been attempted in Table 28 of the present study. The same Table disclosed that grand average inventory turnover ratio in the companies under study had been 19.1 months, although the same in respect of individual companies varied widely. This serves well to indicate the unsatisfactory condition in respect of management of overall inventory in these companies.

Efficiency in the management of inventory cannot be properly evaluated without the evaluation of efficiency in respect of the management of each component of the inventory. Evaluation of the efficiency in respect of management of each component of inventory in the present study had been attempted in the
present exercise, first, with a reference to the company-wise analysis of the percentage of each component of inventory in the total inventory. And secondly, with reference to their holding as a component of working capital in terms of months' value of consumption.

The share of raw materials as one of the component of total inventory in the selected five companies under study had been projected on Table 29. It showed that the share of raw materials in total inventory on an average was 21%. Table 30 of the present exercise, had been on the position of raw materials inventory in terms of month's value of raw materials consumption in selected public undertakings over the period between 1980-81 and 1989-90. It revealed that the grand average holding period of raw materials inventory in these companies had been 2.5 months, though the same varied in case of each company from year to year. It was stated in the study that the work-in-progress as a component of inventory had been found any in the four out of the five selected public sector companies. Table 31 of the present exercise had been on the projection of the same in the companies under analysis. It was found from the analysis that the average share of work-in-progress in the total inventory had been 28.3% and in terms of month's value of production as projected in Table 32, the same had been 1.1 month's value of production.

In course of the present exercise it was stated that the manufacturing concern other than engaged in production
against job orders, maintain stock of finished goods to avoid failure in executing orders. Nevertheless, investment in this component of inventory, needs optimisation so that funds are also available for financing debtors and other components of working capital.

Against this background the relative share of the finished goods in the overall structure of inventory in the companies under study had been analysed in Table 33 and in Table 34 of the present exercise. These revealed that the average share of finished goods to the total inventory had been 20.1% and the grand average holding period of the same in terms of months' value of sales had been only 0.6 months.

Another component of inventory is stores and spares that actually ruled in the structure of inventory in the State Government Undertakings. Table 35 of the study had been on the projection of the average share of stores and spares to the total inventory. The present study found the share of the same at 40% out of the total inventory. Share of the stores and spares had been analysed in terms of months' value of consumption in Table 36 of the study. It was found to be 4.7 months' value of consumption. This served to indicate that the selected public sector undertakings under the ownership and control of the Government of West Bengal failed miserably in respect of the management of stores and spare parts inventory.
Miscellaneous goods and others, as a component of inventory in the companies under study comprised items such as medical stores, construction materials, printing & stationery, capital goods, mercury stock of steel, stock of cement and others. The share of the same in overall inventory of the companies had been analysed in Table 37 of the present exercise. Its share in the overall composition of inventory was found to be very insignificant.

From the details that transferred from the analysis of inventory management in the selected state-owned and state-controlled public sector companies in the State of West Bengal, it is clear that either the position of overstocking or understocking prevailed in respect of each and every component of inventory held by them. Overstocking had been highest in stores and spares component of inventory and understocking in the case of finished goods leading to inefficiency in the management of working capital and crisis in their profitability.

Receivable is an important component of working capital. In the cases of the companies under study there had been no exception. The turnover of working capital depends much upon the behaviour of receivables. Receivables arise out of the delivery of goods or rendering of service on credit. For the purpose of the analysis, in the present exercise, receivable had been presumed to include Sundry Debtors, Loan and Advances and Advance to Contractors.
Accounts receivable, the other nomenclature being debtors, arise in the strict sense of the term from the need to finance sales and as such it is current assets just like inventories.

It was pointed out in the present study that the determination of the quantum of investment in receivables is a function of the volume of sales and credit and collection policies pursued by a firm. The behaviour of the customers is another factor which also affects the volume of receivables at any point of time.

Trade acceptances taking the form of 'promisory notes' or 'bills receivables' are often used to finance credit purchases. Trade acceptances are self-liquidating instruments. These can also be discounted before the maturity dates. Receivables arising from periodic adjustments or sales are designated as accrued receivables.

