

Chapter V

MANAGEMENT OF WORKING CAPITAL

5.1 Introduction

The financial management revolves around the two main areas of responsibility — the management of long term finance and the management of short term finance. The efficient management of short term finance, commonly known as Working Capital (WC) is an essential prerequisite for the successful operation of a business enterprise. The evaluation of management of WC helps one in evaluating various existing or proposed financial constraints and financial offerings.¹ The two main concepts of WC are 'Net' and 'Gross' WC. 'Gross' WC which represents total of current assets is useful to get analytical insights into profitability with reference to the management of current assets. On the other hand, the net concept of working capital is useful to gauge the financial soundness of a firm and is of special interest to sundry creditors and suppliers of short term loans and advances.² Most commonly, "Working Capital" is defined as excess of current assets of a business (Cash, accounts receivables, inventories, for example) over current items owned to employees and others (such as

salaries and wages payable, accounts payable, taxes owed to government).³ In addition to 'gross' and 'net' concepts, 'operating cycle' concept of WC is also in vogue, in order to ascertain exactly the financial requirement of working capital. According to this concept, WC is meant to support all operational activities of the firm and costs thereof.⁴ The length of a operating cycle is equal to the sum total of days of the period from the date of purchase of raw materials to the date of collection against credit sales but it requires that the time available to pay off the creditors is to be deducted from the sum total of days so arrived. The sum total of annual operating expenditure, when is divided by the number of operating cycles in a year gives the 'size of working capital requirement'. The mechanism of operating cycle is also known as 'pipe-line theory'.

Some other aspects of working capital also need to be highlighted in view of its indepth study which may be narrated as follows :-

(1) Fixed and Variable working capital ; If we analyse the total working capital requirement at a particular point of time, we will find that a certain amount of working capital is required for all the time even though there is no production or sales; for example, rent of the factory shed, salary of permanent staff, depreciation, interest on borrowed funds etc. This portion of WC is known as fixed or permanent working

capital. On the other hand, the remaining portion of the total working capital which varies from time to time based on quantum and cost of production such as cost of raw materials, fuel, electricity, wages etc. is known as variable working capital.

(ii) Negative working capital ; Negative working capital, as the term implies arises when the current liabilities and provisions are in excess of current assets. This indicates a situation of financial crisis and a falling production.

(iii) Cash Working Capital and Balance Sheet Working Capital ; Cash Working Capital is derived from the figures, as contained in Income Statement or Profit & Loss account, known as Fund Flow Statement. This incorporates the real flow of money or value. On the other hand, Balance Sheet Working Capital is the difference between the current assets and current liabilities and provisions. This shows a static position as the flow of money or values occurring between the two Balance Sheet dates is not revealed in the true sense of the term.

5.2 Objectives of Working Capital Management :

There are two main objectives of Working Capital i.e., Liquidity and Profitability. Every management tries to have sufficient cash and uninterrupted cash inflows to pay off the

creditors and others in time. This is called liquidity objective of working capital management. But the liquid assets bear a cost of capital affecting the profitability of a business. As a result, every financial manager tries to strike a optimum balance between the liquidity and profitability by holding just enough liquid assets. The finance manager's dilemma is to how much liquidity to be sacrificed for profit and vice-versa. This dilemma is resolved by compromising between liquidity and profitability and this involves a trade off between risk, uncertainty and profitability.

5.3 Importance and Role of Working Capital :

The importance of WC can be visualised in the light of its various roles, such as functional, complementary, proportional and technical in earning a reasonable rate of return. As regards the functional role, it is the WC or current assets which after being converted into saleable products with the help of fixed capital, generates revenue for the business. The complementary role of working capital suggests that one cannot do without fixed capital and vice-versa. The inadequacy of working capital may reduce the profit earning capacity inspite of enough fixed capital. The proportional role of working capital is felt when we notice that the marginal profit keeps

on increasing at a higher rate with the every additional dose of WC upto the maximum capacity of the plants. Lastly, the technical role of working capital calls for using fund for research and development which leads to innovations, resulting into higher production, lower costs and better quality. The importance of management of WC can also be felt from the fact that "the largest proportion of financial manager's time is utilised in the management of working capital."⁵

Now let us examine the proportion of working capital in the total resources of each sample SLPE over seven years as shown by the table 5.1.

In spite of greater importance and various roles of working capital, it is noticed in the table 5.1 that most of SLPEs in manufacturing sector have a very low proportion of working capital and even in some cases they have negative working capital which implies technical insolvency. The resources of manufacturing sector have found to be eaten away mainly by the fictitious assets and fixed assets. The very little has been left for WC requirements which is evidenced in our analysis of financing-pattern in the later part. The insufficiency of WC adversely affects the overall performance of manufacturing sector. The information as gathered from the various sources, also tells the same story of severe shortage of WC in most of the SLPEs. The proportion of WC to total resources of manufacturing SLPEs comes, on an average 12 per cent. Naturally,

Table 5.1

Percentage of 'Working Capital' to 'Total Resources' of each sample SLPE

Enterpr- ises	Years						
	1985-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DCL	(13.05)	(15.29)	(20.90)	(7.36)	(7.75)	(7.86)	(6.54)
WSFL	8.89	5.40	9.22	6.88	(19.52)	(19.83)	(20.08)
KSML	(8.87)	(9.43)	(9.20)	(7.45)	(23.91)	(14.93)	(10.74)
EMAIL	21.05	17.86	15.5	14.94	23.26	33.72	39.39
GL	12.23	11.62	14.08	11.94	22.39	8.74	18.04
NPTCL	13.18	13.47	9.73	9.25	1.34	4.90	0.12
SWL	6.42	3.61	1.46	(3.75)	(0.10)	(11.91)	NA
SPL	18.39	11.85	(1.87)	7.21	1.59	19.01	22.48
WBSIDCL	3.79	6.55	6.65	3.08	9.73	11.70	NA
DPL	16.49	13.77	14.72	15.17	11.03	4.99	5.28
WBSWCL	22.53	19.76	10.50	14.42	NA	29.46	34.76
WBECSCCL	83.24	51.19	81.36	103.59	95.66	97.06	97.9
WBIDCL	85.34	84.83	85.92	84.82	79.38	77.39	75.06

Source : Published Annual Reports.

Figure in brackets shows negative figure.

this ratio, in no way justifies the doze of WC, keeping in mind the huge investment in fixed assets or so. Since it is the WC which after being converted into saleable products with the help of fixed capital, generates revenue for the business, it is possible to reduce the investment in fixed assets by taking them

on rent or lease but it is not justifiable to reduce or avoid the investment in Working Capital. Further on the other hand we notice that the proportion of WC to total resource of trading, service and financial cum promotional enterprises is very high in commensurate with the nature of the business where liquid assets form substantial part of the total assets of the enterprise. In our case, it comes on an average, to the tune of 66 per cent. This is because in financial sector there is very little requirement of fixed assets. It is the 'hard-cash' which is being used frequently in its own shape and/or in the form of 'Near-cash'. In trading sector also, cash is converted directly into finished products so the conversion period from 'goods to cash' is not very long as it happens in case of manufacturing sector. Hence, the requirement of liquid assets is comparatively substantial in case of trading and financial sectors.

5.4 Components of Working Capital :

It is essential to examine the relationship existing between the various items of current assets and Working Capital. The important areas of WC to which the problems of WC relate, are (I) Inventory Management; (II) Cash Management; (III) Receivable Management and the (IV) Working Finance Management.

Let us now evaluate the management of each of these components of WC in sample SLPEs.

5.4.1 Inventory Management : The success or failure of the management of WC owes greatly to the management of inventories. The efficient management of inventory posed the most challenging problem to the public sector enterprises in India. Hence, the Administrative Reforms Commission⁶ suggested that "Materials-Management should be accorded due recognition at the top management level ...". Inventories, as such can be divided into four classes; raw materials, work-in-process finished goods and stores & spares. The 'Inventory Management' can be defined as the sum total of those activities necessary "for the acquisition, storage, sale, disposal or use of materials".⁷ The inventory-management is concerned, mainly with the determination of optimum level of investment for each component of inventory and inventory as a whole, the efficient use of the components and the operation of an effective control and review mechanism.⁸ Hence, the Inventory Management must take into consideration factors like inventory carrying costs, ordering costs, cost of stock-outs, the rate of return on the investment and the cost of capital in determining the optimum level of inventory. The primary objectives behind such an exercise are (i) to minimise the possibility of disruption in production schedules for want of raw materials, stores and spares and (ii) to keep down capital investment in

inventories. As such, all inventory models, no matter how complex, address themselves to the problems of timings, and magnitude of replenishment.

The efficient management and effective control of inventories help in achieving better operational results and reduce investment in working capital. It has a significant influence on the profitability of a firm. Proper control of inventory not only solves the acute problem of liquidity but also increases the annual profits and causes substantial reduction in the WC of the firm.⁹ Various measures of inventory control are : (i) fixation of norms of inventory control such as economic-order-quantity (EOQ), and different levels of inventory such as maximum, minimum and re-order levels; (ii) classification of inventory items; (iii) analysis of inventories through either by A.B.C. (Always Better Control) or C.I.E (Control by Importance Exception) or P.V.A. (Proportional Value Analysis) method; (iv) 'Perpetual Inventory' or 'Continuous Stock Taking'; (v) Appraisal and reviewing of inventory levels in terms of values to assess status of stocks.

Moreover, periodic-inventory-reports, with latest stock position would be an added advantage for an effective control of inventories. The levels of inventory should be reviewed periodically and necessary changes should be made in the light of the review.

5.4.2 Evaluation of Inventory Management in SLPEs : Now let us give a look on the size of inventory and study its various components over the years. The financial sector sample SLPEs have been excluded in this case as they do not possess inventory due to their distinct nature of business.

