EFFICIENCY OF WORKING CAPITAL MANAGEMENT: A COMPARATIVE STUDY OF TATA CONSULTANCY SERVICES LIMITED AND INFOSYS

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[The protocols of working capital management rely on the mechanisms of efficiency approach practices by the managers of the corporate. There is combination of two unique characters found in IT industry and MNCs where managers have to deal with large amount of cash, numbers of branches, human services to be considered as raw-material. Thus, this forms of business have a complete diverse in nature as compared with other forms of business. Therefore, researchers feels that maintaining of adequate amount of working capital is perplexed in Indian IT MNCs and thus, conducted a comparative study on TCS and Infosys. Indices are used as parameter instead of traditional ratios analysis methods to make justification for the test of efficiency level in the study. It was revealed that both the corporate follow more-or-less similar pattern of management strategies except in investment policy of some individual current assets. The stated hypothesis is accepted and the study revealed that both the corporate have similar working capital management policy.

Keywords: *Efficiency, Investments on Inventories, Funds Lock Up.]*

Introduction

The astonishment in transition of modern industries is the transformation of primitive techniques to sophisticated technologies. The shift has ignited the human workforce by competence machine which enable to enhance the economy of productions. In the trend of liberalization, privatization, and globalization, the world diverse market has become into a single market which is known as the global market; having privilege to trade freely by one nation to other nations with their specialty of products. Therefore, opportunity to trade freely has allowed one country to showcase their sophisticated technologies on the specialty products to the whole world in the global market. Wherefore, every country has its own marks of recognition by their specialty of engineering product of goods and services at the global market. For instance, China is known today for its specialty products on electronics goods; Germany is known for its products on iron and steel; India is known for its products on Information Technology (IT) services, so on and so forth. The substantiality of these products

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has immense support in building goodwill and act as the pillar of a country's economy. For whichever is the reason, IT industry in India has played a key role in putting India on the global map and according to the NASSCOM report, the sector's aggregated revenues was estimated at US$ 100 billion in 2012, where export and domestic revenues stood at US$ 69.1 billion and US$ 31.7 respectively. Today the IT industry is playing crucial role in India's economy and has transformed the image of India's from slow moving agrarian economy to the land of innovations. Eventually, India has now become a global player in providing world class technology solutions and business services. The Indian IT service sector alone provides 2.5 million direct employments and has become one of the biggest IT capitals of the modern world and most of the major international IT service providers are also present in the country.

On the other hand, Multinational Corporations (MNCs) or Multinational Enterprises (MNEs) are also known as Transnational Corporations (TNCs), are the firms that engaged in production and selling of goods or services in more than one country. These corporate companies are basically comprised of a parent Company and subsidiaries - parent company is situated at the home country whereas subsidiaries reside in several countries outside the home country. In other words, as according to the definition given by International Labor Organization, MNCs are corporations which have its operational headquarter established at one country with several operating branches in different other countries. The country where headquarters are located is called the home country and the other countries where operational branch are located is called the host countries.

The IT service sector is unlike the other forms of business in terms of managing working capital. Usually, a business concern invests huge amount on inventories whereas IT service sector invests large amount on cash and cash equivalent instead of inventories; the inquisitives of IT firm is that the investments on inventories are almost negligible. Hence, the study is emphasized on the management patterns of working capital on Indian IT MNCs.

Efficiency of Working Capital

In a business concern, working capital plays a crucial role just like that of nerve centre and life blood in human body. It is because working capital supplies the essential current assets to various parts for processing and functioning of the enterprise. In fact, the criticalness of working capital management arrived at the points of very survival and success of the enterprise which means without an efficiency of working capital no firm can survive and success. Efficiency of working capital means having adequate amount of current assets: neither excess nor shortage. For the firm possessing of excess as well as shortage have both negative impact. When having excess it indicates that there is too much of idle funds lock up in current assets which does not earn any profit. But when having shortage, it also does not impress for the firms because this indicates shortage of core resource for operations and are unable to payback their liabilities. Thus, efficiency of working capital management is always encourage and is the best accommodation of current assets for the smooth functioning of the business.