Prepayments arise when payment is made in advance of the receipt or utilization of goods and services. As prepayments represent items to be consumed during the course of business, they are different from typical receivables. Prepaid tax is also considered as an asset chargeable to a latter period. Advances & Loans to employees and officers of the company are also assets and embraced under receivables in the sense that these represent claims of the business for services to be received.
from the recipients. There are, however, good assets only to the extent that the responsibility of the employees or officers can be relied upon.

Given credit terms, receivables uncollected at a point of time is considered a focal point on the efficiency of the collection department. Prompt collection, by the credit and collection department help reducing receivables to the minimum dictated by credit policy and thereby lead to their optimization.

With these in the background in the present study, an attempt was made to evaluate the position of receivables management in the selected five companies under the ownership and control of the Government of West Bengal. As projected in Table 38, the study revealed that the size of receivables in the selected public sector undertakings varied from undertaking to undertaking, from year to year. Further, the size of receivables in each of the selected companies as well as their totals, taken together, in general had a tendency to rise.

When the behaviour of receivables in the selected companies had been analysed in terms of progressive base year percentage of growth, as had been projected in Table 39 of the study, it indicated that the pace of growth of total receivables had not been uniform in all the years under analysis. It was highest in the year 1988-89 (19.89 %) and lowest in the year 1986-87 (11.63 %). What had been more interesting was that in some years the rate of growth of receivables had even been
negative e.g., in the year 1985-86 (-3.26 %) and the year 1987-88 (-7.58 %).

This clearly indicated how casual the management of the companies under study had been in respect of the management of receivables in the selected state-owned and state-controlled public sector undertakings in the State of West Bengal, to the perils of their liquidity, cost and profit.

In the present exercise it was further pointed out that the efficiency in the management of receivables cannot be properly evaluated without the evaluation of efficiency in respect of the management of each component of the receivables. Debtors in the cases of the companies under study had been found to be the most important component of receivables. A minute analysis of behaviour of Sundry Debtors in the sample companies in terms of progressive base year percentage growth had been attempted in Table 40 of the present study. It showed that the rate of growth of Sundry Debtors had not been uniform in all the years under analysis. There had been the years when the rate of growth was negative even e.g., the year 1987-88. The negative growth in the Sundry Debtors in the year 1987-88 had been due to sharp decline in the value of credit sales in two companies under study, namely, The Durgapur Project Ltd. and The West Dinajpur Spinning Mills Ltd.

The size of Sundry Debtors in absolute figure as well as in terms of percentage of the total receivable had
been projected in Table 41 of the present exercise. It had been found from the analysis that the size of Sundry Debtors to receivables varied from undertaking to undertaking and from year to year. In the three out of the five selected companies, Sundry Debtors as receivables had tendency to rise, whereas in the cases of other two, namely, West Bengal Electronics Industrial Corporation Ltd. and Durgapur Chemicals Ltd., Sundry Debtors as receivable showed a sign of decreasing trend.

Sundry Debtors in terms of months' turnover had been projected in Table 42 of the present exercise. It revealed that the grand average of Sundry Debtors in terms of months' turnover in the undertakings under study had been six months, although the same in each individual companies varied widely.

The percentage of debtors that remained due over more than six months in the selected five companies for the purpose of the present study had been projected in Table 43 of the present study. It revealed that the percentage of debtors due in excess of six months but considered good had been on an average 61.27% of the total outstanding debtors. The unit-wise position varied between 54.2% as the minimum (The Durgapur Project Ltd.) and 74.8% as the maximum (The Durgapur Chemicals Ltd.). This served to indicate a poor state of management of debtors accounting for 18% of the total investment in current assets on an average, in the companies under study.
The purpose of any commercial enterprise, as a normal rule, is the earning of profit. Credit in itself is utilised to increase sales, but sales must return a profit. To make credit profitable, a business enterprise has to follow certain well recognised and established principles of credit administration in respect of allocation of authority pertaining to credit collection of dues by a specific department, selection of proper credit terms, institution of credit investigation before taking decision as to granting credit and finally the establishment of sound policies and procedures in administering "credit".

