

# A STUDY ON MANAGEMENT OF WORKING CAPITAL IN SELECTED IT COMPANIES IN INDIA

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## ABSTRACT

*Working capital is the lifeblood and nerve centre of a business. Just as a circulation of blood is essential in the human body for maintaining life, working capital is very essential to maintain the smooth running of a business. No business, no undertakings, no enterprise can bring a sound solvency to the business. It also enables an undertaking in creating and maintaining goodwill. It also enables a business undertaking to pay off its current dues and also provides regular supply of raw materials. Adequate working capital provides inherent strength to the business undertaking and ability to face crisis. Working capital is extremely essential for meeting the daily requirements of an organization. No organization can thrive even for a single day without adequate working capital. It is evident from the words of Accounting standards boards guidance which states working capital as “the funds available for conducting day to day operation of an enterprise. There are many software industries in India, but due to the limitation of the words only performance of two companies is possible to cover and these are ‘INFOSYS’ and ‘WIPRO’.*

**Keywords:** Management of Working Capital, Financial Performance, Ratio Analysis

## INTRODUCTION

In the modern industrial world, the problem of efficient financial management has prime importance. The efficiency of an organization is measured in terms of certain parameters such as profit/ earnings, management of working capital and payments made to investors in the form of dividend etc., the giant structure of any Industry including IT sector industry can only be built on a sound financial base, which ultimately depends upon the availability of adequate finance in the form of working capital. For bright success of any enterprise the management of working capital and earnings is a significant function of finance manager because it affects the price of shares in the stock market and return (i.e., dividends) to the share holders.

The financial manager has to take rational decision from time to time keeping in view the objective of his company. Always the decision must be based on the analytical tools. Financial analysis is the most useful techniques in this regard. Financial analysis relies on the comparisons or relationship of the data that enhance the utility of the practical value of the accounting information. This analysis consists in applying various analytical tools and techniques to the financial data.

### **Meaning**

Working capital is defined as the exceeds of current assets over current liabilities, current assets are those assets which will be converted into cash within the current accounting period or within the next year a result of the ordinary operations of the business, they are cash or near cash resources, these include, Cash and bank balances, Receivables, Inventory (Raw material, stores and spares, Work in progress, Finished good and Prepaid expenses.

### **Definition**

The following are some of the definitions on working capital.

1. According to Jules Bogen, Edward S. Mead, John C. Baker, D.W.Mallot, A.S.Dewing, A.K.Sen, "Working capital means current assets"<sup>2</sup>
2. According to E.A.Saliers, W.Maekensie, H.G.Guthaman, Hervert Dongall, Colin Portk and John.W.Gladson, "Working capital refers to a firm's investment in short-term assets cash, short-terms securities, accounts receivable and inventories, working capital showed mean the total current assets minus current liabilities"<sup>3</sup>

### **About The Software Industry**

Despite the global economy growing up, the Indian software industry is maintaining a steady pace of growth. Software development activity is not confined to a few cities in India. Software development centers such as Bangalore, Hyderabad, Mumbai, Pune, Chennai, Chandigarh, Calcutta, Delhi, vadodara, goa are all developing quickly,

Indian software industry is one of the fastest sector of the Indian economy employing about 4.50 lacks worker mostly from the highly skilled and educated segments, during the year 2005-06, the Indian software industry was worth about 159 billion Indian rupee and export accounted for nearly 70% of this at 2.69 billion USD, in 2005-06 the Indian software industry is expected to gross over 5.65 billion USD representing the growth of nearly 50%,

- Software & services will contribute over 7.5 of the overall GDP growth of India,
- It export will account for 35% of the total export from India,
- Potential for 2.2 billion jobs in it by 2008,
- Software industry will attract foreign direct investment of 4.5 billion,
- Market capitalization of it share will be around U.S \$ 225 billion