Literature Review

Extensive literatures have been reviewed to broaden the concept on the subject working capital management in different firms and different environments. And the common conclusion draws from different studies was working capital management policy has a proportionality relationship with profitability and liquidity of the firm. Efficiency management will impelled the strength of profit and inefficiency management will increases the liquidity of the concern corporate. Therefore, it was convince that working capital enables the firm to operate daily functional activities. It also implicate that when the investment on current assets increases the liquidity of the firm increases and if the increase amounts of current assets was efficiently managed to generate more sales than the profitability increases. Given below are some select studies related to efficiency of working capital management:

Harsh and Sukhdev (2013) conducted a study on Capital Goods Sector in India using performance index, utilization index and efficiency index and it was found that majority of the firms have performed well during the study period. In general, accommodation of huge current assets increases the liquidity of the firms. The study revealed that some firms have high indexes when investment in their current assets has substantially increased but it also observed lower indexes in some of the firms this indicates that those firms have not been able to utilize the increased current assets to generate sales. In the case of achieving the target level of efficiency in working capital, it was observed that most of the firms have the ability to achieve the targets.

Vedavinayagam (2007) investigated working capital management efficiency in Telecommunication Equipment Industry in USA. It was found that significant statistical evidence exists to support the hypotheses that the working capital management efficiency is negatively associated to the profitability and liquidity. When the working capital management efficiency is improved by decreasing days of working capital, there is improvement in profitability of the firm. It is observed that there is no significant statistical evidence to support the hypothesis that the firms manage the components of working capital equally.

Sayaduzzaman (2006) examined the working capital management efficiency on British American Tobacco Bangladesh Company Ltd. it was found that the efficiency of working capital management of the company is highly satisfactory. Mill has no problem in management of inventory, debtors, cash balances and current liabilities. It was also observed that the company liquidity position was maintained in satisfactory level during the study period. It was also ascertain that there was satisfactory on turnover of current assets, inventory debtors and cash balances and the company enjoyed good facility of cash credit and other working capital loan from different commercial banks.

Farrah, W. K. et al. (2016) conducted a study on working capital management efficiency in small medium enterprise in Malaysia using three indexes, namely, Performance Indexes, Utilization Indexes and Efficiency Indexes. It was found that performance index of the company was not up to expectation, only one out of twenty four companies have greater value of 1. However, utilization index shows very good during the study period. It also revealed that efficiency index of the selected SME shows less concern with their working capital management since the value is less than 1. The empirical results revealed that the selected SME companies are less efficient in managing their working capital during the study period.

Objectives of the Study

This paper furnishes the significant of working capital management and their approaches in the process of business operation for a firm. However, more specifically it is to examine and compared the efficiency of working capital between the select Indian IT MNCs.

Methodology

Based on the ranking given by Gartner report and NASSCOM report 2013, the top two Indian IT MNCs were selected for the study. The selected Indian IT MNCs are:

1. Tata Consultancy Services Limited (TCS)
2. Infosys

Sources of Data

The data used in the study are obtained from the annual financial statement; the annual reports of eight years starting from 2006-07 to 2013-14 are collected from their respective website.

Tools and Methods

In spite of numbers of operational management ratios and functional management ratios which are used to determined the performance and efficiency of working capital management. The researchers have chosen the model '*working capital management efficiency indices*' designed by Bhattacharya, H. (2007) to determine the efficiency of working capital management. The reasons is financial ratios are not able to interprets accurately the efficiency of working capital and it is also difficult to judge on the adequacy level between two corporate. Hence, the indices used in the study are: (1) Performance Index of Working Capital Management (PI_{WCM}). (2) Utilization Index of Working Capital Management (UI_{WCM}). (3) Efficiency Index of Working Capital Management (EI_{WCM}); and these indices are stated below:

(1) Performance Index of Working Capital Management (PI_{wcm}): It is to measures the performance of current assets. When the index shows greater-than 1 (>1) it indicates that the cost of current assets are keep control and there was less than proportionate increase in current assets, compared with sales but when the index shows less-than 1 (<1) it indicates that the cost of current assets has excess over the income generated. Therefore, it always prefer for a firm to have the index greater-than 1 (<1) and when the index is greater-than 1, it reveals the firm is having efficiency in performance of working capital management.

$$(PI_{wcm}) = \frac{I_s \sum_{i=1}^{N} \frac{W_{i(t-1)}}{W_{it}}}{N}$$

Where: I_s = Sales index $\left(\frac{S_t}{S_{t-1}}\right)$; W_i = Individual group of current assets; N = Number of current assets group; i = 1, 2, 3….. N

(2) Utilization Index of Working Capital Management (UI_{wcm}): It is an indicator to measure the degrees of utilizing capacity of current assets in generating income. When the index shows greater-than 1 (>1), it reveals that proportionate increase in income is greater-than the proportionate increase in current assets which means there is improvement in usage capacity of currents assets in generating income for that year.

Utilization Index (UI_{wcm}) = $I_s \frac{A_{t-1}}{A_t}$

(3) Efficiency Index of working capital management (EI_{wcm}): It is the product of performance index and utilization index. This index measures the overall efficiency of working capital for the firm. When the index shows greater-than 1 (>1), it indicates that the firm holding of current assets are adequate and therefore maximum sales has been generated but if the index shows less-than 1 (<1) it indicates that currents assets was more than proportionate as compared to sales generation. Hence, the firm is said to have efficiency in working capital management when only the index shows greater-than 1.

Efficiency Index (EI_{wcm}) = PI_{wcm} X UI_{wcm}

For examining the stated hypothesis, SPSS – 20 has used to test the variables and Independent Samples Test was conducted at 95% confidence level and 5% confidence interval.

Hypotheses

Based on the literature reviewed and conceptual framework following hypotheses is generated:-

H_0: $\mu_{Infosys} = \mu_{TCS}$ (The efficiency of working capital management is relatively similar in Indian IT MNCs).

Data Analysis

In order to examine and compared the efficiency of working capital between the select Indian IT MNCs, performance of individual and sundry current assets are measured; measure the efficiency in utilization of current assets and finally, the overall efficiency of current assets are measured.

Table 1: Comparison of Efficiency in terms of Performance indices of Individual Current Assets between TCS and Infosys

Particulars	Years	INFOSYS			TCS		
		Indices	Mean	Std. D	Indices	Mean	Std. D
1. Current Investments Index	2014	0.57	0.15	0.22	0.80	0.26	0.36
	2013	0.21			0.83		
	2012	0.39			0.09		
	2011	0			0.35		
	2010	0			0.04		
	2009	0			0		
	2008	0			0		
	2007	0			0		
2. Inventories Index	2014	0	.		1.4	1.30	0.47
	2013	0			0.86		
	2012	0			1.28		
	2011	0			0.78		
	2010	0			2.05		
	2009	0			1.13		
	2008	0			1		
	2007	0			1.93		
3. Sundry Debtors Index	2014	0.85	0.82	0.12	0.77	0.81	0.45
	2013	0.83			0.82		
	2012	0.79			0.71		
	2011	0.75			1.71		
	2010	1.05			0.03		
	2009	0.90			0.89		
	2008	0.74			0.80		
	2007	0.66			0.76		
4. Cash & Cash Equivalents Index	2014	0.84	0.78	0.12	0.47	0.71	0.34
	2013	0.94			0.89		
	2012	0.73			1.23		
	2011	0.70			0.64		
	2010	0.92			0.57		
	2009	0.72			0.45		
	2008	0.84			1.14		
	2007	0.58			0.31		
5. Short-term Loans & Advances Index	2014	0.81	0.88	0.32	1.35	0.93	0.56
	2013	0.73			0.39		
	2012	1.56			2.15		
	2011	0.79			0.82		
	2010	0.78			0.83		
	2009	0.84			0.62		
	2008	0.44			0.64		
	2007	1.07			0.68		