Table 5.2

Size of Inventory in Sample SLPEs

(Rs. in lakhs)

Enter- prises	Years						
	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DCL	225.38	215.09	211.25	195.19	186.23	182.87	205.98
WSFL	187.20	130.57	NA	126.20	167.04	189.20	286.63
KSML	65.00	69.00	NA	152.23	240.41	324.75	347.50
EMAIL	35.57	47.41	45.37	80.16	68.91	67.03	47.91
GL	NA	NA	NA	NA	106.02	136.91	199.02
NPTCL	57.53	70.78	NA	37.62	79.55	79.53	57.80
SWL	42.58	61.41	61.47	178.52	607.90	714.24	NA
SPL	NA	NA	NA	91.26	99.60	101.13	102.93
WBSIDCL	NA	NA	NA	56.72	121.29	51.79	NA
DPL	2204.07	2539.99	NA	2082.17	3791.86	2934.13	2954.84
WBECSCL	NA	NA	326.71	200.92	60.94	214.93	1708.89

Source ; Published Annual Reports.

The table 5.2 shows that bigger enterprises viz. DPL, WBECSCL and DCL hold larger inventories compared to smaller

ones. However, DPL alone accounts for more than two times stock of inventories as held by the most of the sample enterprises. On the other hand, KSML which is textile manufacturing enterprise also carry a considerable amount of inventories in the later part of the period under study.

But the above analysis of data is not enough to say anything about the efficiency of inventory-management unless it's soundness is judged in the term of turnover. Prof. B. Graham and C. McGolerick¹⁰ are of the view, that the chief criterion of soundness of inventory management is the turnover defined as the annual sales divided by the year-end inventory. The higher the turnover, the larger the profit. An attempt is made hereinbelow with the help of a smaller sample about which data are available to highlight the inventory turnover.

Table 5.3

Turnover of Inventories

Years	Enterprises				
	1981-82	1982-83	1983-84	1984-85	1985-86
DPL	2.8	2.5	1.8	2.3	2.3
DCL	1.7	2.8	1.7	2.1	NA
EMAIL	0.6	0.6	0.9	0.3	NA
WSFL	2.4	2.0	2.2	2.4	2.1
SWL	1.9	1.5	0.8	2.0	1.3
KSML	3.7	3.7	5.9	6.2	4.6
Average	2.3	2.3	1.8	2.2	2.2

Source : Published Annual Reports.

The turnover of investment in inventory in totality is almost static during the period under study at a point, somewhere near 2 but this rate of turnover is not commandable, compared to that of in other countries. In seventies, the rate of inventory turnover in Soviet Industries was in the range of four to five times a year whereas in United States, it was in the range of seven times a year.¹¹ A low turnover does not contribute enough to the profitability, at the sametime a very high turnover indicates inadequacy of inventory. The engineering and chemical industry enterprises show a very low inventory turnover. These findings clearly prove that the profitability of the SLPEs are largely affected by the large idle investment in inventories. This has also enlarged the requirement of WC.

5.4.3 Components of Inventory : The behaviour of the main components of inventory viz. raw materials, work-in-process, finished goods and stores and spares, influences to a great extent, the total inventory turnover and determines the role of working-capital in maximising the profit as a whole. It will, therefore, be useful to examine the behaviour of each component of inventory in order to traceout the particular component of inventory, to which the overstocking occurred.

5.4.3.1 Raw Materials : The stock of raw materials at a particular point is determined by the production plan of the firm. A unit which is able to conduct higher volume of business with proportionately lower volume of raw materials is considered an efficient concern in the management of inventory. The table 5.4 shows the year-end stock of raw materials in terms of its months' consumption, which explains how far stock of materials is justifiable on plea of its requirement for uninterrupted production schedule.

Table 5.4

Year-end Stock of Raw-materials in Terms of Months' Consumption of Materials

Enter- prises	Year								
	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90
DPL	5.6	6.1	3.3	2.3	2.4	5.06	5.94	4.46	4.10
DCL	1.3	0.8	3.4	0.8	0.43	1.59	0.64	2.4	0.27
EMAIL	15.4	18.2	15.3	19.4	NA	7.52	10.42	1.29	NA
WSFL	4.1	3.2	5.7	2.5	7.4	NA	5.28	4.98	3.56
SWL	3.4	8.5	7.9	6.4	NA	NA	NA	NA	NA.
KSML	0.8	0.7	0.4	0.3	0.6	0.14	1.69	1.92	0.79
EIMTL	10.8	9.7	8.0	9.5	8.4	NA	NA	NA	NA
SPL	NA	NA	NA	NA	NA	30.10	6.44	5.82	2.75

Source : Published Annual Reports.

The accumulation of raw materials is considerably high in case of manufacturing sector viz. EMAIL, SWL, EDMTL, and DPL. In EMAIL, the materials have been stocked for a maximum of one and half year's requirement. In EDMTL, SWL, DPL and WSFL, the materials have been stocked for a maximum of 10 months, 8.5 months, 6 months, and 7 months' requirement of materials respectively. This in no way justify the imbalanced purchasing of raw materials, especially under the situation of working capital crisis and loss-making trend prevailing in these SLPEs. The only positive sign to be observed in the table is the falling rate of stocking of materials in almost all the sample undertakings. This indicates management's concern for overstocking of materials and their attempt to improve the situation over the years.

5.4.3.2 Work-in-process ; The size of work-in-process (W.I.P) is determined by the length of the production cycle and current levels of operations. The larger the production cycle, the greater would be the volume of W-I-P. The table 5.5 would highlight the situation of W-I-P in the sample units.

'Work-in-process' occurs only in case of manufacturing sector, where some of the goods may remain lying on the floor of the factory under semi-finished condition on the closing

Table 5.5

Year End 'Work-in-process' (W-I-P) in Terms of Value-of-production of Sample SLPEs

Years	1981-82	1982-83	1983-84	1984-85	1985-86
Enter-prises					
DCL	0.9	0.4	0.6	0.4	0.6
EMAIL	2.6	1.1	1.6	nil	nil
WSFL	2.6	3.3	3.3	3.1	3.0
EIMTL	5.6	4.7	4.6	4.9	4.2
KSML	0.9	0.6	0.6	0.7	0.7
DPL	2.0	2.0	1.0	1.5	2.0
Average	2.4	2.0	1.9	2.1	2.1

Source : Published Annual Reports.

day of the financial year, hence trading, service and financial sector SLPEs have been excluded in this case. The table 5.5 shows that three out of six manufacturing enterprises had a very high proportion of W-I-P, comprising one third of aggregate inventory. Industrywise, we can say that the engineering enterprises have blocked larger amount of Working Capital in W-I-P (2 to 5 months' V-O-P) compared to chemical and textile industries. Particularly, EIMTL had a considerable W-I-P amounting to 5 months' value of production (V-O-P). This may be, to some extent due to larger operating cycle of the engineering enterprises. Thus the larger operating cycle along with unscientific approach to inventory

management and lack of zeal and spirit might be causes of the heavier W-I-P especially in case of engineering enterprises. This resulted into further blockade and shortage of WC.

5.4.3.3 Finished Goods : 'Finished-goods' implies that the products have already been manufactured and are ready for sale and delivery. It introduces flexibility in the business operations. Moreover, some finished goods inventory is bound to be created when goods are produced in anticipation of demand. Sometimes, transport bottlenecks or refusal of the customers to take the delivery in due time compels the firms to carry finished goods inventory. The table 5.6 reveals the idle investment in year-end finished goods.

Table 5.6

'Finished Goods' in Terms of Months Value of Production (V-O-P) of Sample SLPEs

Enter- prises	Years				
	1981-82	1982-83	1983-84	1984-85	1985-86
DCL	0.9	0.8	0.8	0.4	0.6
EMAIL	5.9	7.1	4.7	13.4	1.9
WSFL	0.1	0.1	0.1	0.2	0.2
EIMTC	1.2	1.5	0.4	0.4	0.5
KSML	1.1	1.5	0.7	0.3	0.6
DPL	0.6	1.0	1.4	0.5	0.6
SWL	0.1	0.1	0.1	0.1	0.1

Source : Published Annual Reports.

The question of year-end stock of finished-goods does not arise in case of financial and service-sector enterprises, so they have been excluded from the table. The table shows that, on an average the idle investment in finished-goods ranges from 0.6 to 2.2 months' value of production which means on an average, one and half month's value of production remain invested in finished goods. Although, in totality this particular component of inventory does not pose any problem, the situation seems to very serious in case of EMAIL where 'finished-goods' remained idle and were set ready for disposal, on an average for more than six months. The reasons might be delay in taking delivery by the intended customers or excess production in anticipation of demand etc., they attract serious attention of the management.