## Performance of Indian Software Industry

**Table 1.** Year wise performance of Indian software sector

[In Million]			
YEAR	DOMESTIC	EXPORT	TOTAL
1996-97	320	430	750
1997-98	490	675	1165
1998-99	695	1020	1710
1999-00	1070	1535	2605
2000-01	1670	2520	4190
2001-02	2500	3900	6400
2002-03	3000	4000	7000
2003-04	3900	4700	8600
2004-05	5800	6000	11800
2005-06	7500	8600	16100
2006-07	8700	9100	17800
2007-08	9500	13500	23000
2008-09	12300	14500	26800
2009-10	17400	18400	35800

## The Top Ten Software Company of India

The companies that dominate the software industry are those which look out for these opportunities and provide instant solutions. The Indian software industry has arrived, and the companies that are dominating this industry, based on their turnovers, are:

**Table 2.** The Top Ten Player

Rank	Names	Sales (In Rs Mill)
1	TCS LIMITED	97,272
2	WIPRO LIMITED	82,330
3	INFOSYS TECHNOLOGIES LIMITED	71,297
4	SATYAM COMPUTER SERVICES LIMITED	35,209
5	I-FLEX SOLUTIONS LIMITED	11,386
6	TATA INFOTECH LIMITED	9,743
7	CMC LIMITED	8,074
8	MPHASIS BFL LIMITED	7,657
9	MASTEK LIMITED	5,670
10	NIIT LIMITED	3,984

## OBJECTIVES OF THE STUDY

The broad objective of this study is to measure CASH management of selected units. Other objectives of the study are mentioned as under.

- To analyze the Working Capital Position of both company

- To examine the liquidity position the both company by some important parameter of cash and liquidity management such as
  - Current ratio
  - Liquid ratio
  - Cash ratio
  - Debtor ratio

## **METHODOLOGY OF THE STUDY**

### **Source of the Data**

A study of Indian industry has been made by using data from financial statement of two companies in Indian software industry

- INFOSYS
- WIPRO

For detail information has been collected from different websites and magazines, the study period of five years from 2001-02 to 2005-06

### **Techniques of Analysis**

For the purpose of analysis of data various ratio relating to cash position and cash management is calculate, moreover, the simple technique such as standard deviations, average, and T test also applied to analyze the consistency, otherwise the stability and overall trends in the different financial aspects of the company, in present study data has been converted into relative measures such as ratios, percentage rather than the absolute data,

### **Analysis of Working Capital Position**

NEXT, it is decided to make an attempt to study the working capital position of the both companies. In order to highlight the relative strength of the companies in meeting their current obligation to maintain sound working capital position to the difficulties if any in it, using the following four ratio makes the analysis of the cash position,

- Cash ratio
- Current ratio
- Liquid ratio
- Debtors ratio

### **Cash Ratio**

Cash ratio is the ratio of cash and marketable securities to current liabilities, when we calculated quick ratio, we remove the inventory which was included in the current ratio.

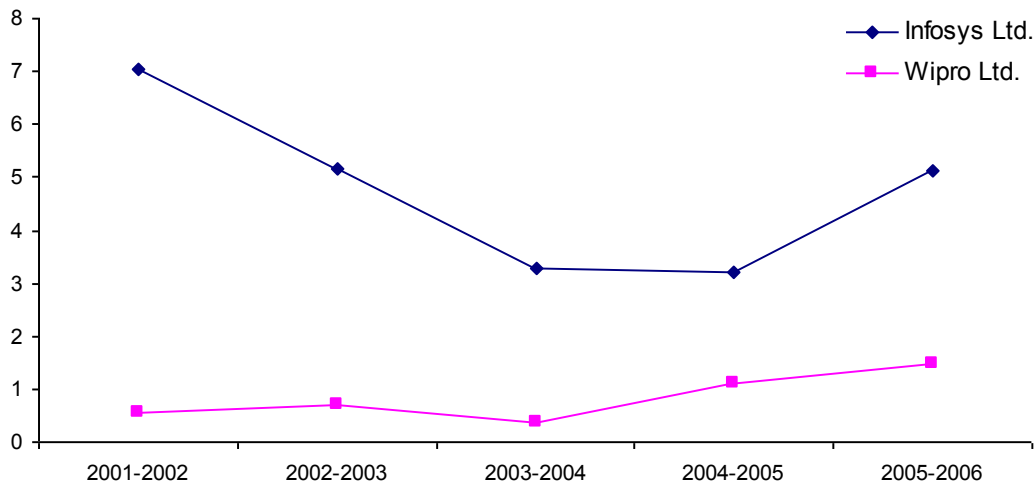
$$\text{Ratio} = \frac{\text{Cash} + \text{Marketable Securities}}{\text{Current Liabilities}}$$

The higher the ratio, the higher liabilities. A low ratio may not matter if the enterprise has ready access to banks to borrow.