Particulars	Years	INFOSYS			TCS		
		Indices	Mean	Std. D	Indices	Mean	Std. D
6. Unbilled Revenue Index	2014	0			0.79	0.79	0.22
	2013	0			0.71		
	2012	0			0.60		
	2011	0			0.89		
	2010	0			1.23		
	2009	0			0.91		
	2008	0			0.58		
	2007	0			0.61		
7. Other Current Assets Index	2014	0			1.09	0.24	0.40
	2013	0			0.57		
	2012	0			0.26		
	2011	0			0		
	2010	0			0		
	2009	0			0		
	2008	0			0		
	2007	0			0		

Source: Computed from annual financial statements

From the above, table 1, it is seen that the adopted working capital management policy has dissimilarities between the two corporate. The reason for dissimilarities is in the issues of investment made on current assets: Infosys was without inventories, unbilled revenue and others current assets, whereas TCS invested on inventories, unbilled revenue and other current assets. Convincingly, the investment of TCS on those mentioned assets is found to be acceptable as they had performed expeditiously. The fund that was utilized in procuring the inventories revealed to be productive as the calculated average mean shows 1.30 per cent indicating that proper measures has been comply by the TCS to keep control over the retained inventories and optimum sales has extracted. However, the performance of TCS shows inefficiency (< 1) in the case of unbilled revenue and other current assets. In spite of showing inefficiency during the study period, if we examine and compare from the first half of the study period (2006-07 – 2009-10) to the second half (2010-11 – 2013-14) it shows improvement in the index this indicates that TCS was more efficient in managing unbilled revenue and other current assets. Thus, it can be concluded that the investment made by TCS on inventories, unbilled revenue and other current assets were improving in keeping control over the years. The reason why Infosys is not investing on the above current assets could be due to holding of huge amounts of funds on cash and cash equivalent. Moreover, it could be possible that, Infosys have adopted Just-In-Time policy on inventory management. Further, both the corporate are seen investing a small amount of funds on current investments in the second half year (2010-11 – 2013-14): Infosys made investment from 2011-12 onward and TCS made investment from 2009-10 onward. In both the cases, the indexes was showing low in the initial investment and then it gradually rise up in the following years this indicates that both the corporate are improving in managing the funds that has lockup on mutual fund (quoted/unquoted) and certificates of deposit.

In the case of sundry debtors both the corporate shows more-or-less the same index, just with 0.01 per cent higher in Infosys. However, both the corporate shows less than proportionate with sales (> 1) in one occasion only: in 2009-10 Infosys show 1.05 per cent and in 2010-11 TCS show 1.71 per cent. This reveals that both the corporate face problem with management on debtors and are not able to collect back their outstanding debts in time. In 2006-07, Infosys shows the lowest index at 0.66 per cent and then it shows increases for the remaining first half years. There shows a fall of 0.30 per cent from 2009-10 to 2010-11 and for the second half years (2010-11 – 2013-14) it shows increases this indicates that there was improvement on the performance of trade receivable. Similarly, the lowest index hit in 2009-10 for TCS with just 0.03 per cent, the corporate must have had unforgettable crunch that year in collecting their receivable amounts, subsequently foreseeing the difficulties TCS could recovered with 1.71 per cent in 2010-11. Apart from the large variation in the index of 2009-10 and 2010-11, TCS maintained uniformity for the rest of the years. Thus, in spite of showing increases and maintaining uniformity in the index, both the corporate needs improvement on the management of sundry debtors it is because the average mean index for both the Indian IT MNCs shows more than proportionate with sales.