5.4.3.4 Stores and Spares : Stores and spares component of inventory consist of thousand of items, including imported ones for the plants and machinery of foreign made. The stock of stores and spares are commonly maintained under some sort of compulsion to avoid long procurement period from abroad as well as from domestic suppliers to ensure uninterrupted production process. But such idle investment in 'Stores and spares' not only reduce the profitability but also impairs the liquidity. Moreover, it puts a administrative burden on the management. The table 5.7 would highlight the size and

Table 5.7

Size of 'Stores & spares' and its Percentage to Aggregate Inventory
(Rs. in lakhs)

Years	1981-82		1982-83		1983-84		1984-85		1985-86	
	Size	%								
Enter-prises										
DPL	949.60	64.3	1249.45	63.4	1311.30	47.2	1303.27	59.1	1461.09	57.5
DCL	145.73	56.4	134.65	52.9	182.49	53.7	177.12	71.9	NA	
EMAIL	17.56	33.7	14.97	26.7	16.93	34.6	16.44	36.4	NA	
WSFL	9.78	4.9	11.10	4.4	9.87	5.8	7.54	3.7	8.89	5.9
KSML	22.23	22.4	23.23	20.2	22.80	26.9	23.70	36.5	25.15	36.4
Total	1144.90	48.2	1433.40	48.9	1543.4	41.9	1528.10	51.0	1495.13	49.7

Source : Published Annual Reports.

proportion of 'stores and spares' in sample undertakings under manufacturing sector. (the other sectors are not supposed to have stores & spares)

The table 5.7 reveals an alarming proportion of investment in 'stores and spares' which ranges, on an average, from 50 per cent to 60 per cent. Individually, it comprises the same proportion in case of DCL and DPL, the two giant SLPEs. Industrywise, it is revealed that power, chemical and textile hold huge amount of stores and spares. According to the recommendations of Tandan Committee,¹² the leading banks should keep a watchful eye if spares exceeded 5 per cent of the total inventory. Except, W.S.F.L, rest of the sample undertakings had not only exceeded the norm of 50 per cent but touched a peak of 60 per cent in some cases. To avoid over-stocking or stockouts position of stores (both of which are detrimental) limits like maximum and minimum are required to be fixed for each and every item of stores and spares. Moreover, the SLPEs can follow the guidelines of NCAER study team¹³ on the structure of WC, which suggests that one of the methods of reducing disproportionate accumulation of stores and spares is to have a 'central-pooling-system' on the basis of industry and/or region for all critical and important items of stores and spares.

5.4.3.5 Summing up ; To sum up the findings of analysis of inventory management, it can be said that inventory turnover was considerably low suggesting accumulation of huge quantity of stores and spares in particular and 'work-in-process' to its next. Although 'materials' and 'finished goods' also blocked working capital to some extent, in totality, they were found to prevail with in the permissible limit as suggested by Tarriff Commission. It seems that the slow moving items of stores and spares have accumulated in larger proportion. On the other hand, long operating cycle along with lower productivity of workers in engineering sector enterprises have resulted into huge 'work-in-process'. These two components of working capital attract the serious attention of management of the concerned enterprises as well as of other concerned agencies.

5.4.4 Cash Management ;

5.4.4.1 Introduction ; The term 'cash' includes coins, currency and balances in bank accounts. Sometimes near-cash items, such as marketable securities or bank time-deposits are also included in cash.¹⁴ Cash is both the means and end of a business in the sense that cash is required to keep the business running and is expected to be realised by selling the products or services. The ultimate problem of working -capital-fund management revolves around as to the quantum

of cash receivables and payables - all those to happen in due time (maturity).¹⁵ J.M.Keynes¹⁶ identified, three motives for holding cash (a) the transactive motive; (b) the precautionary motive and (c) the speculative motive. A firm has these objectives in view while determining its cash needs.

5.4.4.2 Objectives : Cash management is concerned with minimising unproductive cash balances, investing temporarily excess cash advantageously and making the best possible arrangements for meeting planned and unexpected demands on the firms cash. It is, therefore, be the objective of cash management to strike a optimum cash balance which makes a trade-off between risk and return. All these require cash planning which can help anticipate future cash flows and needs of the firm and reduces the responsibilities of idle cash balances and cash deficits. To help cash planning, cash forecastings and thereby cash budgets are done on short-term or long-term basis. There was a time when financial officers sole concern regarding cash management was how to maintain sufficient amount of cash for smooth conduct of the business.

5.4.4.3 Evaluation of cash Management in Sample SLPEs : It is proposed to examine (i) the size of cash as a percentage of

net working capital and its growth vis-a-vis growth in total sales, (ii) adequacy of cash, measured in terms of operational requirements and liquidity and solvency, (iii) efficiency of cash management in the context of cash velocity.

For the purpose of our study, we have taken 'year-end cash' as shown in the Balance Sheet of sample undertakings under the head 'Cash and Bank Balance'.

5.4.4.3.1 Size of Cash : First it is proposed to examine the size of 'cash holding' with reference to sales. Prof. John Sagan¹⁷ writes that increase in sales are normally associated with 'larger bank balances', the growth of which according to the some experts, should decrease as the size of business increases.

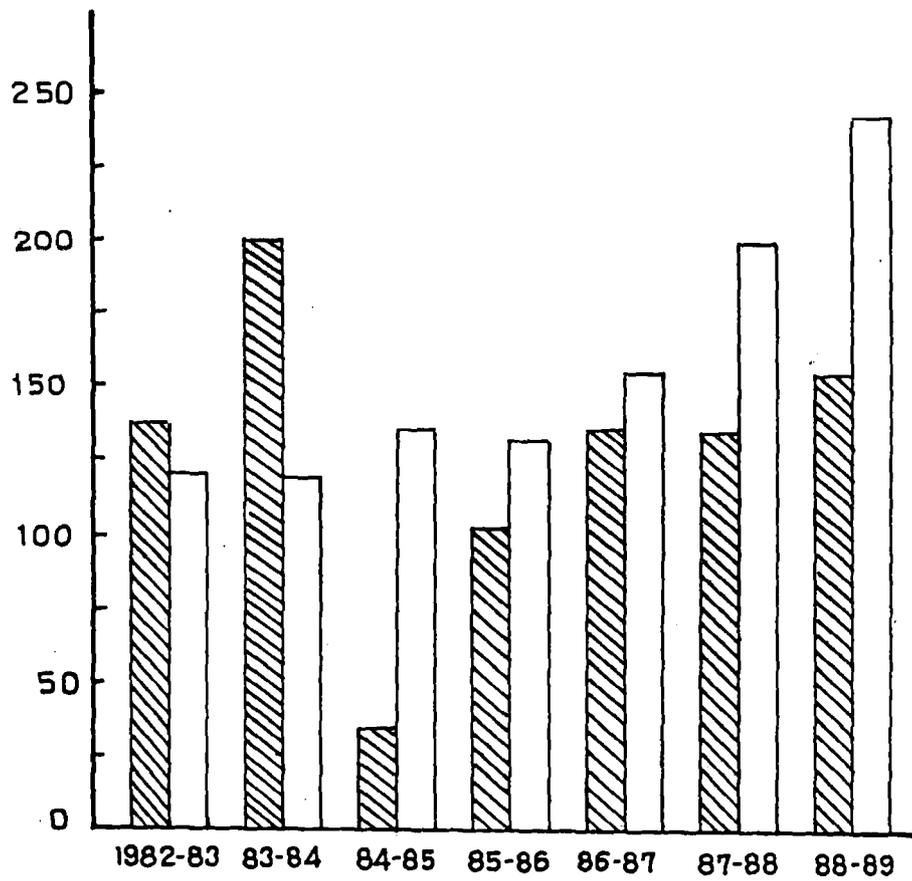
In totality, the analysis of year-end cash balances and sales confirms that both the variables have grown up gradually over the years. Although there is a wide variation in growth of cash, compared to sales, the aggregate growth in cash is more than that of sales which is irrational. It raises the doubts about the cash planning in the sample SLPEs. Individually, SWL is most cash-crunch enterprise. The bigger enterprises hold more cash than smaller ones. In particular, DPL alone holds nearly three-fourth of the total cash of sample SLPEs as in the table 5.8. Industrywise, engineering

Table 5.8

Size of 'Cash & Bank Balance' and Percentage Change in 'Total Cash' and 'Total-Sales'
(Rs. in lakhs)

Enter- prises	DCL	WSFL	KSML	EMAIL	SWL	NPTCL	DPL	TOTAL CASH	TOTAL SALES
Years									
1981-82	41.65	65.68	19.75	26.56	1.27	NA	714.89	869.80 (100.00)	5443.41 (100.00)
1982-83	55.95	11.68	46.23	26.55	4.68	NA	1050.96	1196.05 (137.5)	6590.25 (121.0)
1983-84	89.43	38.28	28.89	8.33	7.54	NA	1578.56	1751.03 (201.3)	6656.60 (122.3)
1984-85	52.50	19.83	35.39	5.10	6.58	23.32	178.82	321.54 (37.0)	7292.63 (133.9)
1985-86	166.24	15.60	28.15	19.64	6.32	23.58	619.84	879.37 (101.1)	7278.20 (133.7)
1986-87	175.76	NA	NA	55.56	25.01	NA	932.68	1189.01 (136.7)	8480.45 (155.8)
1987-88	166.53	73.27	NA	68.60	89.28	1.02	799.53	1198.23 (137.8)	10786.62 (198.2)
1988-89	247.58	67.03	149.28	83.30	13.03	25.87	757.13	1343.22 (154.4)	13304.29 (244.4)
1989-90	333.98	119.32	73.44	35.78	16.30	NA	1488.62	2067.44 (237.7)	13538.53 (248.7)
1990-91	227.90	172.16	138.87	89.74	NA	NA	1803.75	2432.42 (279.7)	13541.39 (248.8)
								13248.11	92912.37

Source : Published Annual Reports.



GROWTH IN YEAR-END CASH BALANCE & SALES .

 Percentage growth in cash
 Percentage growth in sales .

Fig. 1.

-sector enterprises are facing severe shortage of cash, compared to chemical, textile and power sectors. The aggregate cash for all the years comes to nearly 14 per cent of total sales which seems to be inadequate, confirming the claim of the management of most of the SLPEs regarding the crisis of liquidity.

The relationship between 'total cash' and 'total sales' for sample enterprises (as shown in the Table 5.8) can further be established and explained with the help of a graph-1.

The size of cash as a proportion to current assets, also known as 'gross working capital' gives a better picture of management of cash.