The size of receivables fluctuates according to the efficacy of its credit and collection policies in any business entity. The effectiveness with which credit and collection policies are formulated and exercised depend upon the location of credit department in the organizational set up of a business enterprise. The credit and collection function is generally considered as a finance function, which places it under the direct responsibility of the chief finance officer. An alternative to this arrangement is to view it as an integral part of the sales function, in which case it is placed under sales department.

In Chapter VI of the present exercise, among many others it was stated that cash is both the means and an end of business enterprise. Cash becomes the final medium by which claims are discharged in the event of liquidation. Cash also imparts liquidity to a business. Since the ultimate end of
a transaction is either the cash receipt or cash payment, the
decision to expand a business depends on the impact of the same
on the cash flow of the business. Thus cash occupies a place of
pride in the structure of working capital.

Though cash is both a means and end of a business enterprise, the tragic part of cash in hand as a component of Working Capital is that cash itself is a non-earning asset. As such, cash should not be kept in hand by an enterprise in excess of its optimum requirements.

In the course of the present exercise, an attempt had been made to evaluate the position of cash management in the five selected companies under the ownership and control of the Government of West Bengal with reference to:

(i) analysis of the size of cash,
(ii) adequacy of cash,
(iii) planning and control of cash,
(iv) sources and uses of the funds,
(v) evaluation of cash management

The size of cash held by the selected companies had been analysed and projected in Table 44 of the present exercise in terms of absolute figures. The analysis revealed that cash holding in the companies under consideration, are subjected to wide fluctuation. In support of this proposition it had been pointed out in the study that the average cash holding in Durgapur Project Ltd., had been 8% of the total current assets. In case of
Durgapur Chemicals Ltd., the same had been 21%. Similarly, the average cash holding in the Kalyani Spinning Mills Ltd., had been 27%. It was 20% in the case of West Dinajpur Spinning Mills Ltd., and 33% in the case of West Bengal Electronics Ltd. Judged by any standard the cash holding by the selected companies had been rather high contributing negatively towards their profitability, since in a well financed company, cash holding should not be normally expected to go beyond 5% to 10% of the total current assets.

In the present exercise a graphical representation of the size of cash holding in the selected sample companies vis-a-vis their value of total sales had also been attempted. The same indicated a lot of instability in the matter of cash holding by the selected companies. This suggested that there had been a scope for streamlining the management of cash in the selected public sector undertakings under the ownership and control of the State of West Bengal.

Business enterprises have to keep cash to meet their daily operational requirements and to safeguard liquidity and solvency position continually. The sufficiency of cash in terms of the fulfilment of current operational requirements is judged by the computation of the cash turnover ratio i.e., the ratio of cash plus other liquid assets to current operating costs and expenses. The product of this ratio gives the number of days for which the cash held is sufficient to finance the normal expenditures of a business enterprises. For the purpose of the present
study, this ratio had been analysed and projected also in Table 45 of the present exercise. It revealed that there had been different holding period of cash balance in respect of different companies. A minimum cash holding period of 27 days could be noticed in case of Kalyani Spinning Mills Ltd., when the same was for 49 days in Durgapur Project Ltd. Other examples had been Durgapur Chemicals Ltd., West Dinajpur Spinning Mills Ltd., and West Bengal Electronics Industries Corporation Ltd., with a record of 51 days, 120 days and 804 days respectively. From these details, it is clear that there was no problem of cash inadequacy in the selected companies under study. In the wake of persistent losses this had been rendered possible due to financial supports that Public Sector Enterprises in West Bengal receive from the Government in the form of Loans and Advances from the State coffer.

Table 46 and 47 of the present study had been the projection of the liquidity position of the selected companies on the basis of current and liquid ratio respectively. These showed that in Durgapur Project Ltd., Durgapur Chemicals Ltd., and the Kalyani Spinning Mills Ltd., there had always liquidity problem since the average current ratio and liquid ratio of these companies had been always below the accepted norm in these regard. In other two companies, i.e., the West Dinajpur Spinning Mills Ltd., and the West Bengal Electronics Industries Ltd., both the current ratio and the liquid ratio were much above the standard in these respect. These had been the
result of the over investment in current assets especially in inventories.