**Table 3.** Cash Ratio selected unit under study

Infosys Ltd.		Wipro Ltd.	
Year	Ratio	Year	Ratio
2005-06	7.04	2001-2002	0.54
2006-07	5.16	2002-2003	0.69
2007-08	3.27	2003-2004	0.36
2008-09	3.21	2004-2005	1.10
2009-10	5.11	2005-2006	1.47

**Source:** Compared from the annual report of the selected units



**Fig 1.**

**Table 4.** Calculation of “t” test. Analysis of “t” test in selected unit under the study

Infosys Ltd.				Wipro Ltd.			
Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$	Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$
2006	7.09	2.282	5.208	2006	0.54	-0.29	0.084
2007	5.16	0.402	0.162	2007	0.69	-0.14	0.019
2008	3.27	-1.488	2.214	2008	0.36	-0.47	0.221
2009	3.21	-1.548	2.396	2009	1.10	0.27	0.073
2010	5.11	0.352	0.124	2010	1.47	0.64	0.409
$\Sigma \bar{X}$	23.79		10.10	$\Sigma \bar{Y}$			0.807

Calculated value of “t” is 5.337 while table value of T is 2.306, thus

TC > TT

The calculated value of “t” is greater than the table value. The Null Hypothesis is rejected. The results are not as per the exception.

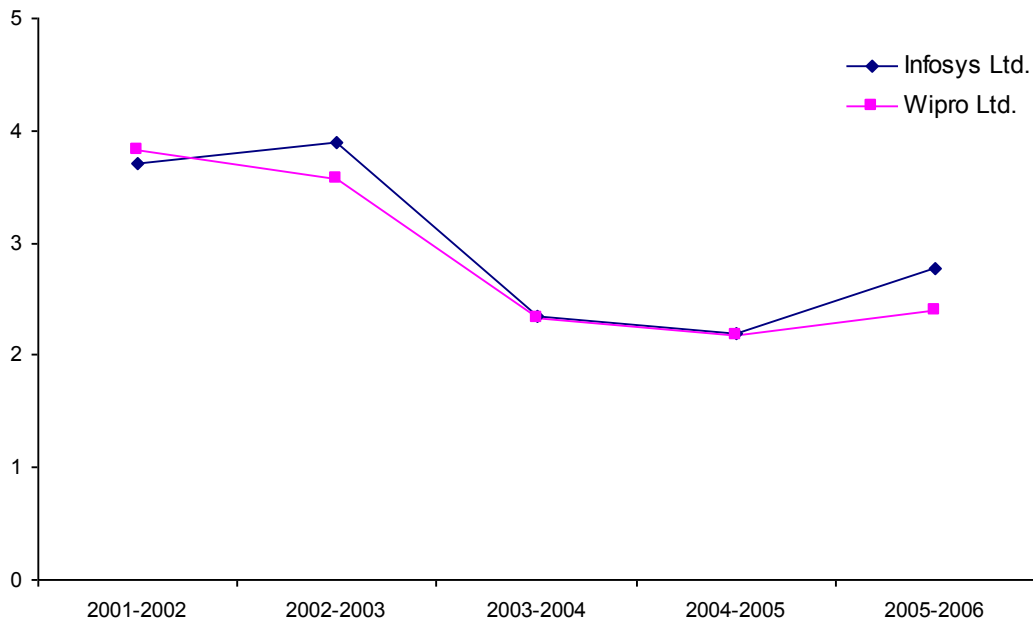
**Current Ratio**

This ratio is an indication of the firm’s commitment to meet its short term commitment to meet its short term liabilities; this ratio was 2:1