Table 5.9
Percentage of Cash to Current Assets of SLPEs

Enter- prises	Years									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
	-82	-83	-84	-85	-86	-87	-88	-89	-90	-91
DCL	8.6	10.5	14.4	10.7	33.7	32.3	30.4	47.5	55.5	31.1
WSFL	9.1	1.4	5.2	2.7	2.4	NA	7.6	5.0	8.0	10.2
KSML	12.9	23.6	16.9	25.9	18.9	NA	NA	26.8	13.7	25.5
EMAIL	21.0	21.3	7.3	5.1	NA	55.3	56.6	34.0	9.2	22.5
SWL	1.7	7.1	8.9	8.2	6.5	21.1	21.8	1.6	1.6	NA
NPICL	NA	NA	NA	18.0	14.7	NA	0.9	15.1	13.6	9.25
DPL	8.5	16.3	18.9	12.3	6.5	NA	NA	6.5	11.0	11.2
EIMTL	1.7	2.2	1.5	5.7	5.8	NA	NA	NA	NA	NA
Average	9.1	11.8	10.4	11.1	12.6	36.2	23.5	19.5	16.1	18.3

Source : Published Annual Reports.

The table 5.9 shows that the average proportion of cash to current assets ranges from 9 per cent to 36 per cent. But it is said that in a comfortably financed business, cash holding will probably run not less than 5 to 10 per cent of the current assets. Thus, our sample enterprises satisfy the required proportion. But at the same time, it is also desired by the financial experts that where the current liabilities do not exceed one - half of the current assets, the cash percentage should run not under 10 to 20 per cent¹⁸ of the same. On an average, the total cash holding for all sample enterprises taken together had a share of 17 per cent of current assets, which also satisfy the stipulated norm. But individually, some sample enterprises show a wide variation in cash holdings yearwise as well as enterprisewise. For example, DCL's cash holding ranges from 8.6 per cent to 55.5 per cent, the same for EMAIL ranges from 7 per cent to 56 per cent and in KSML, it ranges from 13 to 27 per cent. Yearwise also, this proportion had a wide variation from 9 per cent to 36 per cent. This shows a lack of cash planning and control, resulting into cash-crunch as well as cash-surplus position at different points of time.

5.4.4.3.2 Adequacy of Cash : An quantity of cash can be said to be adequate if it is just enough to meet the operational requirements of finance and is able to justify the liquidity

and solvency position of an undertaking. The perfect synchronization between receipts and disbursements of cash is not possible, the management, therefore attempts to maintain an adequate quantity of cash in hand at all times.¹⁹ The operational adequacy of cash can be measured by the computation of turnover ratio of cash. When this ratio is divided into 365 days, gives the number of days for which the cash as held is said to be sufficient to meet the normal operating expenditure of the business. The level of operational adequacy of cash differs from industry to industry due to differences in the quantum of production, pattern of demand, payment of overhead expenditure etc. Thus, the adequacy of cash in sample SLPEs have been measured in terms of operational requirements as shown in Table 5.10.

Table 5.10

Cash of Sample SLPEs in Terms of Months' Operational Requirements

Enter- prises	Years									
	1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91
DCL	0.8	1.0	1.3	0.8	3.0	2.9	2.7	4.0	7.1	5.5
WSFL	1.4	0.2	0.9	0.3	0.2	NA	1.4	1.1	1.9	2.3
KSML	0.5	1.0	0.6	0.6	0.5	NA	NA	2.5	1.1	1.7
EMAIL	18.7	6.7	1.7	1.4	3.9	8.0	8.5	9.4	2.9	5.3
SWL	0.1	0.5	0.9	0.5	0.4	2.0	4.2	0.6	0.6	NA
NPTCL	NA	NA	NA	3.8	3.5	NA	0.1	2.5	1.6	0.5
DPL	6.2	3.9	7.3	6.6	NA	4.1	2.8	2.5	4.3	5.6
EIMTL	1.0	1.1	0.6	2.3	2.1	NA	NA	NA	NA	NA
Average	4.1	2.1	1.9	2.0	1.9	4.25	3.3	3.2	2.8	3.5

Source : Published Annual Reports.

Cash in term of month's operational requirements taken together for all sample enterprises in the table 5.10 shows a minimum of 1.9 months and a maximum of 4.25 months, 2.9 months being the overall average. This result surpasses all the norms as conceived by the financial experts. The financial experts are of the view that cash in the business at any point of time must not exceed one months' normal expenditure. If cash and near cash reserves happen to be more than this limit, it should be taken for granted that excessive cash is being carried by the firm.²⁰ Individually, DPL and EMAIL are very high cash surplus enterprises. Moreover, there is a wide variation in cash in terms of operational requirements within and amongst the enterprises. KSML, SWL and WSFL had a shortage of cash to meet its operational requirements in the first half of the period under study.

It should also be noted that under the accrual basis of accounting, receipts and disbursements of cash do not necessarily take place in the same period in which corresponding revenues and costs are recognised. Thus, our enterprises may have in the same period, large earnings and serious shortage of cash or low earnings and an ample cash flow.²¹ To know the real position, it is required to examine the adequacy of cash in terms of liquidity and solvency with the help of current ratio and acid test ratio. In sample SLPEs, acid test ratios are more important since inventory occupy a larger portion of current assets, distorting the real concern for

payment. Hence, the acid test ratios have been computed as follows :

Table 5.11

Enter- prises	Acid-Test Ratios for Sample SLPEs									
	Years 1981 -82	1982 -83	1983 -84	1984 -85	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91
DPL	3.04	1.91	1.61	1.60	1.67	NA	0.98	0.94	0.86	0.91
DCL	0.33	0.34	0.28	0.21	0.12	0.58	0.13	0.11	0.12	0.12
EMAIL	3.33	3.06	2.94	3.00	NA	0.36	0.33	0.63	1.94	2.62
WSFL	1.79	1.48	1.57	0.34	0.25	NA	0.23	0.24	0.25	0.23
SWL	1.88	0.71	0.49	0.62	0.41	0.40	0.50	0.26	0.28	NA
EIMTL	0.79	0.51	0.48	0.57	0.58	NA	NA	NA	NA	NA
KSML	0.22	0.22	0.21	0.14	0.13	NA	NA	0.14	0.20	0.16
WBECSC	NA	NA	NA	NA	NA	1.14	1.10	1.30	1.35	1.48

Source : Published Annual Reports.

The 'current maturing obligations' are related to the 'quick category of current assets' and the ratio therefore is unity or just near unity. It would prove the firm's capacity to pay off the immediate obligations. In totality, the average ratio for all enterprises show that the SLPEs were in quite a satisfactory position till 1984-85 but the situation got deteriorated after that and 1984-85 onwards the ratio started falling gradually below the norm. In case of trading sector, the ratio has a rising tendency over unity and has

touched a mark of one and half, which needs to be checked. Individually, DPL, EMAIL, WBECSCCL had a higher ratio but on the other hand, DCL, KSML, EIMTL, SWL and WSFL had a very lower acid test ratio, indicating technical insolvency and in majority cases, the SLPEs capacity to pay off immediate maturing obligations were really very poor and far below from unity. It further highlights the poor financial planning and control as well management's lack of spirit and zeal to strengthen the overall situation.

5.4.4.3.3 Efficiency of Cash Management : The efficiency of cash management can be judged in the light of cash velocity. "Cash velocity which is also known as cash turnover is referred to known as 'productivity of cash'. It indicates the value of production/sales generated by a rupee of cash held as a part of working capital. An improvement in the velocity indicates higher value of production per rupee of cash held, while a decline in this velocity points to the opposite. Given the level of production constant, an improvement in the velocity ratio also means reduction in the size of cash held in order to generate the given value of production.²² The table 5.12 measures the velocity of cash in the sample undertakings.

The ratios in the table 5.12 show an alarming higher velocity, indicating an overtrading situation in a few enterprises, which implies the amount of cash held in a few specified enterprises was less than the required amount. Although

Table 5.12
Velocity of 'Cash' in Sample SLPES

Enter- prises	Years									
	1981- 82	1982- 83	1983- 84	1984- 85	1985- 86	1986- 87	1987- 88	1988- 89	1989- 90	1991 -91
DIL	5.65	5.45	3.78	5.79	9.68	10.33	12.30	12.94	7.39	6.37
DCL	11.0	13.2	6.45	9.56	8.75	2.64	2.54	2.28	0.40	nil*
EMAIL	1.12	1.23	4.6	2.6	NA	NA	3.30	6.16	NA	NA
WSFL	7.48	4.54	7.76	26.4	15.5	NA	3.82	7.24	4.53	4.14
SWL	NA	30.98	14.0	29.78	31.18	2.59	0.55	7.85	30.44	NA
KSML	18.38	9.43	16.54	10.67	11.41	NA	NA	5.87	15.07	8.47
Average	8.73	10.6	8.84	14.13	15.3	5.19	4.50	7.06	11.56	6.33

Source: Published Annual Reports.

* Value of production in 1990-91 was nil.

higher value of production generated per rupee of cash held is a contributory factor towards profitability, it at the same time indicates a technical insolvency, hampering creditworthiness and profitability in the long run. Individually, SWL, DPL and KSML had a comparatively higher velocity, posing financial crisis due to shortage of cash. On the other hand, EMAIL, DCL and WSFL had a moderate cash velocity indicating better utilisation of each rupee of real cash at the disposal of the enterprise. On an average, it has been found that each rupee of cash held, generates goods worth Rs. 9 or more. The totality, this ratio varies from 4.5 to 15.3. The textile sector had the highest cash

velocity followed by power. A few engineering enterprises had also recorded a higher velocity of cash. Moreover, there were wide variations in cash velocity of each and every sample SLPE, indicating lack of cash planning and control by the management of most of the SLPEs.