Planning and Control of cash are the central function of the cash management system in any business enterprise. To what extent these were present in the cases of the companies under study had been examined in the present exercise with reference to (i) Organization of Cash Management, (ii) the mechanism of Cash Planning and (iii) the tools which were employed to control cash. And it was found that organisation of cash management function differed from company to company under our study. When in some companies management of cash remained with the Director of Finance, in others the responsibility in respect of cash management remained with the Managing Director etc.

Regarding cash planning it had been stated in the present study that the preparation of cash budget is the principal means. There are other means too, such as, ways and means statement and cash flow statement. The present study revealed that the selected public enterprise prepare two types of cash budget, one for entire operations and one for programmes other than construction.

The present exercise further revealed that these two types budgets are prepared by the selected Public Enterprises to facilitate the internal control on the management of cash and to have the complete picture of incoming and outgoing
cash to the Government with a view to estimating the gaps, if any, to be filled by the Government.

Cash budget is considered to be an integral part of the entire budgetary process in a public enterprise since in a public enterprise budgetary structure is divided into Revenue Budget, Capital Budget and Cash Budget. The present exercise revealed that all the five selected public enterprises in West Bengal would not prepare their cash budget regularly. Absence of the practices of preparing cash budget regularly by some of the selected Public Enterprises served to indicate that these units were not aware of the significance of controlling cash payments in their respective units much to the peril of effective liquidity and profitability management in them.

Effective control of cash also depends on developing a sound system of reporting on the cash flow. Unfortunately, none of the selected Public Enterprises covered by the present study would prepare their cash flow statement indicating lack of their consciousness for the effective utilisation of their working capital.

The sources and utilisation of funds in the selected public sector undertakings covering the period of study had been presented in the Table 48 to 52 of the present study. These Tables explained and analysed the preparation of a fund flow statement in a summary forms. The objective had been to examine the management of short term funds in financing the
current assets of the companies under scrutiny. The most startling revelation from the analysis had been that, in the companies other than WEBEL Ltd., the fund obtained from current liabilities had been eaten up by the losses of the companies. This situation had arisen, since the fund received by the companies under survey from long term sources, ownership and borrowed, had not been found to be adequate enough to finance the increase in the assets, repay the liabilities maturing for payment and to cover the losses suffered by the Company. This only showed, how ineffective and inefficient had been the cash management system in the companies under study. Thus, the selected public sector undertakings were very much inefficient in respect of the payment of working capital and were contributing negatives towards their profitability and solvency.

In the present exercise, while explaining the dimension of working capital management, it was stated that working capital management has two aspects, namely, structural and financial. In the financial side, the problem is one of selecting the appropriate sources for financing working capital investment in keeping with the liquidity norms and profitability requirements of a Company.

An attempt was therefore made in the present study, to examine the technique that the selected public sector undertakings under the ownership and control of State of West Bengal used for financing their working capital requirements. So
far as the financing of working capital is concerned it has been stated in the study, that normally a firm finances its working capital requirements out of both long term and short term sources. Long term sources comprise funds from equities, debentures and retained earnings when short-term sources include cash credit and working capital advances by the commercial banks and also public deposits and spontaneous sources such as trade credit (creditors and bills payable, outstanding expenses, etc.). The respective proportion of each source in the overall working capital pool depends (i) first on the availability of source, (ii) secondly on the cost of the source, (iii) thirdly, on the risk element in the use of the source and (iv) fourthly, on the liquidity and profitability trend of the Company.

In financing working capital the short term sources are generally preferred over long-term ones mainly for two reasons viz, (i) lower cost and (ii) flexibility. But short-term sources are normally riskier than long-term sources as funds are to be arranged on a continuous basis to meet the short term obligations as and when these mature. On the basis of risk and profitability perception, a firm may therefore adopt any one of the following types of working capital financial policy, viz, (i) Hedging Policy, (ii) Conservative Policy, (iii) Moderate Policy and (iv) Aggressive Policy.

