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ANALYSIS OF WORKING CAPITAL MANAGEMENT IN INDIAN INDUSTRY: A COMPARATIVE STUDY OF SELECTED INDUSTRIES

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ABSTRACT

Working Capital position not only is important from an internal standpoint; it also is widely used as one measure of the firm's risk. Risk, as used in this context, deals with the probability that a firm will encounter financial difficulties, such as the inability to pay bills on time. All other things being equal, the more net working capital a firm has, the more likely that it will be able to meet current financial obligations. The present paper is an attempt to study the size, liquidity and efficiency of working capital components in Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry and Iron & Steel Industry during 1999-2000 and 2010-11(12 years period). For this purpose, current assets to total net assets Ratio, Current Ratio, Quick Ratio, Inventories to Sales Ratio, Sundry Debtors to Sales Ratio, which have been published in various issues of monthly bulletins of RBI are used. For the purpose of comparison and drawing meaningful conclusions, statistical techniques such as, Mean, Standard Deviation, Co-efficient of Variance, t-test, etc., have been used and concluded that (1) the ratio of current assets to total net assets was low in all selected industries, except in Chemical Industry (2) the liquidity position was poor in all selected industries, except in Chemical Industry, (3) The efficiency in utilizing the inventories was very poor in all selected industries, except in Chemical Industry (4) the efficiency in utilizing the sundry debtors was very poor in Chemical Industry.

KEYWORDS

Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry, Iron and Steel Industry.

INTRODUCTION

Working capital typically means the firm's holdings of current or short-term assets such as cash, receivables, inventory and marketable securities. These items are referred to as gross working capital or circulating assets because of their cyclical nature. Net Working Capital, which is the difference between current assets and current liabilities, provides an accurate assessment of the liquidity position of the firm. With the liquidity-profitability dilemma solidly authenticated in the financial scheme of management, concerted efforts are made to ensure the ability of the firm to meet these obligations which mature within a twelve month period. Management must always ensure the solvency and viability of the firm. An examination of the components of working capital is helpful at this point because of the preoccupation of management with the proper combination of assets and acquired funds. Although careful maintenance of the proper asset and funds-acquired mixes is subjected to close scrutiny, it must be noted that there exists a close correlation between sales fluctuations and invested amounts in current assets. Although current liabilities are often overlooked, it should be noted here that each of these current asset items must be financed – frequently from short-term funds. All other things being equal, the more net working capital a firm has, the more likely that it will be able to meet current financial obligations. The present paper is an attempt to study the size, liquidity and efficiency of working capital components, i.e., inventories and debtors, in selected industries in India. Before going to review the literature and methodology of the study, a brief profile of the selected industries, i.e., Cotton Textile Industry, Man Made Textile Industry, Cement Industry, Chemical Industry and Iron & Steel Industry in India is presented.

COTTON TEXTILE INDUSTRY AND MAN MADE TEXTILE INDUSTRY (CTI & MMTI)

The Indian textile industry has an overwhelming presence in the economic life of the country. Apart from providing one basic necessities of life, the textile industry also plays a pivotal role through its contribution to industrial output, employment generation and the export earnings of the country. Currently, it contributes about 14 percent to industrial production, 4 percent to the GDP and 12.53 percent to the country's export earnings. It provides direct employment to over 35 million people. The textile sector is the second largest provider of employment after agriculture. Thus, the growth and all round development of this industry has direct bearing on the improvement of the economy of the nation. Due to policy measures initiated by the government in the recent past, the Indian textile industry is in a stronger position than it was in the last six decades. The industry which was growing at 3-4 percent during the last six decades has now accelerated to an annual growth rate of 8-9 percent in value terms. The growth manifests through a consistent increase in production of fabric and investment.

CHEMICAL INDUSTRY (CHEM I)

The chemical industry whose development influences the development of other industries, including the development of agriculture, defence and manufacture of drugs, etc., has claimed a pride of place in the industrial map of India. The World Bank and other eminent organizations have accepted that India has reached a very well progressed stage in having created sufficient capacity for the manufacture of all types of process plant equipment. The chemical industry of India has got its origin in West Bengal. With their plans for developing the chemical industry other States have also been forging ahead. The chemical industry is an omnibus term. The heterogeneous structure of the industry gives basis for the classification of the entire industry into: production of heavy chemicals, chemical fertilizers, plastics, drugs and pharmaceuticals, and synthetic rubber. During the last two decades the Indian chemical industry has forged ahead confidently and recorded an advance in practically every sector. Its position today is that it has 7.2 per cent share in the national industrial capital and contributes 7.4 per cent of the total gross output.

