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WORKING CAPITAL TRENDS IN INDIA

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The purpose of this paper is to analyse the working capital trends in the medium and large manufacturing public limited companies in India during 1970-71 to 1975-76. A study of the working capital trends will help to highlight some of these aspects of the working capital management which need careful attention from the business managers.

The analysis here is based on the data published by the Reserve Bank of India.[1] We have classified all processing and manufacturing industries into three groups: consumer goods, capital goods and others. Consumer goods group includes foodstuffs, textiles, tobacco, leather and their products; capital goods group includes metals, chemicals and their products and 'others group' include cement, rubber and rubber products, paper and paper products etc. The number of companies included in each group is same between 1970-71 to 1973-74; in 1974-75 and 1975-76 the number of companies in each group is slightly different than that of the previous years (see Table 1). Since the number of companies in each group is

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[1] Reserve Bank of India Bulletins, September 1975 and September 1977.

Table 1: Number of Companies in Each Group

	1970-71	1971-72	1972-73	1974-75	1975-7
Consumer goods (Group I)	493	493	493	476	476
Capital goods (Group II)	600	600	600	610	610
Others (Group III)	175	175	175	180	180
Total	1268	1268	1268	1266	1266

more or less the same, a comparison of relevant ratios will be quite useful. The following ratios are analysed to study the trends.

1. Current assets to total net assets.
2. Current assets to current liabilities.
3. Current assets to sales.
4. Debtors to sales.
5. Inventories to sales.
6. Inventories to value of production.

Current Assets to Total Net Assets Ratio

This ratio indicates the proportion of current-assets investment to total investment in assets. This ratio has remained constant during 1970-71 to 1972-73; thereafter, it showed a tendency to increase. Between 1970-71 to 1975-76, the ratio has increased from 58 per cent to 64 per cent for all industries. The group III comprising cement, paper, rubber, etc., has minimum current assets to total net assets ratio throughout 1970-71 to 1975-76. It is this group whose ratio has shown a maximum increase (from 48 per cent in 1970-71 to 58 per cent in 1975-76). The ratio of Group I showed the slightest fluctuations. It ranged between 63 per cent to 66 per cent.

Table 2: Current assets to total net assets ratio

	All Mfg. Cos.	Group I	Group II	Group III
1970-71	.58	.63	.57	.48
1971-72	.59	.65	.59	.50
1972-73	.59	.64	.59	.51
1973-74	.62	.66	.61	.53
1974-75	.64	.65	.65	.57
1975-76	.64	.65	.66	.58

Table 3 shows current assets to total net assets ratios for 1650 large and medium public limited companies divided into 24 industry groups. The ratio can be found to vary widely, the range being 88.3 per cent for Trading to 23.8 per cent for Shipping in 1975-76. Among the manufacturing industry groups, Non-ferrous Metals (Basic) had the highest ratio (81.2 per cent) Rubber and Rubber Products (71.2), Jute Textiles (71 per cent), Engineering (70.5 per cent) and so on. It is noticeable that Trading industry has had continuously a high ratio, the range being 88.1 per cent to 89.9 per cent. The ratio of Non-ferrous Metals (Basic) has fluctuated widely; it has increased from 68.5 per cent in 1970-71 to 81.2 per cent in 1975-76. Aluminium has the lowest ratio (44.9 per cent in 1975-76) among manufacturing group.

Table 3: Current Assets to Total Net Assets Ratio (Industry-wise)