In a very similar way, Infosys shows slightly higher than TCS on cash and cash equivalent with 0.07 per cent in average mean. But when we examine yearly wise, Infosys reveals that none of the years reaches less than proportionate with sales (> 1) that is greater than one. Whereas TCS reach in two occasions 2007-08 and 2011-12 and again, as we compared the variance Infosys (0.12 per cent) shows lower than TCS this can be interpreted that there was uniformity in managing the performance of cash and cash equivalent in Infosys. Hence, both the Indian IT MNCs needs to improve their performance on cash and cash equivalent and try to achieved their index greater than 1. Further-more, The performance of Short-term Loans and Advances of Infosys was recorded twice less than proportionate with sales (>1) in 2006-07 (1.07 per cent) and 2011-12 (1.56 per cent), Whereas TCS also revealed twice less than proportionate with sales (>1) in 2011-12 (2.15 per cent) and 2013-14 (1.35 per cent) this indicates that in only two occasion each both the corporate are able to contribute optimum sales by keeping control on short-term loans and advances. When we examine at the average mean, it was revealed that TCS has higher index (0.93 per cent) with variation of 0.53 per cent.

Hence, it can be ascertain that in spite of dissimilarity in investment policy on working capital management, the performance of individual current assets in generating proportionate sales was similar in most of the current assets.

Table 2: Comparison of Efficiency in terms of overall Performance Indices of Working Capital Management on the basis of yearly wise between Infosys and TCS

Year	Infosys				TCS			
	PI	Maximum	Minimum	Mean	PI	Maximum	Minimum	Mean
2014	0.95	1.12	0.81	0.96	1.24	1.24	0.86	1.06
2013	0.81				0.93			
2012	1.07				1.18			
2011	0.90				0.86			
2010	0.96				1.03			
2009	1.07				0.98			
2008	0.81				1.02			
2007	1.12				1.21			

Source: Computed from annual financial statements

Table 2, depicts comparative analysis between Infosys and TCS on the efficiency in terms of overall performance of working capital management on the basis of yearly wise. Infosys could achieved less than proportionate with sales (> 1) in three occasions (2006-07, 2008-09 and 2011-12) but the rest of the five years (2007-08, 2009-10, 2010-11, 2012-13 & 2013-14) shows more than proportionate with sales (< 1). This confirmed that Infosys was able to keep control on the current assets in 2006-07, 2008-09 and 2011-12 and during these years the current assets could performed efficiently symmetrical with sales but the remaining five years declared that the working capital was weak in terms of their performance and not able to contribute optimum sales. However, the highest index was recorded in 2006-07 with 1.12 per cent and the lowest index was recorded in two occasions, in 2008 and 2012-13 with 0.81 per cent. We also observed that the average mean was just 0.04 per cent lower than the efficiency benchmark. Thus, the overall poor performance of 2008 was due to the weak performance by short-term loans and advances and in 2012-13, it was due to the poor performance of current investment.

On the contrary, TCS attained less than proportionate (> 1) with sales in five occasions (2006-07, 2007-08, 2009-10, 2011-12 and 2013-14) but in three occasions (2008-09, 2010-11 and 2012-13) it shows more than proportionate (< 1) with sales. This indicates that TCS was able to keep control on current assets by enhancing performance and has extracted optimum sales in five occasions but the remaining three occasion shows weak performance by the current assets and therefore, unable to enhance its sales. Thus, highest index was found in the year 2013-14 with 1.24 per cent and the lowest index was recorded in the year 2010-11 with 0.86 per cent. The average mean shows at 1.06 per cent this reveals that overall TCS show efficiency on working capital management, however, the inefficiency of working capital management in 2010-11 was due to poor performance by current investment (0.35 per cent) and cash and cash equivalent (0.64 per cent).

Hence, in the light of the above discussion it is clear that the overall performance of current assets was efficient in TCS, since when we compared on the average mean TCS show less than proportionate increase with 1.06 per cent in current assets as compared with sales. This means the current assets of TCS was able to kept control at the minimum level during the study period. In the case of Infosys, the inefficiency of working capital management was due to the weak performances by short-term loans and advances and sundry debtors. Even it could be due to huge amounts of funds lockup on cash and cash equivalent.