CEMENT INDUSTRY (CEM I)

Cement, being the basic building material, plays a vital part in a country's planned development. It is one of the established major industries in our country. Besides providing direct employment to 70,000 workers, it accounts for an annual output valued at the Rs.110 crores. The industry annually pays over Rs.65 crores to the exchequer by way of direct taxes and around Rs.28 crores to the railways towards freight charges. The industry plays an important role not only from the employment and national income point of view, but also it is an essential ingredient for the development process to be kept apace. The process of economic growth will inevitably generate an increasing demand for cement, although the actual level of consumption will be governed by the pattern of investment in the development programme. Though the annual cement production has been rising at the rate of seven per cent, the demand for the product is growing at the rate of eight per cent. Even at this rate of growth of the demand for cement, the per capita consumption of cement in our country is very low when compared to the advanced countries where the per capita consumption is nearly 15 to 20 times to that of India.

IRON AND STEEL INDUSTRY (I & S I)

Iron and Steel Industry forms the base of all industrial activity. The development of all manufacturing and consumer goods industries depends upon the extent of development of iron and steel industry. The most important among the industries, directly dependent on iron and steel industry, are engineering industry, wagon building industry, and other transport equipment industries. The development of agriculture is dependent on steel both directly and indirectly – directly in the manufacture of machinery for fertiliser and pesticides industries. Steel production has a multiplier effect on the development of all other industries. Therefore, it has been rightly called a 'mother industry'. Iron and steel industry provides direct employment to thousands of workers in the quarrying and mining of ores, coal and other minerals and in the actual steel production. Apart from this, a number of ancillary industries come into being and the investment in the steel plant by itself will have an immense multiplying effect in carrying new employment opportunities to thousands of workers.

From the above profile, it was clear that these industries have been playing a major role in economic development since independence. Apart from other things, their performance and success also depends upon efficiency in management of working capital. Hence, current assets are to be managed effectively and efficiently so as to reduce investment in them to increase profitability and at the same time without adversely affecting liquidity. The present study has been undertaken to evaluate various facets of working capital, i.e., size, liquidity and efficiency in utilization of working capital components in selected industries, i.e., Cotton Textile Industry (CTI), Man Made Textile Industry (MMTI) Chemical Industry (Chem I), Cement Industry (Cem I) and Iron and Steel Industry (I & S I). A brief review of literature is presented here before stating the objectives, methodology and plan of the present study.

REVIEW OF LITERATURE

Kirkham (2012) has undertaken a study to examine the value in analysis of the liquidity of 25 companies of telecommunication sector in Australia using the traditional ratios i.e., current ratio, quick ratio, interest coverage ratio and compared to the more recently devised cash flow ratios, i.e., the cash flow ratio, critical needs cash coverage ratio, and cash interest coverage ratio. The study revealed that differences existed between the traditional liquidity ratios and cash flow ratios. A conclusion based solely on the traditional ratios could well have led to an incorrect decision regarding the liquidity of a number of companies.

Gumber and Kumar (2012) have studied the efficiency of working capital management in public (NFL, MFL & GSFCL) and cooperative sectors (IFFCL & KBCL) of fertilizer industry and concluded that the cooperative sector was better off than the public sector as regard liquidity and payment to creditors as their credit period were much shorter than the public sector.

A study has been conducted during 2003-04 to 2008-09 with the objective of examining and evaluating the working capital management in major cement industries in India and to find relationship between working capital efficiency and profitability by Vilas Vijaya and Sundar Rama (2013).

Mehrotra (2013) made an attempt to examine the working capital trends and practices in FMCG Sector in India by selecting five FMCG companies namely, HUL, Nestle, Britannia, P&G and ITC. The study is based on secondary data, i.e., Annual Reports of the selected companies. The period of study is five years and traditional method of data analysis and ratio analysis as tools of financial statement analysis for examine the degree of efficiency of working capital management has been adopted.

Madhu and Raju (2013) have made an attempt to analyse the liquidity and profitability in Cotton Textile Industry and Man Made Textile Industry which are major wings of Textile industry in India and compared with All Industries Average. This study is based on the overall industry data published by the RBI and covers a period 12 years from 1999-00 to 2010-11. It has concluded that the liquidity and profitability of Cotton Textile Industry and Man Made Textile Industry was very poor during the study period.

IMPORTANCE OF THE STUDY

It is evident from the above review of literature, a considerable work has been done to analyse the efficiency of working capital management in different organizations and industries in different study periods. However, very few studies have been conducted in these selected industries. Therefore, the present study is one of the unique studies in this direction.

STATEMENT OF THE PROBLEM

Due to several problems, many industries are running losses and becoming sick in India. One of the reasons for failure of the industry may be inefficiency in management of current assets/working capital. Therefore, proper management of working capital not only improves performance of the industry but also reduce the burden of the economy. In this present study efforts have been made to analyse the size, liquidity and efficiency in management of working capital in selected industries in India.