5.4.4.3.4 Summing Up : To sum up the findings of cash management in sample SLPEs, it can be put on record that (i) growth in cash balance was higher than that of sales; (ii) the share of cash held in the current assets was also on higher side but was close to the norm as suggested by the financial experts; (iii) the stock of cash held by SLPEs were higher than the operational requirements, causing loss of interest on idle fund; (iv) the liquidity position of most of SLPEs were at stake in the second half of the period under study; (v) the value of production, generated per rupee of cash held was more or less moderate (vi) a wide variations in all sorts of ratios proves lack of cash budgeting and control. It can further be said that the inflows of cash in SLPEs were jammed by some external factors where the management had very little to do.

5.4.5 Receivable Management :

5.4.5.1 Introduction : Receivable occupy an important position in the structure of working capital. The turnover of working

capital finally rests on the transitive behaviour of receivables. In the buyers' market, where the necessity to finance sales is so urgent, the management of receivables is of great importance. The three characteristics of receivables such as the 'element of risk', 'economic value' and 'futuraity' — explain the basis and the need for efficient management of receivables.²³

Receivables, in the strict accounting sense arise out of the delivery of goods or rendering of services and include book debts, notes, loans and advances, bills and accrued income or prepaid expenses. The term receivables is also applicable to all claims held against others for the future receipts of money, goods and services and in this broader sense covers prepayments on purchase and expense contract and advances to subsidiaries and officers.

5.4.5.2 Objectives : The ultimate objective of receivable management is to maximise the profits of the business. Receivable management to be successful must ensure comparatively slow growth in receivables as against sales satisfactory collection period, minimum bad debts losses, and effective use of the capital invested. As a whole the objective of receivable management is to increase the profit of a business through credit sales to a level where profitability can be balanced against liquidity, considering the

factors like cost of investment in receivables, collection charges, business conventions, effect of inflation, government regulations and general economic conditions etc.

5.4.5.3 Principles of Credit Administration : The management of receivables has to follow certain well recognised and established principles of credit administration in order to make credit sales, a profitable venture. The credit sales play a vital role for the success of a business firm. In many cases, 90 per cent of total sales effected by manufacturers and wholesalers are credit sales. Since granting of credit involves use of financial resources, a firm has to strike a balance between profitability and liquidity. An adherence to the principles of credit administration helps to achieve this balance. The principles of credit administration are :

- (i) Allocation of authority;
- (ii) Selection of proper credit terms;
- (iii) Thorough credit investigation and
- (iv) Collection policies and procedures.

5.4.5.4 Evaluation of Receivable Management in Sample SLPEs :

It is proposed to examine the proportion of 'receivables' to the 'current assets' and 'sales' and also 'Book Debts', a component of receivables as equivalent to month's turnover. Receivables is composed of book-debts (i.e., amount due on

credit sales) and loans and advances, implying advances to employees recoverable in cash, advances made for value to be received, deposits with port-trusts, customs, security deposits in the railway and others etc. The quantum of receivables at a particular point of time is the function of credit sales and credit and collection policies. It throws light on the efficiency of collection department.

It is revealed by the table 5.13 that, on an average about 32 per cent of current assets are blocked by receivables alone. Moreover, this proportion in case of manufacturing sector ranges somewhere near 40 per cent. The trading sector which enjoy monopoly in the market have only 3 per cent of current assets as receivables. Thus the share of receivables in overall composition of current assets is a significant one which requires a routine check by the credit and collection department. This would ease the shortage of working capital and reduce the SLPEs pressure on State Government for working fund.

On the other hand, the receivables as a percentage to sales is abnormally high which ranges from 65 to 100 per cent in first half of the period under study in case of manufacturing sector. The inclusion of trading sector which is least prone to receivables have lowered the average figure from 65 to about 45 per cent. This means for every sale of Re. 1/- by SLPEs, more than 50 p_s of it remains due which cannot be

Table 5.13

Percentage of 'Receivables to 'Current Assets' and 'Sales'

Enter- prises	Years									
	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DPL	41.1 (85.6)	53.0 (70.4)	47.6 (77.7)	59.9 (92.6)	54.4 (87.1)	NA	37.2 (43.7)	41.5 (48.3)	42.5 (51.9)	44.9 (65.2)
DCL	38.2 (42.0)	41.9 (31.1)	30.9 (32.8)	39.3 (36.6)	11.2 (12.0)	13.3 (16.5)	17.2 (21.8)	21.1 (28.4)	18.9 (105.8)	15.5 (113.8)
EMAIL	35.7 (146.7)	31.7 (124.6)	49.7 (134.6)	49.2 (370.9)	NA	NA	35.7 (62.9)	53.0 (37.8)	56.2 (54.3)	78.1 (65.6)
WSFL	60.9 (95.8)	63.2 (109.2)	71.7 (144.8)	69.5 (104.0)	74.3 (152.8)	NA	36.1 (106.9)	33.9 (100.3)	35.7 (102.0)	20.4 (84.0)
SWL	38.5 (33.2)	29.3 (30.6)	23.5 (42.2)	38.9 (37.8)	30.3 (36.6)	21.4 (34.6)	10.8 (24.8)	8.2 (64.4)	15.1 NA	NA
KSML	22.3 (9.0)	17.7 (8.3)	33.6 (11.5)	47.7 (16.3)	41.8 (19.5)	NA	NA	5.7 (3.7)	16.3 (8.3)	12.4 (6.1)
NPTCL				23.8 (30.9)	30.1 (38.4)	NA	45.0 (31.6)	20.5 (17.5)	34.8 (38.2)	27.9 (47.7)
EIMTL	24.8 (88.7)	22.3 (106.4)	25.0 (82.4)	27.4 (121.8)	30.8 (116.7)	NA	NA	NA	NA	NA
WBECSCL	NA	NA	NA	NA	NA	4.4 NA	3.2 (1.1)	11.7 (1.2)	2.2 (6.3)	1.9 (1.4)
Average of R to CA 31.8	37.4	37.0	40.3	44.5	38.9	13.0	26.5	24.5	27.7	28.7
Average of R to Sale (59.5)	(71.6)	(68.6)	(75.0)	(101.3)	(66.2)	(25.5)	(41.8)	(37.7)	(52.4)	(54.8)

Note : Figure in brackets show percentage of 'Receivables' to 'Sales'.

justified in such a situation where the enterprises are facing severe shortage of working capital. Individually, WSFL, EMAIL, DPL and DCL are highly receivable ridden public enterprises whereas KSML, DCL and NPICL are moderate ones. WBECSCCL has not at all any problem of receivables. Although the sale by public enterprises, to inter-government departments or to other government agencies are mainly on credit, the realisation thereof needs to be strengthened to facilitate the desired inflow of funds in time. Since the investment in receivables does not directly help the profit to increase, such idle investment should be checked by all means to ease the liquidity and profitability of the enterprise. It has been noted that although the second half of period under study shows a sign of improvement in receivables management, the credit and collection department is still needed to maintain the continuity of their efforts with more vigour.

Out of two components of receivables (i.e., 'Book debts' and 'loans and advances', the greater portion of 'loans and advances' are beyond the control of an enterprise, for example, the deposits with port-trust, customs, security deposits and advances made for values to be received etc. The receivable management has very little to do to avoid their accumulation. On the other hand, book debts which comprises a larger proportion to receivables need all the attention in managing the working capital. The quantum of receivables at a particular point of time is the function of credit sales

and credit and collection policies. Hence let us have a insight view of book debts computed as equivalents to month's turnover. The table 5.14 reveals the degree of efficiency of collection department.

Table 5.14

Book-Debts as Equivalent to Months' Turnover										
	1981- 82	1982- 83	1983- 84	1984- 85	1985- 86	1986 -87	1987- 88	1988- 89	1989- 90	1990- 91
DCL	2.53	1.84	2.09	2.15	1.46	1.95	2.57	3.04	12.70	nil
DPL	6.35	5.47	6.19	7.97	7.90	5.76	6.47	7.35	8.27	8.71
EMAIL	14.18	12.10	14.28	39.17	NA	9.37	8.60	4.54	NA	NA
WSFL	7.81	9.67	11.44	12.07	17.15	NA	13.20	12.17	12.42	10.18
SWL	3.68	2.64	4.07	3.58	3.10	4.15	2.98	7.73	3.62	NA
KSML	0.22	0.20	0.78	0.20	0.72	NA	0.44	1.00	0.73	0.10
Ave- rage	5.79	5.32	6.46	10.85	6.07	5.31	5.71	5.97	7.54	6.66

Source : Published Annual Reports.

The table 5.14 shows 'Book-Debts' (i.e., the money due from customers on account of credit sales) as equivalent to month's turnover are found to be on a very high side. On an average, the book-debts during the peirod under study are more than 6 months' value of sales. In totality this result is very discouraging. Individually, EMAIL, WSFL and DPL have a very high level of 'book-debts' which is equal to, sometimes more than a year's sales. Thus, the book-debts as equivalent to

sales ranges from 4.5 to 39 months in case of EMAIL being the worst. 7.8 to 17 months in case of WSPL and 5.4 to 8.7 months in case of DPL, all belonging the manufacturing sector, KSML under the textile industry is the only exception which has a very low 'book-debts' in terms of month's sales which ranges from 0.2 to 1.1 months only. The possible reasons for accumulation of book-debts might be the buyers' market and the credit sales, being guaranteed by the Government. A stiff competition from both the private and public sector could not help the tight collection measures as it would squeeze the sales, capital turnover and ultimately the profitability. The broad policy measures in public undertakings seems to be in favour of capacity utilisation rather than tight credit policy.