Table 3: Comparison of Efficiency in terms of Utilization Indices of Working Capital Management between Infosys and TCS

Companies	Years	A	A_{t-1}	A_t	UI_{wcm}	Mean	Std. Deviation
Infosys	2014	0.86	0.87	0.86	1.01	0.97	0.06
	2013	0.87	0.90	0.87	1.03		
	2012	0.90	0.91	0.90	1.01		
	2011	0.91	0.80	0.91	0.88		
	2010	0.80	0.77	0.80	0.96		
	2009	0.77	0.78	0.77	1.01		
	2008	0.78	0.68	0.78	0.87		
	2007	0.68	0.66	0.68	0.97		
Total No. of indices having > 1					4/8		
TCS	2014	0.52	0.50	0.52	0.96	0.97	0.11
	2013	0.50	0.48	0.50	0.96		
	2012	0.48	0.59	0.48	1.23		
	2011	0.59	0.52	0.59	0.88		
	2010	0.52	0.49	0.52	0.94		
	2009	0.49	0.44	0.49	0.90		
	2008	0.44	0.42	0.44	0.95		
	2007	0.42	0.39	0.42	0.93		
Total No. of indices having > 1					1/8		

Source: Computed from annual financial statements

Table 3, shows the utilization indices of working capital management of Infosys and TCS. These indices interprets that if the index is falling it suggests a lower utilization capacity on the current assets and if it showed rising, it indicate higher capacity of utilization on current assets. The utilization indices for Infosys indicates that the current assets made available to the operating management has been efficiently utilize to produce sales in the year 2009, 2012 and 2013. This suggests that the utilizing capacity of working capital has improved in 2008-09 with 0.14 per cent, in 2011-12 with 0.13 per cent and in 2012-13 with 0.02 per cent. However, Infosys face not only efficiency in utilization of current assets but it also experience the index falling in 2007-08 with 0.10 per cent, in 2009-10 with 0.05 per cent, in 2010-11 with 0.08 per cent and in 2013-14 with 0.02 per cent. This reveals that during these years the degree of utilization of current assets was ineffective as we compared with the volume of the sales the corporate produce.

On the other hand, TCS reveals that the utilization index of current assets rises in the year 2007-08 with 0.02 per cent, in 2009-10 with 0.04 per cent and in 2012 with 0.35 per cent. The rise in the index indicates the usage capacities of working capital are improving and productive during these years. It also shows decline in the index for the year 2008-09 with 0.05 per cent, 2010-11 with 0.06 per cent and 2012-13 with 0.27 per cent.

Thus, the utilization indices reveal that there was wavering pattern in the utilization of working capital in both the Indian IT MNCs. As we compared at the average mean and standard deviation it was confirmed that both the corporate has congruency pattern of management on the capacity of utilization of current assets.

Table 4: Comparison of Overall Efficiency Indices of Working Capital Management between Infosys and TCS

	Infosys			**TCS**		
Years	PI	UI	EI	PI	UI	EI
2014	0.95	1.01	**0.96**	1.24	0.96	**1.19**
2013	0.81	1.03	**0.83**	0.93	0.96	**0.89**
2012	1.07	1.01	**1.08**	1.18	1.23	**1.45**
2011	0.90	0.88	**0.79**	0.86	0.88	**0.76**
2010	0.96	0.96	**0.92**	1.03	0.94	**0.97**
2009	1.07	1.01	**1.08**	0.98	0.90	**0.88**
2008	0.81	0.87	**0.70**	1.02	0.95	**0.97**
2007	1.12	0.97	**1.09**	1.21	0.93	**1.12**
Mean	0.96	0.97	**0.93**	1.06	0.97	**1.03**
Std. Deviation	0.12	0.06	**0.15**	0.14	0.11	**0.22**