OBJECTIVES OF THE STUDY

1. To analyse the size of current assets in selected industries.
2. To analyse the liquidity position of the selected industries.
3. To analyse the efficiency in utilization of working capital components, i.e., inventories and debtors, in selected industries.

HYPOTHESES

The study is undertaken to test the following hypotheses;

1. There is no difference in size of current assets among the selected industries.
2. There is no difference in liquidity position among the selected industries.
3. There is no difference in efficiency in utilising working capital components among the selected industries

RESEARCH METHODOLOGY

The present study is an attempt to analyse the size, liquidity and efficiency in utilising working capital components in CTI, MMTI, Chem I, Cem I and I&SI. For this purpose, secondary data on current assets to total net assets ratio, current ratio, quick ratio, inventories to sales ratio and sundry debtors to sales ratio in selected industries and All Industries Average published in various monthly issues of RBI Bulletins (i.e., May 2003, March 2006, March 2009 and March 2012) have been collected and used. Statistical techniques such as, Mean, Standard Deviation, Coefficient of Variation and T-test, have also been used to compare and draw meaningful conclusions. This study covered a period of 12 years i.e., from 1999-00 to 2010-11. The number of units covered in each industry during the study period is presented in table 1. The total study has been divided into three parts, i.e., A) Size Analysis B) Liquidity analysis C) Efficiency analysis.

TABLE 1: NUMBER OF UNITS COVERED IN EACH INDUSTRY GROUP

Year	Cotton Textile Industry (CTI)	Man Made Textile Industry (MMTI)	Chemical Industry (Chem I)	Cement Industry (Cem I)	Iron & Steel Industry (I&SI)	All India Industries (AI)
1999-00 to 2001-02	41	62	163	26	33	990
2002-03 to 2004-05	40	49	174	35	35	964
2005-06 to 2007-08	89	42	228	28	68	1526
2008-09 to 2010-11	106	21	298	37	93	2072

RESULTS & DISCUSSION

A. SIZE ANALYSIS

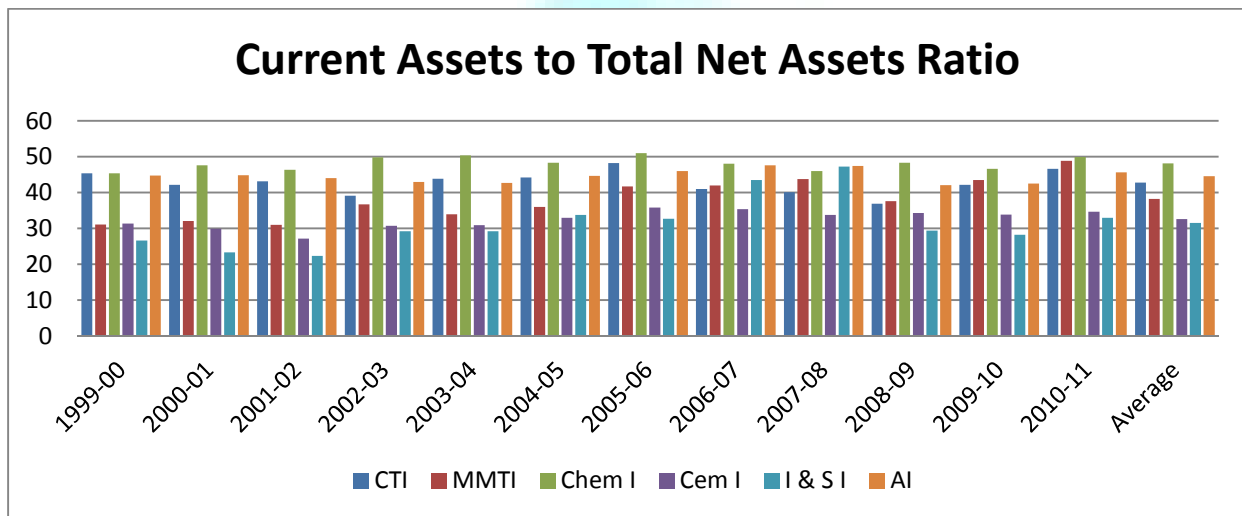
Though the size of current assets in any industry depends upon several factors, such as nature of industry, size of firm, level of sales, credit policy, availability of finance, rate of interest, etc., every industry should maintain minimum level of current assets without which it is very difficult to run day-today activities.

1. CURRENT ASSETS TO TOTAL NET ASSETS RATIO

Size analysis of Working capital in selected industries during the study period has been done with the help of Current Assets to Total Net Assets. The ratio of current assets to total net assets shows the proportion of current assets in the total net assets of the organization. Higher the ratio more will be the liquidity of the firm and vice versa. The ratio of current asset to total net assets in selected industries has been presented in table 2.

