

# A STUDY ON WORKING CAPITAL MANAGEMENT OF INFOSYS LTD

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**ABSTRACT:** For a successful working of a business organization fixed and current assets play a vital role as organization generally invests in these options. An attempt has been made in this paper to study the working capital components and the analysis of working capital management of Infosys companies. The study is based on secondary data collected from annual reports of Infosys companies for the period 2007 to 2017. The various components for measuring the working capital management include the Current ratio and Quick ratio on the Net profitability position of the Indian companies.

## INTRODUCTION:

Working capital management commonly involves monitoring cash flow, assets and liabilities through ratio analysis of key elements of operating expenses, including the working capital. Current assets include cash, marketable securities, inventory, accounts receivable and other short-term assets to be used within the year. Current liabilities include accounts payable and the current portion of long-term debt. These are debts that are due within the year. From the technical point of view there continues to be difference of opinion about definition of working capital. Gross working capital concept and net working capital concept are two different concepts. Gross working capital concept emphasises on the quantitative aspect, while net working concept highlights upon qualitative aspect.

## REVIEW OF LITERATURE

Chandra Bihas, Chouhan Vineet and Goswami Shubham Chandra Bihas, (2012) analyse the trends and profitability vis-à-vis working capital of some selected information technology organizations in India. The author concludes with the observation that the increased requirement of working capital in IT companies is significantly established. The positive direction of relationship indicates that increase in working capital leads to increase in profitability.

Joshi Lalitkumar and Ghosh Sudipta (2012) study the working capital performance of Cipla Ltd during the period 2004-05 to 2008-09. Financial ratios have been applied in measuring the working capital performance, and statistical as well as econometric techniques have been used. It was observed that the selected ratios show satisfactory performance, and significant negative relationship between liquidity and profitability is found to exist.

Singh Moirangthem B. and Singh Tejmani N. (2013) emphasize on the efficient management of working capital. According to them it means proper management of various components of working capital due to which adequate amount of working capital and liquidity is maintained in the larger interest of successful running of an enterprise. The industry should also try to maintain balance between liquidity and profitability position by improving current ratio and quick ratio.

Kaur Harsh V. and Singh Sukhdev (2013) analyse empirically BSE 200 manufacturing companies spread over 19 industries for the period 2000 to 2010. The study tests the relationship between the working capital score and profitability measured by income to current assets and income to average total assets. At the end, the study emphasizes that efficient management of working capital significantly affects profitability.

Joseph Jisha (2014) closely examines the study of working capital management in Ashok Leyland and points out that the liquidity and profitability position of the company is not satisfactory, and needed to be strengthened in order to be able to meet its obligations in time.

## OBJECTIVES OF THE STUDY.

❖ Using the score to evaluate the liquidity position of Infosys IT companies by using Altman Z score.

## METHODOLOGY:

For evaluating Working Capital Management of Infosys IT companies in 10 year's data from 2007 to 2017 have been collected.

## COLLECTION OF DATA

Secondary data are used for the study. The data required are collected through the published financial statements such as profit and loss accounts & balance sheet, additional information were obtained from the executives of company.

## ANALYSIS OF CURRENT RATIO OF INFOSYS LTD. (Rs. In Cr.)

Year	Current Assets	Current Liabilities	Current Ratio
2007-08	37.50	14.83	2.53
2008-09	41.95	15.44	2.72
2009-10	41.73	19.95	2.09
2010-11	178.77	18.80	9.51
2011-12	234.461	24.54	9.55
2012-13	267.66	31.81	8.41
2013-14	314.36	45.03	6.98
2014-15	363.49	57.00	6.38
2015-16	389.74	68.01	5.73
2016-17	301.13	115.18	2.61
Average			5.65
Standard Deviation			131.75
Correlation			0.68

Sources: Annual Reports.

## INTERPRETATIONS

The above table line lights that the current ratio of selected company was highest during the year 2011-12 (9.55) and lowest in 2009-10 (2.09). A higher ratio indicates that there sufficient assets available with the organization which can be converted in cash, without reduction in the value. During the study period the average of current ratio is 5.65 and the standard deviation is 131.75.there is a positive correlation in current ratio.