While under a Hedging Policy, a matching is attempted between maturities of an obligation with the realisation
of a current asset, under an aggressive policy of financing, in view of the cost advantage, the almost whole gamut of current asset is sought to be financed out of short term sources.

With these in the background and under the assumption that a firm uses mainly long-term sources to finance the fixed assets and short-term sources for working capital, in the present study, analysis had been made of the technique used to finance the working capital requirements of the selected State-owned and State-controlled public sector undertakings in the State of West Bengal. For the purpose, the ratios between the specific source of finance and total investment in current assets of the companies under study had been worked out.

The analysis revealed that the long term sources of finance for working capital of the State-owned public sector undertakings in West Bengal had been mainly equity issues and long-term loans, secured and unsecured. In view of the basic characteristics of the Preference Shares, these had no role to play in the capital structure of these units. In otherwords, preference shares were conspicuous by their absence.

The unit-wise equity/working capital ratio in the companies under analysis had been projected in the Table 53 of the study. It showed that in the case of Durgapur Project Ltd. equity/working capital ratio fluctuated between 0.01:1 and 0.15:1 as the minimum and as the maximum respectively with
an average of 0.10:1 over the period under study. This meant that the company financed at least 10% of its working capital requirements out of equity funds during the period under study.

In the case of Durgapur Chemicals Ltd. equity/working capital ratio varied between 0.54:1 and 0.87:1 and on an average this ratio had been 0.70:1. In the case of West Dinajpur Spinning Mills Ltd. the equity/working capital ratio had been in the range between 0.20:1 and 1.50:1 with an average of 1.03:1. In the case of the Kalyani Spinning Mills Ltd. the equity/working capital ratio varied between 0.50:1 and 0.97:1 with an average of 0.69:1. In the case of The West Bengal Electronics Industry Development Corporation Ltd. the equity/working capital ratio had been in the range between 0.15:1 and 0.80:1 with an average of 0.48:1. From these details it was evident that the selected companies had sufficient equity fund for investment in working capital.

Generally, long-term sources of borrowed capital for the Corporate Sector are bonds & debentures, borrowings from financial institutions such as Industrial Finance Corporation, Industrial Bank of India, Industrial Credit and Industrial Corporation and the like, borrowings from Bank etc. The present study revealed that in the case of State-owned and State-controlled public sector undertakings, the sources of long term borrowings had been mainly the Bank and the borrowings
financing the working capital requirements of the selected companies had been quite significant.

The short-term sources of working capital finance of the selected State-owned and State-controlled public sector undertakings in West Bengal, had been spontaneous source, viz. supply from the creditors advance from customers, security deposits, interest accrued but not due etc. Interestingly, cash credit had been conspicuous by its absence as a source of short term finance for working capital of the companies under analysis.

In Table 55 and 56 of the present exercise an attempt had been made to project the ratio of Sundry Creditors to working capital and the ratio of other creditors to working capital in the selected companies in order to highlight the role that these sources had in providing working capital finance in the companies under study. For working capital purposes Sundry Creditors are a spontaneous source. Table 55 of the present study had been prepared to project the use of short term creditors by the selected companies for financing their working capital requirements. In the case of Durgapur Project Ltd. short-term creditor to working capital ratio had been found to be in the range between 0.17:1 as the minimum and 0.34:1 as the maximum within average of 0.25:1. In the case of the Durgapur Chemicals Ltd. short term creditor to working capital had varied between 1.01:1 and 3.42:1 with an average of 1.64:1. In the case of the
from financial institutions such as Industrial Finance Corporation of India, Industrial Development Bank of India, Industrial Reconstruction Bank of India, Power Finance Corporation Ltd. etc. The unsecured loans had been obtained mainly from the State Government.