TABLE 2: CURRENT ASSETS TO TOTAL NET ASSETS RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	45.3	31.1	45.3	31.3	26.6	44.7
2000-01	42.1	32	47.6	29.9	23.3	44.8
2001-02	43.1	31	46.3	27.1	22.3	44
2002-03	39.1	36.7	49.8	30.7	29.2	42.9
2003-04	43.8	33.9	50.3	30.9	29.2	42.7
2004-05	44.2	36	48.3	32.9	33.7	44.6
2005-06	48.2	41.7	51	35.8	32.7	46
2006-07	41	41.9	48	35.3	43.5	47.6
2007-08	40.1	43.7	46	33.7	47.2	47.4
2008-09	36.9	37.6	48.3	34.3	29.4	42
2009-10	42.1	43.5	46.6	33.8	28.2	42.5
2010-11	46.6	48.8	49.9	34.6	32.9	45.6
Average	42.71	38.16	48.12	32.53	31.52	44.57
S.D	3.20	5.75	1.85	2.57	7.39	1.86
C.V	7.49	15.07	3.84	7.9	23.45	4.17
t-value	2.01	3.86*	6.65*	16.23*	6.12*	



- a) **Cotton Textile Industry:** This ratio has been fluctuated between 36.9 per cent and 48.2 per cent during the study period in this industry and recorded 42.71 per cent on an average which was not significantly different from that of AI (t-value).
- b) **Man Made Textile Industry:** In this industry, it was fluctuated between 31 per cent and 48.8 per cent and recorded 38.16 per cent on an average during the study period. The difference between the average ratio of this industry and that of AI was significant (t-value).
- c) **Chemical Industry:** It was fluctuated between 45.3 per cent and 51 per cent and recorded 48.12 per cent on an average during the study period. The average of this industry was significantly different from that of AI (t-value).
- d) **Cement Industry:** It was fluctuated between 27.1 per cent and 35.8 per cent during the study period in this industry. There was a significant different between the average ratio of this industry (32.53 per cent) and AI (t-value).
- e) **Iron & Steel Industry:** This ratio was fluctuated between 22.3 per cent and 47.2 per cent during the study period. On an average, it was recorded as 31.52 per cent, which was significantly different from that of AI (t- value).

B. LIQUIDITY ANALYSIS

The liquidity ratios (Current Ratio, Quick Ratio) measure the ability of a firm to meet its short term obligations and reflect the short term financial strength of a firm.

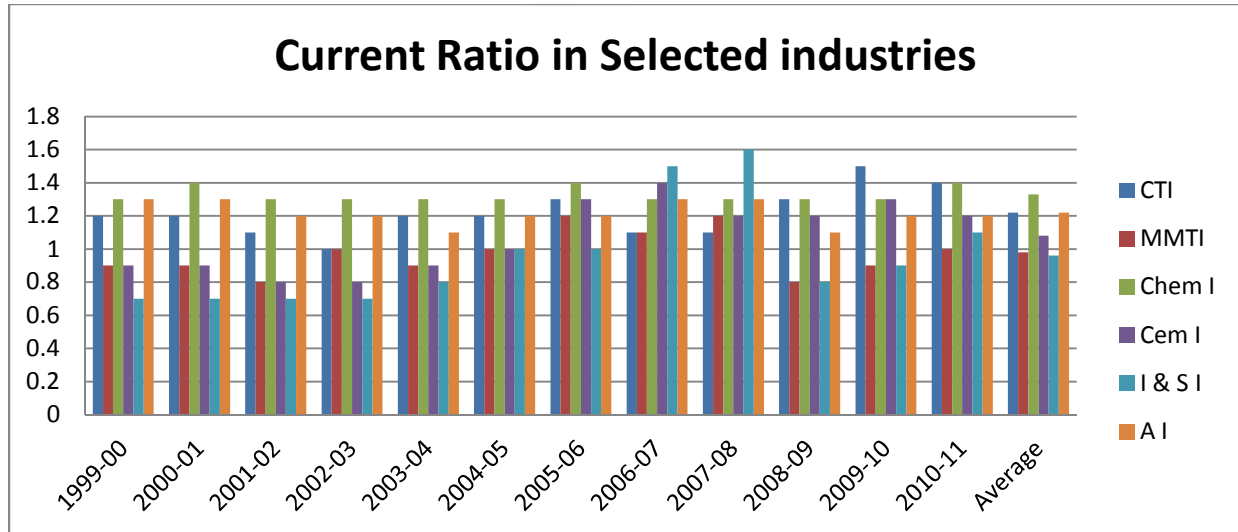
1. CURRENT RATIO

The current ratio of a firm measures its short term solvency, that is, its ability to meet short term obligations. Although there is no hard and fast rule, conventionally, a current ratio of 2:1 is considered satisfactory. Current Ratio in selected industries has been presented in table 3.