## ANALYSIS OF LIQUID RATIO OF INFOSYS LTD (Rs. In Cr.)

Year	Current Assets	Inventory	Liquid Assets	Current Liabilities	Liquid Ratio
2007-08	37.50	12.60	24.90	14.83	1.68
2008-09	41.95	61.50	-19.55	15.44	-1.27
2009-10	41.73	40.90	0.83	19.95	0.04
2010-11	178.77	24.90	153.87	18.80	8.18
2011-12	234.461	58.80	175.66	24.54	7.16
2012-13	267.66	11.35	256.31	31.81	8.06
2013-14	314.36	95.40	218.96	45.03	4.86
2014-15	363.49	76.90	286.59	57.00	5.03
2015-16	389.74	93.40	296.34	68.01	4.36
2016-17	301.13	12.47	288.66	115.18	2.51
Average					4.06
Standard Deviation					109.87
Correlation					0.73

Sources: Annual Reports.

**INTERPRETATIONS**

The above table shows that, the liquid ratio was satisfactory during the study period except in the year 2008-09 and 2009-10. In the year 2012-13, the ratio was 8.06 which was the highest ratio during the study period and the lowest ratio was (-) 1.27 in the year 2008-09. During the study period the average of liquid ratio is 4.06 and the standard deviation is 109.87. there is a positive correlation in liquid ratio.

**ANALYSIS OF CURRENT ASSETS TURNOVER RATIO (CATO Ratio) OF INFOSYS LTD.  
Rs. In Cr.**

Year	Net Sales	Current Assets	CATO Ratio Rs In Times
2007-08	166.92	37.50	<b>0.22</b>
2008-09	216.93	41.95	<b>0.19</b>
2009-10	227.42	41.73	<b>0.18</b>
2010-11	275.01	178.77	<b>0.65</b>
2011-12	337.34	234.461	<b>0.70</b>
2012-13	403.52	267.66	<b>0.66</b>
2013-14	501.33	314.36	<b>0.63</b>
2014-15	533.19	363.49	<b>0.68</b>
2015-16	624.41	389.74	<b>0.62</b>
2016-17	684.84	301.13	<b>0.44</b>
Average			<b>0.50</b>
Standard Deviation			<b>181.28</b>
Correlation			<b>0.90</b>

Sources: Annual Reports.

**INTERPRETATIONS**

The above table reveal that the Current Assets Turnover Ratio of selected company was varied between the highest of 0.70 times in the year 2011-12 and the lowest of 0.18 times in the year 2009-10. Hence, it is satisfactory position during the study period. During the study period the average of current assets turnover ratio is 0.50 and the standard deviation is 181.28. there is a positive correlation in current asset turnover ratio.

**ANALYSIS OF WORKING CAPITAL TURNOVER RATIO (WCTO Ratio) OF INFOSYS LTD.  
Rs. In Cr.**

Year	Net Sales	Net Working Capital	WCTO Ratio Rs In Times
2007-08	166.92	22.67	<b>0.14</b>
2008-09	216.93	26.51	<b>0.12</b>
2009-10	227.42	21.78	<b>0.10</b>
2010-11	275.01	159.97	<b>0.58</b>
2011-12	337.34	209.92	<b>0.62</b>
2012-13	403.52	235.85	<b>0.58</b>
2013-14	501.33	269.33	<b>0.54</b>
2014-15	533.19	306.49	<b>0.57</b>
2015-16	624.41	321.73	<b>0.52</b>

2016-17	684.84	185.95	<b>0.27</b>
Average			<b>0.40</b>
Standard Deviation			<b>186.75</b>
Correlation			<b>0.80</b>

Sources: Annual Reports.