Industry group	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
1. Tea plantation	54.9	55.8	54.3	55.4	61.5	62.0
2. Coffee plantations	52.1	56.4	52.7	56.6	58.1	59.2
3. Rubber plantations	32.3	33.4	32.9	33.8	37.7	38.1
4. Edible vegetable and hydro-genated oils	67.9	68.2	72.1	73.9	70.6	66.7
5. Sugar	72.0	71.4	66.9	69.6	68.1	69.6
6. Tobacco	80.1	79.7	80.5	79.2	79.4	79.2
7. Cotton textiles	61.2	64.0	63.8	66.2	66.5	64.7
8. Jute textiles	66.9	70.3	68.6	71.9	71.7	71.0
9. Silk and rayon textiles	54.0	53.4	53.3	53.3	48.5	51.1
10. Woollen textiles	69.9	73.2	70.5	73.7	72.6	72.6
11. Breweries and distilleries	54.9	52.7	51.4	54.0	55.9	54.7
12. Iron and steel	40.1	42.9	43.9	47.9	51.3	52.4
13. Aluminium	34.1	34.3	36.2	34.9	36.9	44.9
14. Other non-ferrous metals(basic)	68.5	65.4	68.6	71.4	80.8	81.2
15. Engineering	65.0	67.5	67.9	69.8	71.9	70.5
(i) Transport Equipment	59.0	61.9	62.3	64.7	67.8	65.3
(Of which motor vehicles)	(58.4)	(61.4)	(61.7)	(63.9)	(67.0)	(64.3)
(ii) Electrical machinery, apparatus, appliances etc.	70.4	72.4	73.0	74.3	75.6	75.7
(iii) Machinery (Other than transport and electrical)	71.2	72.3	72.2	73.7	74.9	74.5
(iv) Foundries and engineering workshops	50.2	56.4	56.9	59.2	64.0	62.0
(v) Ferrous/non-ferrous metal products	61.9	64.7	65.1	68.9	71.3	67.2
16. Chemicals	51.4	51.5	52.0	53.4	60.2	62.8
(i) Basic industrial chemicals	44.0	42.9	43.9	45.4	53.8	58.3
(ii) Medical and pharmaceutical preparations	66.6	67.2	68.8	69.2	71.6	72.0
(iii) Other chemical products	69.2	71.2	65.8	67.3	71.5	71.0
17. Cement	42.3	45.2	46.3	49.5	50.0	53.1
18. Rubber and rubber products	63.2	63.2	61.8	62.9	69.2	71.2
19. Paper and Paper products	40.7	42.9	42.8	43.4	48.1	48.3
20. Glass and glassware	50.5	53.4	55.7	53.4	58.3	58.4
21. Printing and publishing	61.0	63.5	60.6	60.2	64.2	63.7
22. Electricity generation&supply	21.8	23.2	24.4	28.1	31.1	32.5
23. Trading	88.1	88.7	88.7	89.9	89.7	88.3
24. Shipping	34.7	32.7	32.3	29.2	28.4	23.8
25. TOTAL (including others)	57.3	58.9	58.7	60.6	62.5	62.0

The current assets to total net assets ratio for 1650 companies has shown an increase from 57.3 per cent in 1970-71 to 62.0 per cent in 1975-76. As stated earlier, for manufacturing companies only, this ratio has increased from 58 per cent to 64 per cent. Because of a high and increasing investment in current assets, managements need to pay special attention in managing current assets of their respective companies on a continuing basis. The tendency to give lip service to the management of current assets, considering them as short-lived, can prove to be disastrous to company. A very high proportion of these so-called short-lived assets keeps funds tied-up on permanent basis. To ensure maximum profitability, these assets should, therefore, be managed skilfully.

Current Assets to Current Liabilities Ratio

The current assets to current liabilities ratio is indicative of the liquidity position of the firms. A firm to survive on a continuing basis and to avoid risk of insolvency should maintain sufficient liquidity. As a rule of thumb, a 2:1 ratio is considered to be reasonab le. There is, however, nothing very sacrosanct about the 2:1 ratio; what is important is the quality of current assets: how fast and to what extent can they be converted into cash.

Table 4: Current Ratio (Industry-wise)