TABLE 3: CURRENT RATIO IN SELECTED INDUSTRIES (No. of times)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	1.2	0.9	1.3	0.9	0.7	1.3
2000-01	1.2	0.9	1.4	0.9	0.7	1.3
2001-02	1.1	0.8	1.3	0.8	0.7	1.2
2002-03	1	1	1.3	0.8	0.7	1.2
2003-04	1.2	0.9	1.3	0.9	0.8	1.1
2004-05	1.2	1	1.3	1	1	1.2
2005-06	1.3	1.2	1.4	1.3	1	1.2
2006-07	1.1	1.1	1.3	1.4	1.5	1.3
2007-08	1.1	1.2	1.3	1.2	1.6	1.3
2008-09	1.3	0.8	1.3	1.2	0.8	1.1
2009-10	1.5	0.9	1.3	1.3	0.9	1.2
2010-11	1.4	1	1.4	1.2	1.1	1.2
Average	1.22	0.98	1.33	1.08	0.96	1.22
S.D	0.14	0.14	0.05	0.21	0.31	0.07
C.V	11.47	14.29	3.76	19.44	32.29	5.74
t-value	0	5.94*	7.62*	2.31	2.91*	

- a) **Cotton Textile Industry:** This ratio was fluctuated between one time and 1.5 times during the study period. On an average it was 1.22 times which was same to that of AI during the study period.
- b) **Man Made Textile Industry:** It was fluctuated between 0.8 times and 1.2 times in this industry during the study period. On an average, it was 0.98 times, which was significantly different from that of AI (t-value).
- c) **Chemical Industry:** A steady trend was observed in this ratio during the study period in this industry. The average ratio was 1.33 times, which was significantly different from that of AI (t-value).
- d) **Cement Industry:** It was fluctuated between 0.8 times and 1.4 times and recorded on an average 1.08 times during the study period.
- e) **Iron & Steel Industry:** This ratio was fluctuated between 0.7 times and 1.6 times during the study period. It was 0.96 times on an average, which was significantly different from that of AI (t-value).

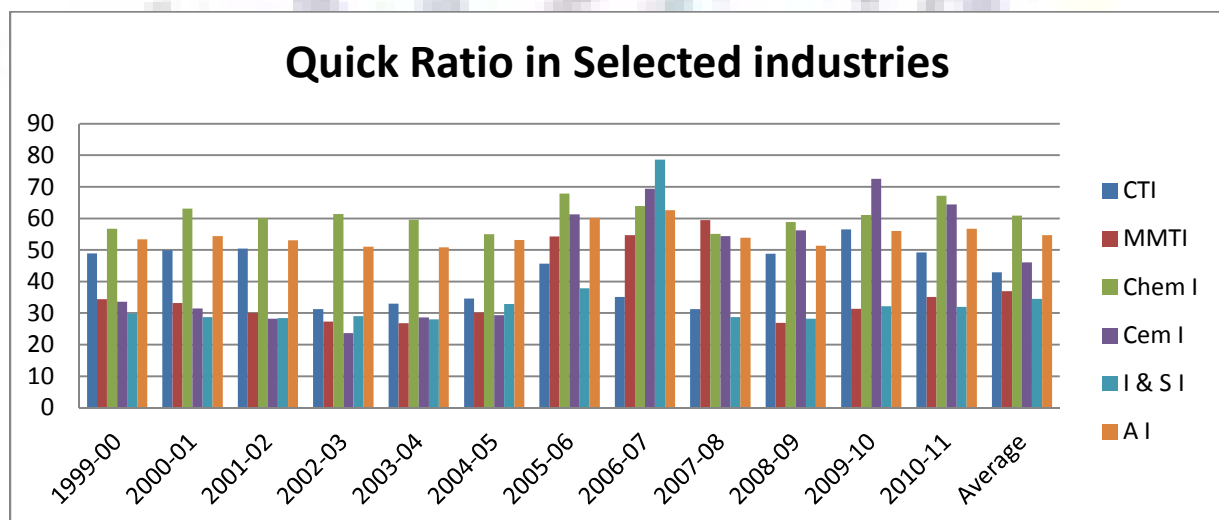


2. QUICK RATIO

The quick ratio or acid test ratio is the ratio between quick assets and current liabilities and is calculated by dividing the quick assets by the current liabilities. A quick test ratio of 1:1 is considered satisfactory as a firm can easily meet all current claims. Quick ratio in selected industries during the study period has been presented in table 4.