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

**Table 5.** Current ratio in selected units under study

Infosys Ltd.		Wipro Ltd.	
Year	Ratio	Year	Ratio
2005-06	3.71	2005-06	3.82
2006-07	3.90	2006-07	3.57
2007-08	2.35	2007-08	2.33
2008-09	2.19	2008-09	2.17
2009-10	2.77	2009-10	2.40



**Fig 2.**

**Table 6.** Calculation of “t” test. Analysis of “t” test in selected unit under the study

Infosys Ltd.				Wipro Ltd.			
Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$	Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$
2005-06	3.71	0.726	0.527	2005-06	3.82	0.962	0.925
2006-07	3.90	0.916	0.839	2006-07	3.57	0.712	0.507
2007-08	2.35	-0.634	0.402	2007-08	2.33	-0.528	0.279
2008-09	2.19	-0.794	0.630	2008-09	2.17	-0.688	0.473
2009-10	2.77	-0.214	0.046	2009-10	2.40	-0.458	0.210
$\Sigma \bar{X}$	14.92		2.444	$\Sigma \bar{Y}$	14.29		2.394

The calculated value of T is 0.257 while table value of T is 2.306

TC < TT

The calculated value of ‘T’ is less than the table value, the null hypothesis is accepted, and the results are as per the expectation.

#### Liquid Ratio

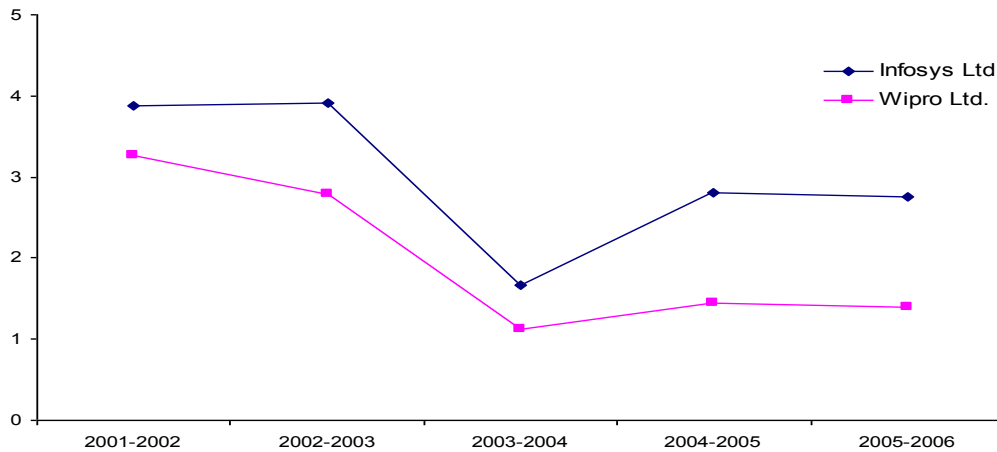
Liquid ratio as quick ratio, it is more rigorous test of liquidity than current ratio, two department of current ratio, as a measure of liquidity, are current assets and current liabilities,

$$\text{Liquid Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

**Table 7**

Infosys Ltd.		Wipro Ltd.	
Year	Ratio	Year	Ratio
2005-06	3.87	2005-06	3.26
2006-07	3.92	2006-07	2.79
2007-08	1.67	2007-08	1.13
2008-09	2.80	2008-09	1.45
2009-10	2.75	2009-10	1.40

**Source:** Compared from the annual report of the selected units



**Fig. 3.**

**Table 8.** Calculation of “t” test. Analysis of “t” test in selected unit under the study

Infosys Ltd.				Wipro Ltd.			
Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$	Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$
2006	3.87	-0.868	0.753	2006	3.26	-1.259	1.573
2007	3.92	-0.918	0.843	2007	2.79	-0.784	0.615
2008	1.67	1.332	1.774	2008	1.13	0.876	0.767
2009	2.80	0.202	0.041	2009	1.45	0.556	0.309
2010	2.75	0.252	0.064	2010	1.40	0.606	0.367
$\Sigma \bar{X}$	15.01		3.475	$\Sigma \bar{Y}$	10.03		3.631

The calculated value of T is 1.680 and table value of T is 2.306 (at 5% level of significance). Hence,

$$TC < TT$$

The calculated value of ‘T’ is less than the table value the null hypothesis is accepted the results are as per the expectation.