Industry group	1970-71	1971-72	1972-73	1973-74	1974-75	1975-7
1. Tea plantation	1.21	1.21	1.17	1.17	1.23	1.25
2. Coffee plantation	1.59	1.49	1.62	1.62	1.85	1.76
3. Rubber plantations	1.06	1.08	1.07	1.21	1.28	1.23
4. Edible vegetable and hydro-genated oils	1.13	1.06	1.07	1.17	1.26	1.20
5. Sugar	1.04	1.06	1.15	1.13	1.16	1.10
6. Tobacco	2.08	1.86	1.89	1.77	1.71	1.52
7. Cotton textiles	1.16	1.17	1.23	1.33	1.45	1.27
8. Jute textiles	1.05	1.12	1.08	1.00	1.03	0.97
9. Silk and rayon textiles	1.50	1.69	1.74	1.61	1.86	1.84
10. Woollen textiles	1.44	1.40	1.40	1.49	1.38	1.39
11. Breweries and distilleries	1.27	1.18	1.20	1.19	1.27	1.22
12. Iron and Steel	1.13	1.04	1.04	1.13	1.21	1.11
13. Aluminium	1.82	1.52	1.37	1.20	1.46	1.37
14. Other non-ferrous metals(basic)	1.25	1.27	1.37	1.51	1.64	1.59
15. Engineering	1.22	1.25	1.26	1.25	1.28	1.24
(i) Transport equipment	1.18	1.28	1.32	1.28	1.25	1.19
(Of which motor vehicles)	(1.18)	(1.29)	(1.33)	(1.30)	(1.26)	(1.18
(ii) Electrical machinery, apparatus, appliances etc.	1.21	1.25	1.25	1.27	1.33	1.28
(iii) Machinery (Other than transport and electrical)	1.20	1.20	1.20	1.19	1.21	1.22
(iv) Foundries and engineering workshops	1.23	1.26	1.25	1.21	1.36	1.28
(v) Ferrous/non-ferrous metal products	1.37	1.34	1.38	1.35	1.36	1.29
16. Chemicals	1.51	1.37	1.39	1.40	1.58	1.59
(i) Basic industrial chemicals	1.23	1.30	1.34	1.35	1.62	1.63
(ii) Medicines and pharmaceutical preparations	1.46	1.50	1.49	1.53	1.61	1.61
(iii) Other chemical products	1.43	1.42	1.41	1.43	1.46	1.43
17. Cement	1.27	1.26	1.25	1.17	1.26	1.22
18. Rubber and rubber products	1.54	1.42	1.46	1.48	1.42	1.35
19. Paper and paper products	1.28	1.27	1.18	1.21	1.40	1.33
20. Glass and glassware	1.24	1.16	1.21	1.20	1.37	1.22
21. Printing and publishing	1.05	1.07	1.07	1.14	1.18	1.25
22. Electricigy generation& supply	0.93	0.94	0.89	0.88	1.08	1.01
23. Trading	1.23	1.23	1.24	1.21	1.26	1.26
24. Shipping	0.98	0.92	0.90	0.78	0.79	0.63
25. TOTAL (including others)	1.22	1.23	1.24	1.24	1.31	1.25

The current assets to current liabilities ratio for all manufacturing industries has fluctuated between 1.24 to 1.36 during 1970-71 to 1975-76. After showing an increasing trend till 1974-75, it has declined to 1.29 in 1975-76. The consumer goods industry and capital goods industry groups also have shown the same trend. In the case of other manufacturing industries, such as cement, rubber, paper, glass and glassware etc., the ratio has shown a decline from 1970-71 to 1973-74, rising in 1974-75 and again declining in 1975-76. The decline in the ratio from 1974-75 to 1975-76 is attributable to the expansion in trade dues and other current liabilities outstripping that in debtor balances.

The liquidity position of 1650 companies has varied in the range of 1.22 to 1.25 except in 1974-75 when it rose to 1.31. Thus, the pattern is similar to that of the manufacturing companies. Among the manufacturing industries, Silk and Rayon Textiles has the highest liquidity ratio of 1.84 in 1975-76, followed by Non-ferrous Metals (Basic) and Chemicals (both have a ratio of 1.59), Tobacco (1.52), Woollen Textiles (1.39) and so on in the manufacturing group of industries. On an overall basis, Coffee Plantation has the second highest ratio in 1975-76 (1.76) and shipping has the lowest (0.63). During 1970-71 and 1975-76, the ratios of Tobacco and Aluminium fell significantly while those of Chemicals.

Glass and Glassware, Printing and Publishing and Shipping registered impressive increases (refer to Table 4).

Table 5: Current Assets to Current Liabilities Ratio

	All Mfg. Cos.	Group I	Group II	Group III
1970-71	1.24	1.20	1.25	1.30
1971-72	1.25	1.22	1.27	1.28
1972-73	1.27	1.26	1.28	1.25
1973-74	1.28	1.29	1.28	1.24
1974-75	1.36	1.37	1.35	1.36
1975-76	1.29	1.23	1.32	1.31

Current Assets to Sales Ratio

Table 6 contains current assets to sales ratio. The reciprocal of this ratio, sales to current assets (or more appropriately sales to working capital) is called 'trading ratio'. Current assets to sales ratio (or its reciprocal) indicate the efficiency with which current assets (or working capital) turn into sales. By analysing the trend of this ratio over period, we may know the efficiency of current assets in supporting sales. A lower current assets to sales ratio (or a higher sales to current assets ratio) implies, by and large, a more

efficient use of funds. However, investment in current assets cannot go beyond a limit, otherwise the liquidity position of the company will be endangered.