TABLE 4: QUICK ASSETS TO CURRENT LIABILITIES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	48.9	34.4	56.7	33.6	29.8	53.4
2000-01	49.9	33.2	63.1	31.5	28.7	54.4
2001-02	50.4	30	60.1	28.2	28.4	53.1
2002-03	31.3	27.3	61.4	23.7	29	51
2003-04	33	26.8	59.6	28.6	28	50.8
2004-05	34.6	30.1	55	29.3	32.9	53.2
2005-06	45.7	54.3	67.9	61.3	37.9	60.2
2006-07	35.1	54.7	63.9	69.4	78.6	62.6
2007-08	31.3	59.4	55.1	54.4	28.7	53.9
2008-09	48.8	26.9	58.8	56.2	28.2	51.3
2009-10	56.5	31.4	61.1	72.5	32.2	56
2010-11	49.2	35.1	67.2	64.4	32	56.7
Average	42.89	36.97	60.83	46.09	34.53	54.72
S.D	9.07	11.94	4.22	18.48	14.17	3.64
C.V	21.15	32.3	6.94	40.09	41.04	6.65
t-value	*4.52	*5.15	5.02*	1.62	4.94*	



- a) **Cotton Textile Industry:** This ratio was fluctuated between 31.3 per cent and 56.5 per cent and recorded 42.89 per cent on an average during the study period. The average ratio of this industry was significantly different from that of AI (t-value).
- b) **Man Made Textile Industry:** It was fluctuated between 26.8 per cent and 59.4 per cent during the study period. The average ratio of this industry (36.97 per cent) was significantly different from that of AI (t-value).
- c) **Chemical Industry:** It was fluctuated between 55 per cent and 67.9 per cent during the study period. The difference between the average ratio of this industry (60.83 per cent) and AI (54.72 per cent) was significant (t-value).
- d) **Cement Industry:** It was fluctuated between 23.7 per cent and 72.5 per cent during the study period in this industry. On an average, it was 46.09 per cent.
- e) **Iron & Steel Industry:** This ratio has been fluctuated between 28.2 per cent and 78.6 per cent and recorded 34.53 per cent on an average during the study period. The average ratio of this industry was significantly different from that of AI (t-value).

C. ANALYSIS OF EFFICIENCY

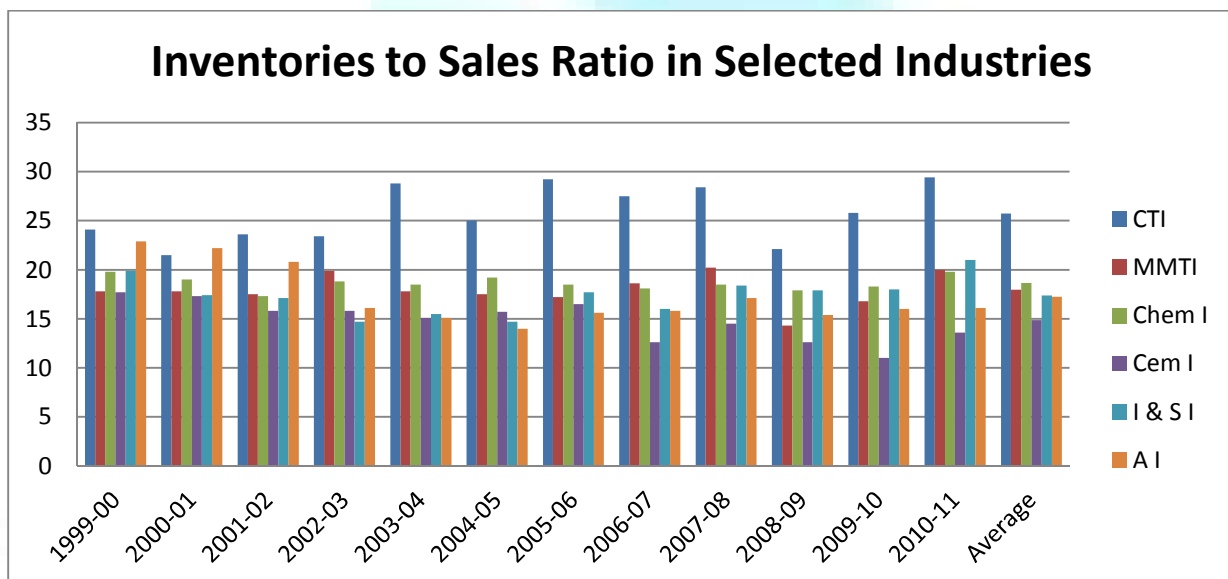
Efficiency or Turnover or Activity analysis reflects the intensity with which the firm uses its components of current assets in generating sales. This analysis is made with the help of inventories to sales ratio and sundry debtors to sales ratio in selected Indian industries during the study period.

1. INVENTORIES TO SALES RATIO

The ratio of inventories to sales indicates how much of investment is made in inventory for every one rupee of sales. A low ratio is good from the viewpoint of liquidity and vice versa. A high ratio would signify that inventory does not sell fast and stays on the shelf or in the warehouse for a long time. Table 6 shows the inventories to sales ratio in selected industries during the study period.