### INTERPRETATIONS

The above table reveal that the Working Capital Turnover Ratio of selected company was varied between the highest of 0.62 times in the year 2011-12 and the lowest of 0.10 times in the year 2009-10. A higher ratio indicates efficient utilization of working capital and a low ratio indicates otherwise. During the study period the average of working capital turnover ratio is 0.40 and the standard deviation is 186.75. there is a positive correlation in working capital turnover ratio

### ANALYSIS OF INVENTORY TURNOVER RATIO (ITO Ratio) OF INFOSYS LTD. Rs. In Cr.

Year	Net Sales	Inventory	ITO Ratio Rs In Times
2007-08	166.92	12.60	<b>0.08</b>
2008-09	216.93	61.50	<b>0.28</b>
2009-10	227.42	40.90	<b>0.18</b>
2010-11	275.01	24.90	<b>0.09</b>
2011-12	337.34	58.80	<b>0.17</b>
2012-13	403.52	11.35	<b>0.03</b>
2013-14	501.33	95.40	<b>0.19</b>
2014-15	533.19	76.90	<b>0.14</b>
2015-16	624.41	93.40	<b>0.15</b>
2016-17	684.84	12.47	<b>0.02</b>
Average			<b>0.13</b>
Standard Deviation			<b>219.20</b>
Correlation			<b>0.33</b>

Sources: Annual Reports.

### INTERPRETATIONS

The above table reveals that the Inventory Turnover Ratio was satisfactory during the study period. In the year 2008-09, the highest ratio was 0.28 times and the lowest ratio was 0.02 times in the year 2016-17. The low inventory implies over-investment in inventories, dull business, poor quality of goods, etc., A high inventory Turnover may be the results of demand, a position of stock-out, conservative method of valuing inventories at lowest values. During the study period the average of inventory turnover ratio is 0.13 and the standard deviation is 219.20. there is a positive correlation in inventory turnover ratio.

**ANALYSIS OF DEBTORS TURNOVER RATIO (DTO Ratio) OF INFOSYS LTD.  
Rs. In Cr.**

Year	Net Sales	Debtors	DTO Ratio Rs In Times
2007-08	166.92	30.93	<b>0.19</b>
2008-09	216.93	33.90	<b>0.16</b>
2009-10	227.42	32.44	<b>0.14</b>
2010-11	275.01	42.12	<b>0.15</b>
2011-12	337.34	54.04	<b>0.16</b>
2012-13	403.52	63.65	<b>0.16</b>
2013-14	501.33	73.36	<b>0.15</b>
2014-15	533.19	86.27	<b>0.16</b>
2015-16	624.41	97.98	<b>0.16</b>
2016-17	684.84	109.60	<b>0.16</b>
Average			<b>0.16</b>
Standard Deviation			<b>213.24</b>
Correlation			<b>0.99</b>

Sources: Annual Reports.

#### INTERPRETATIONS

The above table indicates that Debtors Turnover Ratio of selected company was satisfactory. It was highest during the year 2007-08 which was 0.19 times and lowest in the year 2009-10 which was 0.14 times. The higher value of Debtors Turnover Ratio indicates that the debtors are maximized efficiency. The low ratio implies inefficient management of debtors and less liquid debtors. During the study period the average of debtor's turnover ratio is 0.16 and the standard deviation is 213.24. there is a positive correlation in debtors' turnover ratio.

#### ANALYSIS OF ALTMAN Z- SCORE OF THE INFOSYS COMPANY DURING THE YEAR 2007 -17

X1	X2	X3	X4	X5	Z
0.41	0.48	1.50	0.03	1.68	4.09
0.38	0.39	1.26	0.02	1.66	3.71
0.28	0.31	1.39	0.02	1.52	3.52
0.27	0.34	1.46	0.03	1.49	3.60
0.37	0.51	1.77	0.02	1.56	4.23
0.51	0.48	1.58	0.02	1.48	4.07
0.61	0.46	1.75	0.01	1.46	4.28
0.63	0.52	1.77	0.01	1.61	4.54
0.72	0.45	1.63	0.01	1.45	4.26
0.89	0.37	1.29	0.01	1.18	3.75

The above table indicates that the INFOSYS Company reported 4.09, 3.71, 3.52, 3.60, 4.23, 4.07, 4.28, 4.54, 4.26 and 3.75 as Altman Z Score value. It can be concluded that Company has a good status and it has a healthy financial position during the study period. It is a safe zone.

#### CONCLUSION:

It is concluded from the study, though the working capital and the liquidity position and profitability position of the company was lower at initial stages, it has been maintained at optimum level at present. Now the liquidity position and profitability position of the company is maintained at a desired level in order to meet day-to-day affairs of the company. Therefore, the major objectives of the study are fulfilled by measuring various ratios to check the liquidity position and profitability position of the company is more helpful to measure the wealth of the company

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