It can be seen from Table 6 that current assets to sales ratio has reduced from 57 per cent to 54 per cent for all manufacturing companies during 1970-71 to 1975-76. In the various manufacturing industry groups also it has shown a decline. It is observable from the table that the ratio is highest for the capital goods group of manufacturing industries during the entire period of 1970-71 to 1975-76. A declining trend in the current assets to sales ratio is a healthy sign.

Table 6: Current Assets to Sales Ratio

	All Mfg. Co.	Group I	Group II	Group III
1970-71	.57	.50	.65	.54
1971-72	.57	.49	.65	.55
1972-73	.54	.44	.62	.55
1973-74	.57	.49	.65	.53
1974-75	.56	.47	.63	.55
1975-76	.54	.45	.61	.53

Debtors to Sales Ratio

The debtors to sales ratio shows the extent of trade credit granted and the efficiency in the collection of debtors. The lower the ratio, the more efficient the collection of debtors.

It is seen from Table 7 that during 1970-71 to 1975-76, the ratio of debtors to sales has remained more or less constant for all manufacturing industries as well as for the three groups. The ratio is minimum for the consumer goods industry group while it is highest for the capital goods industry group. Thus the capital goods industries seem to sell goods on more liberal terms and conditions than the consumer goods industries.

Table 7: Debtors to Sales Ratio

	All Mfg. Cos.	Group I	Group II	Group III
1970-71	.13	.08	.18	.14
1971-72	.13	.08	.17	.14
1972-73	.12	.07	.16	.12
1973-74	.12	.07	.16	.12
1974-75	.11	.07	.14	.11
1975-76	.12	.08	.16	.12

- Inventory to Sales Ratio

The inventory to sales ratio (or its reciprocal called inventory turnover) indicates efficiency with which inventory turns into sales. The lower this ratio, the more efficiently the inventory is said to be managed.

Table 8 expresses inventory as a ratio of sales. The ratio for all manufacturing industries ranged between 32 per cent to 35 per cent in 1974-75 to 32 per cent in 1975-76. During 1970-71 and 1975-76, the inventory to sales ratio has decreased for the consumer goods group from 33 per cent to 29 per cent, has remained constant (35 per cent) for capital goods group and has increased from 28 per cent to 31 per cent for all other manufacturing industries. It is also noticeable from the table that the ratio has declined between 1974-75 to 1974-76 for all groups of industries.

Table 8: Inventory to Sales Ratio

	All Mfg. Co.	Group I	Group II	Group III
1970-71	.33	.33	.35	.28
1971-72	.34	.32	.36	.29
1972-73	.32	.29	.35	.31
1973-74	.34	.32	.37	.32
1974-75	.35	.31	.38	.3.
1975-76	.32	.29	.35	.31

Inventory to Value of Production Ratio

Inventory to value of production ratio shows the relationship between production levels and inventory requirements. A lower ratio will imply more efficient production.

It is indicated from Table 9 that the inventory to value of production ratio has generally remained constant for all manufacturing

Table 9: Inventory to Production Ratio

	All Mfg. Cos.	Group I	Group II	Group III
1970-71	.33	.32	.35	.28
1971-72	.33	.32	.36	.29
1972-73	.32	.29	.35	.31
1973-74	.34	.31	.39	.32
1974-75	.33	.30	.37	.33
1975-76	.32	.29	.34	.30

industries, the range being 32 per cent to 34 per cent. Between 1970-71 and 1975-76, this ratio has decreased in the case of consumer goods group and capital goods group and has increased in the case of other manufacturing industries. The ratio is generally highest in the case of the capital goods group.