TABLE 6: INVENTORIES TO SALES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	24.1	17.8	19.8	17.7	19.9	22.9
2000-01	21.5	17.8	19	17.3	17.4	22.2
2001-02	23.6	17.5	17.3	15.8	17.1	20.8
2002-03	23.4	19.9	18.8	15.8	14.7	16.1
2003-04	28.8	17.8	18.5	15.1	15.5	15.1
2004-05	25	17.5	19.2	15.7	14.7	14
2005-06	29.2	17.2	18.5	16.5	17.7	15.6
2006-07	27.5	18.6	18.1	12.6	16	15.8
2007-08	28.4	20.2	18.5	14.5	18.4	17.1
2008-09	22.1	14.3	17.9	12.6	17.9	15.4
2009-10	25.8	16.8	18.3	11	18	16
2010-11	29.4	20	19.8	13.6	21	16.1
Average	25.73	17.95	18.64	14.85	17.36	17.26
S.D	2.85	1.63	0.74	2.05	1.93	2.96
C.V	11.08	9.08	3.97	13.8	11.12	17.15
t-value	*12.49	1.49	6.96*	4.07*	0.18	



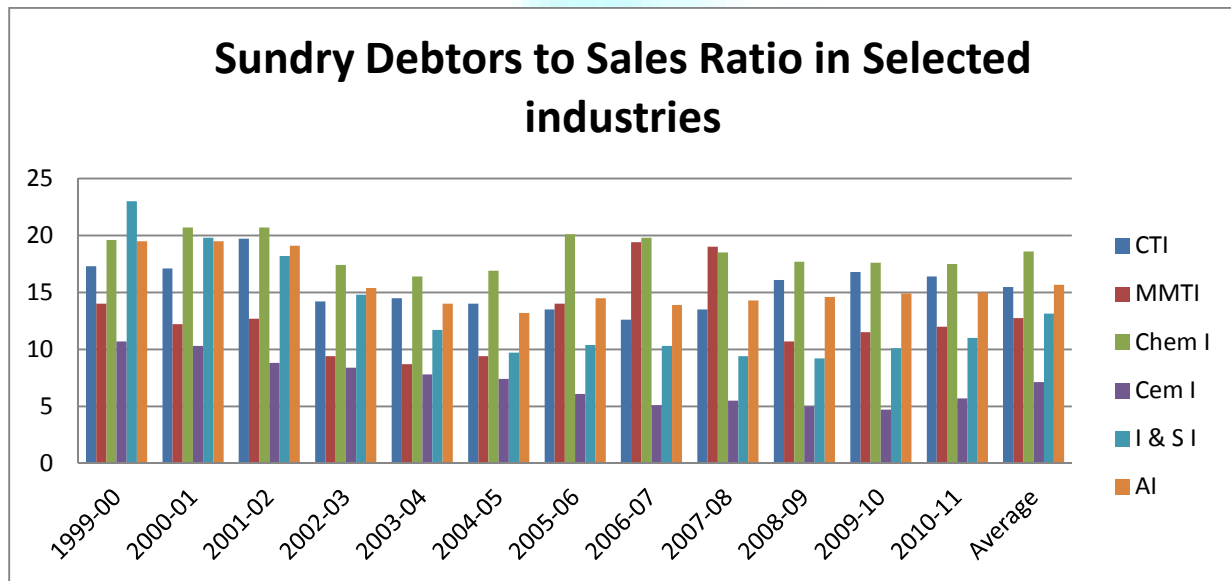
- a) **Cotton Textile Industry:** This ratio has been fluctuated between 21.5 per cent and 29.4 per cent during the study period. On an average, it was 25.73 per cent, which is significantly different from that of AI (t-value).
- b) **Man Made Textile Industry:** It has been fluctuated between 14.3 per cent and 20.2 per cent registering an average ratio of 17.95 per cent during the study period. There is no significant difference between the average of this industry and AI (t-value).
- c) **Chemical Industry:** This ratio has been fluctuated between 17.3 per cent and 19.8 per cent during the study period. However, there is a significant difference between the average of this industry (18.64 per cent) and AI (t-value).
- d) **Cement Industry:** This ratio has been fluctuated between 11 per cent and 17.7 per cent during the study period. There is a significant difference between the average ratio of this industry (14.85 per cent) and AI (t-value).
- e) **Iron & Steel Industry:** This ratio has been fluctuated between 14.7 per cent and 21 per cent registering 17.36 per cent on an average during the study period. There is no significant difference between the average of this industry and AI (t-value).

2. SUNDRY DEBTORS TO SALES RATIO

The sundry debtors to sales ratio, which is calculated by dividing the debtors with the sales, indicate the velocity of debt collection of a firm. Generally, the lower the ratio efficient is the management of debtors/sales or more liquid are the debtors. The ratio of sundry debtors to sales in selected industries has been presented in table 7.