5.4.5.5 Summing Up : To sum up the findings, the receivables occupied on an average 32 per cent of current assets and 60 per cent of sales. In both the cases engineering sector enterprises have a larger amount of receivables than any other sector. On the other hand, Book-Debts — one of the two components of receivables predominated the composition of receivables, representing equivalence of 6 months turnover on an average. It indicates liberal credit and collection policy of SLPEs either to maintain required capacity utilisation or under some sort of compulsion to make inter-department sales

on credit, the repayment thereof are normally being delayed. The advances made to suppliers of raw materials and fixed assets are not settled in time which led to blocking of working capital and loss of interest thereon. It seems that there is no well-laid rules of recovery of advances and sale-proceeds.

5.4.6 Working Finance Management :

Working Capital, also known as Working Finance, or Short-term Finance is a must for every business to meet its day to day expenditure, in order to the business. The requirement of working finance varies from industry to industry and from one firm to another, depending upon the size, type and the length of operating cycle. A firm, generally requires two types of working finance — Permanent and variable working capital finance. 'Permanent working capital' represents the minimum level of current assets required all the time for minimum level of operation, consists of minimum inventory investment in raw materials, work-in-process, finished goods and of receivables obtained on any day of the year. Any excess over the minimum current assets is termed as 'Temporary working capital'. The permanent working capital never leaves the business and remains gainfully employed all the time, whereas temporary working capital is occasionally unutilised during the year. A company operating in a field subject to

wide fluctuations in demand and price for its products or involving rapidly changing technology requires additional working capital to cope with these contingencies.²⁴

5.4.6.1 Various Sources of Working Finance : The conventional generalisations relating to the financing of working capital suggest that an amount equal to the basic minimum of current assets should be financed from long-term sources and that only seasonal needs of working capital should be financed through short term sources. A public enterprise does not raise finance in a way the private sector enterprise does for reasons of social and economic policy of the Government. However, care must be taken in selecting the specific source particularly about the suitability of the source considering the various factors and constraints of the firm. All the sources may be classified broadly into two categories from the view point of time element : (I) Long term source; and (II) Short term source. For each of these two main sources, a further classification can be done based on their origin as follows :

I. (a) Long-term internal sources (owned by the firm itself) :

- (i) Retained earnings like Reserves and Surplus.
- (ii) Depreciation & provisions.
- (iii) Equity and Preference share capital.

- I. (b) Long-term external sources (owned by external agencies) :
 - (i) Debentures.
 - (ii) Long-term loans from financial institutions, banks and other sources.
 - (iii) Public fixed-deposits.

- II. (a) Short-term internal sources :
 - (i) Dividend provisions,
 - (ii) Tax provisions,
 - (iii) Any other provisions.

- II. (b) Short-term external sources :
 - (i) Buying on credit from the suppliers,
 - (ii) Cash credit arrangement from banks,
 - (iii) Bank over-drafts,
 - (iv) Commercial papers,
 - (v) Short-term public deposits,
 - (vi) Miscellaneous sources such as deposits from contributors and stockists etc.

But in case of public-sector enterprises, the discretion about the use and accumulation of these funds is not exclusively with the enterprise and hence, reliance on them is conditional and subject to the approval of the government.

5.4.5.2 Relative Advantage of Short-term Sources Over the Long-term Sources : The short-term sources have some comparative advantages over the long-term sources :

- (i) First, the cost of securing short-term funds is generally low or negligible. For example, the trade credit is obtained free of cost.
- (ii) Secondly, since short-term funds can be retained only for the period they are needed, no cost is incurred by the firm for the period these funds remain idle.
- (iii) Thirdly, short-term funds generally do not interfere with the autonomous right of the management to manage the business the way they like.
- (iv) Finally, if long-term funds also are utilised for all working capital requirements, the firm may, on the other hand, be short of funds for expansion and on the other hand, be unable to make optimum use of scarce resources.

Internal short-term funds for working capital is generated automatically due to the gap between incurring of short-term liabilities like outstanding wages, salaries, shares of the owners of the business in profits, tax liabilities etc. and their off-settings. During this intervals, the

short-term funds arise automatically. These short-term funds are also termed spontaneous sources of short-term credit.²⁵

5.4.6.3 Evaluation of Working Finance in Sample SLPEs : It is proposed to examine the size of working finance and its growth, its relation with the size of the business and its adequacy in terms of months' cost of production. It is also proposed to make study of two most important and common internal source of working finance viz. cash credit arrangements with banks and depreciation fund, reserves and surplus.

5.4.6.3.1 Working Finance and Its Growth in SLPEs : The size of working finance has been computed on the basis of 'net working capital' concept, i.e., the difference between the current assets and current liabilities. The table 5.15 focuses light on the size of working finance and its growth over the years.

The computations in table 5.15 based on net concept of working capital, give the size of both the positive and negative working finance. The negative working finance proves that the size of current liabilities had exceeded the size of current assets in two SLPEs (out of 13 sample SLPEs in this case) for the period under study. Again, the negative working

Table 5.15

Size of Working Finance* and its Growth over Base Year
(Rs. in lakhs)

Enter- prises	Years						
	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DCL	(658.20) (100.00)	(848.07) (123.77)	(1233.99) (180.10)	(559.15) (81.6)	(648.63) (94.66)	(736.98) (107.56)	(690.92) (100.83)
WSFL	377.99 100.00	258.39 68.36	532.82 140.96	455.23 120.43	(1546.26) (409.07)	(1806.61) (477.95)	(2078.06) (549.77)
KSML	(351.54) (100.00)	(425.19) (120.95)	(471.36) (134.08)	(438.23) (124.66)	(1607.41) (457.25)	(1039.05) (295.57)	(770.12) (219.07)
EMAIL	81.12 100.00	75.15 92.64	70.83 87.32	74.28 91.57	123.31 152.00	202.61 249.47	257.71 316.96
GL	33.25 100.00	36.10 109.06	45.83 137.83	44.05 132.48	120.35 361.95	41.79 125.68	107.19 322.37
NPTCL	53.56 100.00	70.47 131.57	60.45 112.86	70.91 132.39	12.59 23.51	61.81 115.4	1.63 3.04
SPL	64.39 100.00	43.02 66.81	(6.36) (9.88)	28.87 44.84	6.93 10.76	92.77 144.07	231.72 359.86

contd ...

Table 5.15 contd ...

WBSIDCL	31.84 100.00	65.47 205.62	76.99 241.80	41.86 131.47	146.29 459.45	204.06 640.89	NA
DPL	4369.09 100.00	4083.47 93.46	4902.8 112.22	4443.68 101.71	3463.40 79.27	1732.83 39.66	1998.97 45.75
WBSWCL	98.02 100.00	92.75 94.62	53.80 54.89	90.02 91.83	NA	275.70 281.27	362.88 370.21
WBECSCCL	546.96 100.00	428.40 78.32	792.48 144.88	1079.74 197.41	1147.43 207.95	1423.91 260.33	1746.10 319.24
WBIDCL	5881.62 100.00	7176.65 144.88	8413.93 143.05	9908.63 168.47	11039.24 187.69	12466.15 211.95	13887.98 236.13
SWL	26.04 100.00	18.61 71.47	9.48 36.41	(29.25) (112.32)	(89.59) (344.05)	(117.21) (450.12)	NA
Total Working Finance	10527.14	11500.41	13247.70	15810.64	12167.65	12801.79	15055.08
Percentage growth of Total.	100.0	109.25	125.84	150.19	115.58	121.61	141.01

* Based on Net Concept
Source : Published Annual Reports.

finance exists in two more sample SLPEs for a couple of years of period under study. It is further noticed that negative working finance prevails in chemical and textile sectors and not much in engineering sector which dominates the sample. This indicates a situation of technical insolvency, requiring immediate rectification in order to check the financial crisis and resultant loss of production. The base year percentage growth of working finance shows a wide variations a falling growth of working finance in first half of the period under study and then rising growth in next half, in atleast 5 SLPEs, out of 13 sample SLPEs in this case. Moreover the overall percentage growth in working finance is also in commensurate with the above fact, showing 150 per cent growth in just 4 years. The percentage growth also indicates that for those sample units whose working finance run in negative have a upward trend, implying more hardships in managing the working finance to the concerned SLPEs.

5.4.6.3.2 Adequacy of Working Finance : However, the analysis of size of working finance itself is not enough to highlight its adequacy, shortage or surplus, unless it is measured in terms of its requirement i.e., cost of production. The table 5.16 will help to analyse the adequacy of working finance in terms of months' cost of sales.

Table 5.16

Working Finance in Terms of Months' Cost of Production

Enter- prises	Years						
	1984 -85	1985 -86	1986-87	1987 -88	1988-89	1989-90	1990-91
DCL	(7.68)	(9.62)	(12.53)	(4.53)	(6.18)	(8.25)	NA
WSFL	4.58	3.24	6.27	5.42	(14.57)	(14.28)	(15.07)
KSML	(4.42)	(5.44)	(5.64)	(3.96)	(14.04)	(9.16)	(6.17)
EMAIL	19.8	14.45	7.70	8.65	4.55	6.77	7.16
GL	1.67	1.61	1.87	1.47	4.58	1.13	2.63
NPTCL	3.01	3.75	2.91	2.89	0.43	1.97	0.07
SWL	1.70	1.03	0.52	(1.03)	(7.66)	2.19	NA
SPL	2.99	1.96	(0.24)	1.02	1.17	2.89	5.32
WBSIDCL	3.64	0.02	(4.69)	2.15	6.92	7.55	NA
DPL	8.16	7.13	6.82	5.11	3.74	1.61	2.02
WBSWCL	7.21	5.59	3.11	4.76	NA	11.25	14.8
WBECSCL	0.46	0.32	0.54	0.58	0.83	1.49	2.07
Average	5.32	3.91	3.72	3.56	2.55	4.09	5.89

Note (1) Cost of Production is not applicable in case of financial sector enterprises.

(2) Figure in brackets shows negative working capital.