Composition of Current Assets

After having analysed a few important working capital ratios, an analysis of the significance of individual component of current assets is made here. Table 10 express inventory, loans, advances and debtors, marketable investments and cash and bank balances respectively

Table 10: Current Assets Composition - All Manufacturing Industries

	Inventory	Loans, advances and debtors	Marketable investments	Cash and bank balances
1970-71	.58	.34	.02	.06
1971-72	.60	.32	.02	.06
1972-73	.60	.32	.02	.06
1973-74	.60	.32	.02	.06
1974-75	.62	.31	.01	.06
1975-76	.60	.33	.01	.06

as a ratio of current assets for all manufacturing industries. The similar ratios for consumer goods group, capital goods group and other industry group are given in Tables 11, 12 and 13.

It can be seen in Table 10 that inventory constituted the highest proportion of current assets for all manufacturing industries. The inventory to current assets ratio has remained constant at 60 per cent except in 1974-75 when it rose to 62 per cent. Loans, advances and

Table 11: Current Assets Composition--
Consumer Goods Industry Group

	Inventory	Loans, advances and debtors	Marketable investments	Cash and ba balances
1970-71	.66	.27	.02	.05
1971-72	.66	.27	.02	.05
1972-73	.66	.27	.02	.05
1973-74	.66	.26	.02	.04
1974-75	.66	.27	.02	.05
1975-76	.65	.28	.02	.05

debtors have occupied the second place in relation to current ratio. Approximately one-third of current assets is made of debtors etc. Cash and bank balances were just 6 per cent of current assets throughout the period 1970-71 to 1975-76. Marketable investment was a very insignificant proportion of current assets. It varied between 1 per cent to 2 per cent.

Table 12: Current Assets Composition—
Capital Goods Industry Group

	Inventory	Loans, advances and debtors	Marketable Investments	Cash and bank balances
1970-71	.55	.37	.01	.07
1971-72	.57	.36	.01	.06
1972-73	.57	.36	.01	.06
1973-74	.57	.35	.01	.07
1974-75	.60	.33	.01	.06
1975-76	.58	.35	.01	.06

Table 13: Current Assets Composition—
All Other Industry Group

	Inventory	Loans, advances and debts	Marketable investment	Cash and bank balances
1970-71	.53	.38	.02	.07
1971-72	.53	.37	.02	.08
1972-73	.56	.35	.02	.06
1973-74	.55	.35	.02	.08
1974-75	.59	.34	.02	.06
1975-76	.58	.36	.01	.05

Among capital goods, consumer goods and other industry groups, the consumer goods group has the highest inventory to current assets ratio and the lowest loans, advances and debtors to current assets ratio. The inventory to current assets ratio of this group was 66 per cent during 1970-71 and 1975-76. The other ratios of this group have remained more or less constant during 1970-71 and 1975-76. The inventory to current assets ratio for capital goods group varied between 55 per cent to 60 per cent while for others industries group it fluctuated between 53 per cent to 59 per cent. It may be observed from the tables that between 1974-75 and 1975-76, inventory to current assets ratio declined in case of all industry groups while loans, advances and debtors to current assets ratio increased for all industry groups.

The ratios given in the above tables do not show much variations during 1970-71 to 1975-76. Within an industry group, the ratios for individual companies may widely fluctuate. If any of these ratios is abnormal or shows wide variations, a shrewd management will promptly find out its cause and correct it.

Since inventories are the major current assets component, every effort should be made to manage it efficiently and effectively. A

large tie-up of funds in inventories means a loss of profitability to the company. The levels of inventories should be related to the levels of production and sales. A management should put its efforts in bringing down the level of inventories which are disproportionately related to production and sales.

Conclusion

Our analysis highlights certain important trends in working capital in the manufacturing industries. It is shown that current assets as a percentage of total assets is increasing. It is also revealed that inventories constitute the major part of current assets and sales; it is, however, noticeable that inventory as a percentage of sales has not varied much during 1971-76. In view of the recent credit squeeze, the Tandon Committee norms and the Chore Committee's recommendations, it is expected from the business executives to manage inventories and debtors skilfully in order to bring down their levels without adversely affecting production and sales. This certainly needs an attitudinal change in the process of managing working capital Management must shun off the old style of managing by trial and error. They must resort to collection of data, their scientific analysis and projections. Operating and other budgets should be prepared on short-term as well as as long-term basis. In the preparation of budgets, all levels of management should be involved. Top management must realise that operating managers have to play

a significant role in working capital management. These are the people who can really influence the mode of production in such a manner that more mileage is derived from every rupee investment in inventory.