TABLE 7: SUNDRY DEBTORS TO SALES RATIO IN SELECTED INDUSTRIES (%age)

Year	CTI	MMTI	Chem I	Cem I	I & S I	AI
1999-00	17.3	14	19.6	10.7	23	19.5
2000-01	17.1	12.2	20.7	10.3	19.8	19.5
2001-02	19.7	12.7	20.7	8.8	18.2	19.1
2002-03	14.2	9.4	17.4	8.4	14.8	15.4
2003-04	14.5	8.7	16.4	7.8	11.7	14
2004-05	14	9.4	16.9	7.4	9.7	13.2
2005-06	13.5	14	20.1	6.1	10.4	14.5
2006-07	12.6	19.4	19.8	5.1	10.3	13.9
2007-08	13.5	19	18.5	5.5	9.4	14.3
2008-09	16.1	10.7	17.7	5	9.2	14.6
2009-10	16.8	11.5	17.6	4.7	10.1	14.9
2010-11	16.4	12	17.5	5.7	11	15
Average	15.48	12.75	18.58	7.13	13.13	15.66
S.D	2.08	3.46	1.53	2.09	4.70	2.31
C.V	13.43	27.14	8.23	29.31	35.8	14.75
t-value	0.3	2.91*	35.46*	14.14*	1.86	



- a) **Cotton Textile Industry:** In this industry, this ratio has been fluctuated between 12.6 per cent and 19.7 per cent during the study period. There is no significant difference between the average ratio of this industry (15.48 per cent) and AI (t-value).
- b) **Man Made Textile Industry:** This ratio has been fluctuated between 8.7 per cent and 19.4 per cent during the study period and registered an average ratio of 12.75 per cent. A significant difference could be observed between the average of this industry and AI (t-value).
- c) **Chemical Industry:** In this industry, this ratio has been fluctuated between 16.4 per cent and 20.7 per cent during the study period. A significant difference could be observed between the average of this industry (18.58 per cent) and AI (t-value).
- d) **Cement Industry:** This ratio has been fluctuated between 4.7 per cent and 10.7 per cent during the study period. The difference between the average ratio of this industry (7.13 per cent) and AI is significant (t-value).
- e) **Iron & Steel Industry:** It has been fluctuated between 9.2 per cent and 23 per cent and registered an average ratio of 13.13 per cent during the study period. There is no significant difference between the average ratio of this industry and AI (t-value).

FINDINGS

1. The average ratio of Current Assets to Total Net Assets was 48.12 per cent in Chem I, 42.71 per cent in CTI, 38.16 per cent in MMTI, 32.53 per cent in Cem I and 31.52 per cent in I & S I as against 44.57 per cent in AI.
2. The average Current Ratio was 1.33 times in Chem I, 1.22 times in CTI, 1.08 times in Cem I, 0.98 times in MMTI and 0.96 times in I&S I as against 1.22 times in AI.
3. The average Quick Ratio was 60.83 per cent in Chem I, 46.09 per cent in Cem I, 42.89 per cent in CTI, 36.97 per cent in MMTI and 34.53 per cent in I & S I as against 54.72 per cent in AI.
4. The average Inventories to Sales ratio was 14.85 per cent in Cem I, 17.36 per cent in I&S I, 17.95 per cent in MMTI, 18.64 per cent in Chem I, 25.73 per cent in CTI as against 17.26 per cent in AI.
5. The average Sundry Debtors to Sales ratio was 7.13 per cent in Cem I, 12.75 per cent in MMTI, 13.13 per cent in I & S I, 15.48 per cent in CTI and 18.58 per cent in Chem I as against 15.66 per cent in AI.

TESTING OF HYPOTHESIS

1. There is a significant difference in the size of current assets in selected industries
2. There is a significant difference in liquidity position of selected industries.
3. There is a significant difference in efficiency in utilizing the working capital components in selected industries.

CONCLUSIONS

1. The ratio of current assets to total net assets was lower in all selected industries, except in Chemical Industry.
2. The liquidity position was poor in all selected industries, except in Chemical Industry.

3. The efficiency in utilizing the inventories was very poor in all selected industries, except in Chemical Industry.
4. The efficiency in utilizing the sundry debtors was very poor in Chemical Industry.

SUGGESTIONS

1. Chemical Industry has to reduce the size of current assets or improve the sales performance.
2. The liquidity ratios i.e., current ratio and quick ratio, should be improved in all selected industries, except in Chemical Industry.
3. The efficiency in utilizing the components of working capital i.e., inventories and sundry debtors, should be improved in Cotton Textile Industry and Chemical Industry.

LIMITATIONS

This study is based on the data relating to the large industrial units, the paid up capital of which is Rs. 5 Crore and above, published by the RBI. Therefore, findings may not be applicable to other category of industries.

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