### Debtor Ratio

This ratio gives an indication of the efficiency of the credit and collection policy of the firm and it will directly affect the cash position of the company, it is a test of speed in which debtors are converted in to cash, thus debtor ratio is an important tool of analyzing the efficiency of cash management of a company,.

$$\text{Debtor Ratio} = \frac{\text{Debtors}}{\text{Sales}} \times 365 \text{ days}$$

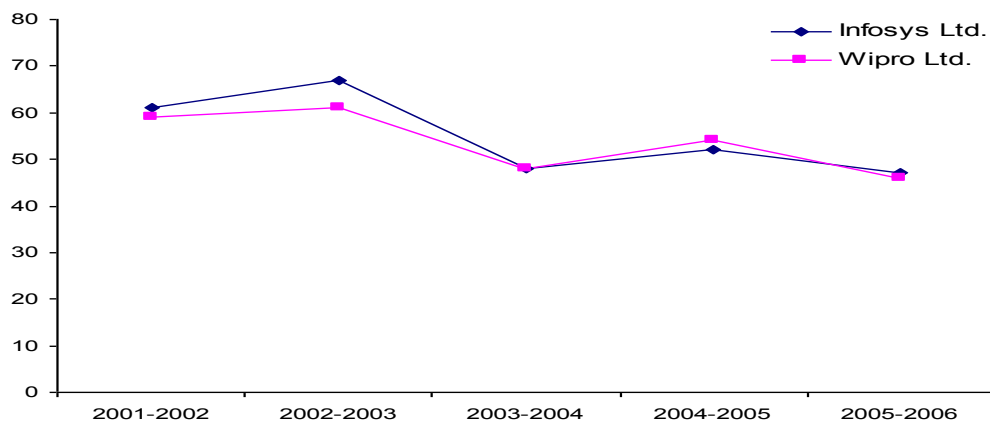
Sales



**Table 9.** Debtor Ratio selected unit under study

Infosys Ltd.		Wipro Ltd.	
Year	Ratio	Year	Ratio
2005-06	61	2005-06	59
2006-07	67	2006-07	61
2007-08	48	2007-08	48
2008-09	52	2008-09	54
2009-10	47	2009-10	46

**Source:** Compared from the annual report of the selected units



**Fig. 4.**

**Table 10.** Calculation of “t” test. Analysis of “t” test in selected unit under the study

Infosys Ltd.				Wipro Ltd.			
Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$	Year	Ratio	$\Sigma(X - \bar{X})$	$\Sigma(X - \bar{X})^2$
2006	61	6	36	2006	59	5.4	29.16
2007	67	12	144	2007	61	7.4	54.76
2008	48	-7	49	2008	48	-5.6	31.36
2009	52	-3	9	2009	54	0.4	0.16
2010	47	-8	64	2010	46	-7.6	57.76
$\Sigma \bar{X}$	275		302	$\Sigma \bar{Y}$	268		173.2

The calculated value of T is 0.288 and table value of T is 2.306 (at 5 % level of significance)  
 Hence.

$$T_c < T_t$$

The calculated value of ‘T’ is less than the table value, the null hypothesis is accepted, and the results are as per the expectation

### **SUMMARY OF FINDINGS AND SUGGESTION**

1. current ratio in 2006-07 was at 3.71 and 3.82 of Infosys ltd and Wipro ltd is very high
2. current ratio in 2006-07 was at 2.19, and 2.17 of Infosys ltd and Wipro ltd is low,
3. T test suggested that there is no uniformity in both companies
4. the quick ratio of Infosys ltd was higher than the Wipro ltd
5. the cash ratio of Infosys ltd was higher than the Wipro ltd

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