The table 5.16 shows the number of months' cost of production, for which working finance at the disposal of SLPEs are available. These computations when compared to guide posts would speak of adequacy or inadequacy of working finance

in order to meet the cost of production. In case of Central Government's undertakings, the Government had fixed the level of working finance at four month's production cost for different steel plants in the country.²⁶ But this norm varies from industry to industry. However, the comparison of SLPE's working finance in terms of months' cost of production shows that atleast 50 per cent SLPEs (6 out of 12) have shortage of working finance in terms of their requirements most of which belong to engineering sector. The working finance in these enterprises varies from one month to three months in most cases. The most disappointing fact states that 2 out of 12 SLPEs have negative working finance for all the years under study and another three also have negative working finance from 2 to 3 consecutive years. The degree of negativity is also very higher i.e., 7.3 months on an average. Although 3 SLPEs which had negative working finance have succeeded partially in overcoming the problem in later years, the position of same had deteriorated in two SLPEs where the rate increased for 7 to 12 months and 4 to 14 months respectively. The year 1988-89 is most adverse year so far working finance is concerned which shows negative working finance in at least 4 units and a lowest average of 2.55 months. The disadvantage of negative working finance have manifold as discussed earlier. DPL (under the power sector) and EMAIL (under the engineering goods sector) have succeeded in controlling their excess working finance gradually from a abnormal rate of 8 months to 3.75 months and 20 months to 4.5 months respectively.

WBEC SCL (under the trading sector), on the other hand is trying to improve its working finance for a meagre figure of 0.46 months in 1984-85 to 2.07 months gradually over the years under study. The average working finance for all SLPs taken together has also come down from 5.3 months to 2.55 months gradually in 5 years but unfortunately increased in last couple of years touching a peak of 5.89 months.

Both the situations of inadequate or surplus working finance have an adverse effect on the profitability of an enterprise. For shortage of working finance, factors like sickness of the unit, unsound financial planning and control, unplanned operation, inability on the part of Government to supply enough working finance, and last but not the least, inefficiency of management as a whole might be held responsible. On the other hand, for the excess of working finance, factors like lack of skill in managing the working finance, huge expansion programmes, slow transmutation of working capital, and unproductive sales and purchase policies might be the reasons. In totality, working finance in terms of months' cost of production reveals a close proximity to the prescribed standard.

5.4.6.3.3 Growth of Working Finance vis-a-vis Volume of Business of SLPs : After examining the adequacy of working finance, it is proposed to study its growth along with the

growth of business in terms of sales. Normally, the volume of working finance should change to the same direction to which the business of a firm moves in terms of sales and/or production.

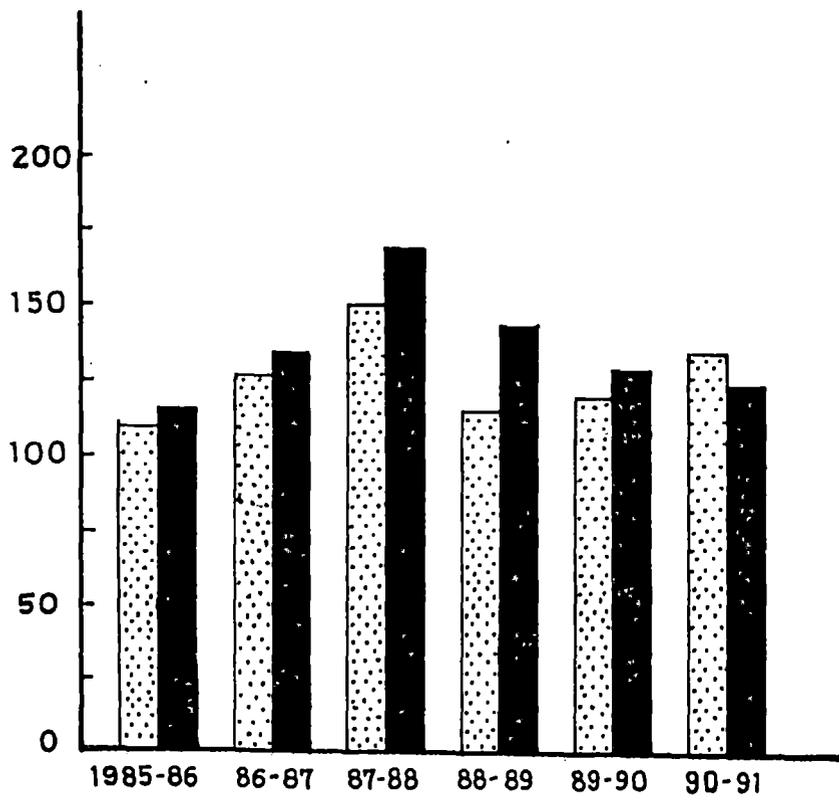
Table 5.17

Relation Between Working Finance and Size of Business (i.e., Sales)

(Rs. in lakhs)

Years	Total Working Finance			Total Sales		
	Amount	Link Relat-ives %	Growth Rate	Amount	Link Relat-ives %	Growth Rate
1984-85	10527.14	100.0	-	21434.69	100.0	-
1985-86	11500.41	109.25	+ 9.25	24941.83	116.36	+ 16.36
1986-87	13247.70	125.84	+ 25.84	28931.08	134.97	+ 34.97
1987-88	15810.64	150.19	+ 50.19	36458.88	170.09	+ 70.09
1988-89	12167.65	115.58	+ 15.58	31108.20	145.13	+ 45.13
1989-90	12801.79	121.61	+ 21.61	27475.33	128.18	+ 28.18
1990-91	15055.08	141.01	+ 41.01	26621.64	124.20	+ 24.20
Average Growth			27.25%			34.69%

The table 5.17 shows that the pace of growth in working finance is slower than the growth in sales. In all the years under study except 1990-91, the working finance have grown at a slower rate than that of sales. This proves the inability



GROWTH IN WORKING FINANCE & SALES .

▨ % Growth in working finance .

■ % Growth in sales .

Fig. 2 .

of management to arrange additional working finance to meet the requirement of growing sales and thereby growing production.

Main Sources of Working Finance in SLPEs :

The needs of SLPEs in West Bengal for working capital are normally met through cash credit arrangement with scheduled banks or by temporary utilisation of internal resources. The government of West Bengal rarely provide short-term loans to public enterprises except making good the cash losses incurred by these enterprises. In some cases, diversification of long-term loans (as provided by the State Government) for meeting the working capital requirements has become a common practice which is not desirable. Unless Government's guarantee is available, even the banks hesitate to grant loans to public enterprises. Even in some cases, the banks have stopped cash-credit arrangement to SLPEs due to various reasons viz. poor performance, default in repayment, lack of liquidity etc. Thus, the three main source of working finance as noticed in sample SLPEs are ;

- (i) Arrangement of cash-credit with banks;
- (ii) Diversification of long-term finance, provided by the State Government;
- (iii) Use of internal resources, viz. Depreciation fund and Reserve and surplus.

(i) Arrangement of Cash-credit with Banks :

Normally, cash credits are available to SLPEs by the hypothecation of stocks of inventories. The common practice adopted by banks for allowing the cash credits is to fix a credit line for each undertaking. The table 5.18 shows that all the sample SLPEs have made arrangements for cash credits with banks.

It is also revealed from the table 5.18 that there is a wide variation in availing the cash credit. The percentage of cash credits to total working finance ranges from 2.66 per cent to 19.74 per cent in DPL, from 0.01 to 2.58 per cent in WBIDCL, from 22.34 per cent to 71.33 per cent in GL and 19.25 per cent to 30.8 per cent in WSFL, averaging a meagre figure of 17 per cent of working finance (based on net concept). On the other hand, the average proportion of 'cash credit' in NPTCL, SWL, SPL comes to 280 per cent of net working capital. One important finding of the table 5.18 is that the proportion of cash credit has risen over the years in almost all the enterprises, except EMAIL, WBSIDCL and WBECSCCL where the same has not been availed of. The reasons for not availing themselves of cash credits are obvious for trading and service sector enterprises in this sample who depends considerably on internal sources and plough back their profits.

Table 5.18

Size of Cash Credit from Banks availed by SLPEs and its Percentage to 'Working Finance'
(Rs. in lakhs)

Enter- prises	Years						
	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DCL	42.09 NWF	45.37 NWF	73.76 NWF	61.42 NWF	63.59 NWF	72.26 NWF	nil NWF
WSFL	72.77 (19.25)	79.61 (30.81)	108.66 (20.39)	139.87 (30.73)	581.73 NWF	656.80 NWF	726.45 NWF
KSML	45.35 NWF	59.40 NWF	54.85 NWF	63.65 NWF	nil	nil	nil
EMAIL	0.02 (0.02)	nil	nil	nil	nil	nil	0.29 (0.11)
GL	8.01 (24.09)	8.88 (24.6)	10.24 (22.34)	9.96 (22.61)	85.84 (71.33)	84.72 (202.73)	109.45 (102.11)
NPTCL	58.18 (108.63)	101.27 (143.7)	119.29 (197.34)	124.61 (175.73)	115.30 (915.8)	142.20 (230.06)	140.11 -

contd ...

Table 5.19 contd ...

SWL	36.32 (139.48)	45.98 (247.0)	52.11 (549.68)	42.57 NWF	41.25 NWF	43.28 NWF	NA
SPL	152.63 (237.0)	159.43 (370.59)	104.87 NWF	132.13 (457.67)	101.22 -	104.31 (112.44)	128.44 (55.43)
WBSIDCL	nil	nil	nil	nil	2.12 (1.45)	nil	NA
DPL	-	108.67 (2.66)	205.54 (4.19)	382.98 (8.62)	332.18 (9.59)	287.66 (16.6)	394.57 (19.74)
WBIDCL	NA	NA	1.23 (0.01)	255.89 (2.58)	125.94 (1.14)	11.60 (0.09)	NA
WBECSCL	3.91 (0.71)	nil	nil	nil	nil	nil	nil

*NWF = Negative Working Finance.