Table 54 of the present study had been on the projection of the long-term borrowed capital vis-a-vis working capital financing of the selected sample companies. It transpired from the analysis that in the case of the Durgapur Project Ltd. the use of long-term borrowing for financing working capital varied between 0.01:1 and 0.58:1 with an average of 0.41:1 over the period under study. In the case of Durgapur Chemicals Ltd., the use of long-term borrowings for financing working capital fluctuated between 2.59:1 and 10.88:1 with an average of 6.57:1 over the period under study. In the case of The West Dinajpur Spinning Mills Ltd., the use of long-term borrowings for financing working capital varied between 0.09:1 and 1.31:1 as the minimum and maximum respectively with an average of 75:1. In the case of The Kalyani Spinning Mills Ltd., the use of long-term borrowings for financing working capital varied between 5.83:1 and 22.16:1 with an average of 14.3:1 over the period under study. In the case of The West Bengal Electronics Industrial Development Corporation Ltd. long term borrowings to working capital ratio had been in the range between 0.04:1 and 0.10:1 with an average of 0.38:1 over the period under study. From these details it was concluded in the study that the share of borrowed capital in
West Dinajpur Spinning Mills Ltd. short term creditors to working capital ratio fluctuated between 0.15:1 and 0.41:1 with an average of 0.28:1. In the case of The Kalyani Spinning Mills Ltd. short term creditors to working capital ratio varied between 0.44:1 and 3.08:1 with an average of 1.71:1. In the case of The West Bengal Electronics Industries Development Corporation Ltd. short term creditor to working capital had been in the range between 0.02:1 and 0.43:1 with an average of 0.16:1.

Table 56 of the present study had been the projection of other short-term credit to working capital in the selected companies under study. It showed that in the case of The Durgapur Project Ltd. the other short term credit to working capital ratio fluctuated between 0.16:1 and 0.34:1 with an average of 0.22:1. The same in case of The Durgapur Chemicals Ltd. varied between 0.21:1 and 0.82:1 with an average of 0.49:1. In the case of The West Dinajpur Spinning Mills Ltd. the other short-term credit to working capital ratio varied between 0.15:1 and 0.41:1 with an average of 0.28:1. In the case of The Kalyani Spinning Mills Ltd. the other source of short-term credit to working capital ratio varied between 0.32:1 and 1.07:1 with an average of 0.68:1. In the case of The West Bengal Electronics Industries Development Corporation Ltd. this specific ratio had varied between 0.10:1 and 0.25:1 with an average of 0.15:1.
Despite the high ratio of long-term borrowed funds to working capital, the selected companies used short-term finances for the same, mainly for two reasons viz, (i) erosion of capital base due to successive losses suffered by the companies (ii) spontaneity of such sources of short-term finance such as trade credit and outstanding payables.

When the selected public sector undertakings under study had greater reliance on the long-term sources for financing their working capital requirements, it could normally be expected that the short-term liquidity position would be better. But a simple analysis of the same, by the use of current and liquidity ratio revealed that it was a far cry as indicated by the average of current ratios and liquidity ratios in three out of the five companies that had been under study. This weak short term liquidity position of the companies also suggests that all are not well with the management of working capital. And management of working capital had been lagging behind not only in its structural aspect but also in respect of financial aspect. Therefore, if these companies are to pull out themselves from the present profitability crisis, they would have to streamline the management of working capital, among many other factors, which are not within the ambit of the present study.

For streamlining the management of working capital in these companies, as aforesaid, the possible lines of approach may be:
The existing organisational set up pertaining to the management of inventory would have to be restructured to bring about the required efficiency in the management of the same. A separate integrated inventory management department would have to be created under the direct control of the Chairman and Managing Director in each one of the Companies under study. It will have to be realised by each company that inventory management now has become a highly specialised and technical job. Hence, the functions relating to inventory management, such as material planning and programming, inventory control, warehousing and stores keeping and disposal of scraps and surplus stores will have to be assigned to technically qualified personnel specially recruited and trained for the job.