Source: Published Annual Accounts.

(ii) Use of Internal-resource in SLPES :

Internal-resource implies the use of retained-earnings, depreciation fund and other funds at the disposal of an enterprise. Although internal resources are not available in the initial stage of an enterprise, the discretion about the use and accumulation of these funds is not exclusively with the enterprise and hence, reliance on them is conditional and subject to the approval. The table 5.19 shows sum total of 'depreciation fund' and 'reserve and surplus' at the year-end and its percentage to working capital yearwise.

In totality, 'depreciation fund' accounted for 80 per cent and 'reserve & surplus' accounted for 20 of internal resource as a whole. So far the use of depreciation fund, as a internal source is concerned, the cash-loss making enterprises have nothing as such to utilise as provision for depreciation is merely an accounting practice and does not provide anything in cash. In general, Government does not favour the use of depreciation fund for the purpose of working finance. On the other hand, 'reserve & surplus' which on an average accounts for 20 per cent of internal source in our case, is not available in all the SLPES. 4 out of 14 sample SLPES do not have any 'reserve & surplus'. All the engineering sector enterprises have no or very little 'reserve & surplus'. The ^{next} four sample SLPES alone have accounted for more than 85 per cent of 'reserve and surplus' (which in turn represents 80% per cent of total internal resource). The proportion of 'internal source' as whole is very

Table 5.19

Size of Internal Source (i.e., Depreciation Fund, Reserve & Surplus) and its Proportion to Working Finance (Rs. in lakhs)

Enter- prises	Years						
	1984-85	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91
DCL	969.89 NWF	1002.89 NWF	1037.89 NWF	1073.89 NWF	1098.55 NWF	1130.73 NWF	1155.81 NWF
WSFL	320.61 (84.8)	330.31 (127.8)	340.97 (63.9)	349.07 (76.7)	355.75 NWF	363.90 NWF	373.42 NWF
KSML	479.09 NWF	488.18 NWF	497.00 NWF	503.12 NWF	517.32 NWF	535.35 NWF	558.12 NWF
EMAIL	23.11 (28.5)	24.52 (32.6)	25.81 (36.4)	27.01 (36.4)	27.97 (22.7)	29.58 (14.6)	31.07 (12.1)
GL	25.89 (77.9)	31.21 (86.5)	35.83 (78.2)	39.01 (99.6)	6.65 (5.5)	7.52 (18.0)	9.48 (8.8)
NPICL	15.78 (29.5)	14.21 (20.2)	12.99 (21.5)	12.12 (17.1)	59.48 (472.4)	66.88 (108.2)	73.23 -
SWL	23.19 (89.0)	29.54 (158.7)	34.8 (367.1)	39.28 NWF	43.24 NWF	47.78 NWF	NA

contd ...

Table 5.19 contd ...

SPL	103.68 (161.0)	105.58 (245.4)	107.29 NWF	111.20 (385.2)	300.29 -	206.59 (222.7)	417.43 (180.1)
WBSIDCL	103.08 (323.7)	109.99 (168.0)	116.16 (150.8)	126.65 (302.5)	140.02 (95.7)	151.41 (74.2)	NA
DPL	5083.06 (116.3)	5301.04 (129.8)	5500.58 (112.2)	5765.21 (129.7)	6347.06 (183.3)	7168.17 (413.7)	7946.76 (397.5)
WBSWCL	55.62 (56.7)	69.85 (75.3)	93.20 (173.2)	139.91 (155.4)	NA	556.92 (202.0)	636.89 (175.5)
WBECSCCL	545.16 (99.6)	728.90 (170.1)	866.07 (109.3)	891.99 (82.6)	1267.55 (110.5)	1543.64 (108.4)	1867.25 (106.9)
WBFC	432.54 -	578.96 -	652.51 -	750.00 -	79.73 -	91.11 -	237.70 -
WBIDCL	293.28 (4.9)	400.44 (5.6)	301.08 (3.6)	302.34 (3.1)	372.05 (3.4)	321.14 (2.6)	257.03 (1.9)
Total Deprecia- tion Fund	7105.32	7380.41	7636.69	7945.27	8816.61	9864.85	10608.92
% to Grand Total	83.8%	80.1%	79.4%	78.4%	83.0%	80.7%	78.2%
Total Reserve & Surplus	1368.66	1835.21	1985.49	2185.63	1799.02	2355.87	2955.27
% to Grand Total	16.2%	19.9%	20.6%	21.6%	17.0%	19.3%	21.8%
GRAND TOTAL	8473.98	9215.62	9622.18	10130.90	10615.63	12220.72	13564.19

NWF = Negative Working Finance.

Figure in brackets shows percentage of Internal Source to Working Finance.

significant in DPL SWL, SPL, WBSIDCL, WBSWCL and WBECSCCL sample units which shows more than 100 per cent of working finance (net concept) in these enterprises. The rest of the enterprises have on an average, 50 per cent of working finance from internal source.

5.4.6.4 Summing Up : To sum up the findings of working-finance management, we can say that (i) at least 15 per cent of sample units have negative working finance (based on net concept) whereas, other 20 per cent have negative working finance for a couple of years under study, indicating technical insolvency; (ii) a wide variation prevails in the size and composition of working finance in almost all the sample enterprises, proving lack of planning and control in the management of working finance, (iii) at least 50 per cent of SLPEs mostly in engineering sector have inadequate working finance in terms of cost of production and thereby adversely affecting the profitability to the SLPEs, (iv) the growth in working finance over the period under study is slower, compared to growth in size of the business, measured in terms of sales, proving inability of management to arrange additional working finance for additional production, (v) the main sources of working finance in our case restricted to 'cash credit arrangement' with banks, use of 'depreciation fund' and 'reserve and surplus' as a internal source and diversification of long-term debt for meeting the working capital requirement.

REFERENCES

1. William Beranek, Working Capital Management (California : Wodsworth Publishing Company, Inc. Belmont, 1966), p.2.
2. N.K. Agarwal, Management of Working Capital (New Delhi: Sterling Publishers Pvt. Ltd., 1983), p.6.
3. Colin Park and John W. Gladson, Working Capital (New York: Mac Millan Company (1st Printing), 1963), p.2.
4. Bhabatosh Banerjee, Cash Management ; A Practical Approach (Calcutta ; The World Press Pvt. Ltd., 1982), p.77.
5. J.F. Weston and E.F. Brigham, Essentials of Managerial Finance (New York: Holt Rinehart and Winston, Inc., 1971), p.297.
6. Report on Public Sector Undertakings, Administrative Reforms Commission (New Delhi: Govt. of India, Oct. 1967), p.63.
7. James W. Pichard and Robert H. Eigel, Modern Management Inventory (New York: John Wiley and Sons, (1st Printing), 1965), p.2.

8. Kasula Rajeshwar Rao, Working Capital Planning and Control in Public Enterprises in India (New Delhi: Ajanta Publications (India) 1st Published, 1985), p.14.
9. L.R.Howard, Working Capital : Its Management and Control (London: Macdonald & Evans Ltd., 1971), p.92.
10. C.McGolerick and B.Graham, The Interpretation of Financial Statements (London: Harper and Row, 1964).
11. Robert W Campbell, Accounting in Soviet Planning and Management (Cambridge Massachusetts: Harvard University Press, 1963), p.194.
12. Report of the Study Group to frame guidelines for Follow-up of Bank Credit (Bombay: RBI, 1975), pp.20-21 (Chairman: Prakash Tondon and Popularly Known as the Tondon Committee).
13. National Council of Applied Economic Research, Structure of Working Capital (New Delhi, 1966), p.57.
14. I.M.Pandey, Financial Management; 4th Edition (New Delhi: Vikash Publishing House Pvt.Ltd., 1983), p.355.
15. Anil B.Roy Chowdhury, Working Capital Management : A Workbook on Corporate Liquidity (Calcutta: Eastern Law House, 1978), p.97.
16. J.M.Keynes, The General Theory of Employment, Interest and Money (New York: Harcourt, 1936), pp.170-174.
17. John Sagan, 'Towards a Theory of Working Capital Management, The Journal of Finance (Vol.X, May 1955) New York, p.124.

18. H.G.Guthmann and H.E.Dongall, Corporate Financial Policy (New Delhi;Prentice Hall of India Pvt.Ltd., 4th Edition) pp.84-85.
19. E.W.Walker and W.H.Banghn, Financial Planning & Policy (New York;Harper & Row, Tokyo;John Weather hill, Inc., 1961), p.152.
20. H.G.Guthmann and H.E.Dongall, Corporate Financial Policy, op.cit., p.295.
21. National Association of Accountants, Cash Flow Analysis for Managerial Control (N.Y:N.A.A. Research Report No.38, 1961), p.3.
22. Kasula Rajeshwar Rao, Working Capital Planning and Control in Public Enterprises in India, op.cit., p.177.
23. V.E.Ramamoorthy, Working Capital Management (Madras: Institute for Financial Management and Research, 1976), p.183.
24. Ram Kumar Mishra, Problems of Working Capital ; With Special reference to Selected Public Undertakings in India (Bombay;Somaiya Publications Pvt.Ltd., 1975), pp.26-27.
25. R.G.Schultz and R.E.Schultz, Basic Financial Management: Text, Problems and Cases (Pennsylvania : Intext Educational Publishers, 1972), p.228.
26. Circular No.SC (C)-2 (27)/62 of Sept.7, 1961 quoted in R.K.Mishra, Problems of Working Capital, op.cit., p.165.