An improvement in procedure relating to procurement of materials would have to be carried out both at the undertakings and the Government levels to reduce the 'lead time'. At the undertaking level, the reduction in administrative 'lead time' would require the curtailment of time which the purchasing department of undertaking takes in releasing a 'purchase order'. The practices of compulsory reference to Finance Department for its concurrence in placing an order for purchase, as far as possible, may be done away with especially in the cases where comprehensive purchase budget, incorporating minute details is prepared at the instance of the Finance Department. The indenting departments for procurement of inventory
will have to be instructed to submit well in advance their requisitions complete in all respects. A Standing Committee consisting of the persons drawn from the Finance Department and Inventory Management Department may be constituted to monitor the purchase of high magnitudes. The Committee will have to meet at regular intervals not exceeding two or three weeks.

Where inventory holding will have a component involving foreign exchange, the government will have to come forward and modify the procedure for the issue of impact licence requirements, if any, and grant of foreign exchange, so that the undertakings of this nature are not to suffer on account of long leadtime that is consumed in the procurement of material abroad. The Government will also have to ensure that the Chief Controller of Export and Import does not take undue time in a normal case in issuing import licences where such prior sanction is necessary. Efforts will have to be directed in reducing delivery leadtime. This will be possible if it is ensured that the 'inspection' of materials or spares does not take undue time.

It will also go a long way if the units under study prepare 'vocabulary list' of the items of stores and classify and codify them. Categorisation of items of stores into A.B.C. or VSD should be made up-to-date, taking into account the changes that might have taken in their prices in recent years.

Norms for the stocking of raw materials, finished goods and stores and spares will have to be laid down on a scientific
basis. Once norms are established, these will have to be strictly adhered to.

Stores and spares inventory can be reduced if the programme for import substitution is given due encouragement and ancillaries are developed around the manufacturing units to cater to their needs.

It is also felt that much can be had in respect of efficient management of inventory if a chart indicating the position of various components of inventory is maintained at each plant of the units under study.

Re : Cash :

The units under study should first improve their techniques of planning and controlling of cash. Efforts will also have to be made to regularise their cash flow and to match the inflows of cash with the outflows.

It is suggested that the units under the present study, prepare cash flow statement weekly at the plant level and monthly, quarterly and yearly at the head office level though preparation of cash flow statement is not mandatory in India.

The optimum balance of cash to be kept at the plant level needs to be determined. Similarly efforts will have to be made to attain the forecaste cash flows.
On the scare score, if there is any excess balance of cash arising from business operation, the same will have to be immediately invested in short-term securities to augment the income from other sources.

To give effect to the above suggestion, the administrative set up in the companies under study dealing with cash will have to be reorganised and given more power to take decision regarding the management of cash balances.

Credit Administration:

The administration of credit also requires improvement in these undertakings. They need to formulate comprehensive credit and collection policy and for its proper execution a separate department to be named as credit and collection department need to be established. The task of this department will be to formulate the procedures for collection of credit, to carry out necessary investigations to ascertain credit worthiness of customers and to take up follow-up actions for expeditious collection outstanding. The department will also prepare reports of overdues and submit it to the Board of Directors for proper action.

The funds tied up in loans and advances should be reduced by charging interest on advances and penal interest on overdues.

The central and the State Governments should issue necessary instructions to their concerned departments to make
timely payments of their dues with the State-owned and State controlled units so that their liquidity is not impaired.

**Working Finance**

A few suggestions may also be offered to bring about improvement in the overall management of working finance. First, policies regarding management of inventory, cash and receivables will have to be formulated as indicated above, on the basis of past experience, gained from the working of these undertakings and the guidelines issued by the Government accordingly, to facilitate their working.

Secondly, sincere efforts are required to speed up the pace of transmission of working finance and to bring debtors-creditors ratio to the undertakings advantage.

Finally, the requirement of fixed working capital should be met by equity, long term loan and the resources generated from its own operations. The Government can widen its equity base as and when necessary. The variable working capital should be financed by the cash credit arrangement with the nationalised banks, as is the practice with public sector undertakings under the ownership and control of the Central Government. Short term loans from the Government and other institutions under guarantee if necessary. Similarly, depreciation reserve and tax provisions may also be used.

Once the management of working capital is toned up
on the basis of the suggestions given above, it is expected that the public sector undertakings under study, will be able to pull out themselves from their present profitability crisis.