Source: computed from annual financial statements

It was observed from the table 4 that in 2006-07 although there was a slight differences in performance index and utilization index both the corporate achieved efficiency benchmark on working capital management: utilization index shows higher in Infosys with 0.04 per cent and performance index shows higher in TCS with 0.09 per cent. However, when we compared the overall efficiency index between the two corporate, TCS shows more efficient than Infosys with 0.03 per cent higher this reveal that the performance of current assets in TCS has greatly contributed to overall efficiency of working capital management. In 2007-08, Infosys reveals very low in both performance index and utilization index eventually leading to overall inefficiency of working capital. In the same way, TCS show less than proportionate with sales (> 1) in performance index but utilization index shows more than proportionate with sales (< 1) subsequently, overall efficiency index shows more than proportionate with sales (0.97 per cent) which was just 0.03 per cent lower than the efficiency benchmark, the cause of this inefficiency was due to low utilization index. Nonetheless in 2008-09, Infosys reveals improvement in managing the current assets showing less than proportionate with sales (> 1) in all the three efficiency indices but in contrasts, TCS shows declines in all three efficiency indices. This confirms that the current assets of TCS were not able to perform and even degree of utilization was ineffective. Therefore, we conclude that Infosys has more efficiency of working capital management than TCS in 2008-09. Further, for the years 2009-10, 2010-11 and 2012-13 it disclosed inefficiency indices by both the corporate but as we examine and compared the two corporate we found that TCS show higher ratio in 2009-10 and 2012-13 and Infosys show better in 2010-11. Further-more, in 2011-12 and 2013-14 TCS show less than proportionate with sales which is efficient but Infosys show efficiency in 2011-12 and inefficiency in 2013-14.

Hence, this reveal as that TCS was more efficient than Infosys in both 2011-12 and 2013-14. The inefficiency of Infosys in 2013-14 was due to weak performance of current assets. Average mean depicts that TCS was more efficient in managing working capital during this study period.

Table 5: Independent Samples Test

			Efficiency of working capital Mngt.	
			Equal variances assumed	Equal variances not assumed
Levene's Test for Equality of variances	F		.879	
	Sig.		.364	
t-test for Equality of Means	t		-1.046	-1.046
	df		14	12.343
	Sig. (2-tailed)		.313	.316
	Mean Difference		-.09750	-.09750
	Std. Error Difference		.09319	.09319
	95% Confidence Interval of the Difference	Lower	-.29738	-.29993
		Upper	.10238	.10493

From the table 5, the Efficiency of working capital management shows that the Levene's Test for Equality of Variances gave the significance values which was greater than 0.05 ($p > 0.05$). Therefore, the t-test for equality of means was reveal in first row, the p-value of the index shows greater than 0.05 ($p > 0.05$) which imply that null hypothesis is accepted. Thus, the efficiency of working capital management between TCS and Infosys are relatively similar.

Conclusion

Though it might be in manufacturing sector or agriculture sector or services sector the significance of working capital management policy remains the same: working capital enables to operate daily functional activities and the profit earning capacity depends on the working capital management policy adopted by the firm. In fact, the cruciality of working capital management is the accommodation of efficient amounts of current assets against current liabilities. Having gained this momentum, prudent decision of holding rightful amounts of current assets and current liabilities is vital on the part of financial managers. Therefore, in examining the pattern of working capital management practices by the Indian IT MNCs, the study revealed that the performance indexes of individual current assets is more or less similar despite of having investments in different component of current assets by both the corporate. However, the TCS performance index of working capital management shows more efficiency in comparison with that of the Infosys. In case of Infosys, the inefficiency of working capital management was due to weak performance by short-term loans and advances and sundry debtors. Nevertheless, the utilization index revealed that there was wavering pattern in the utilization of working capital in both the corporate. However, in comparison with average mean it was confirmed that TCS and Infosys has congruent pattern of management on the capacity of utilization of current assets. On the other hand, the overall efficiency index shows that TCS has maintained efficient level of working capital management whereas Infosys was slightly short of 0.07 per cent to attain efficiency index. The inefficiency of Infosys was found to be due to weak performance of current assets in 2007-08 and 2013-14 and also due to poor utilization capacity of current assets in 2007-08 and 2010-11. Finally, in all the three efficiency indexes: performance index, Utilization index and Efficiency index, the variations are in negligible between the corporate and the hypothesis framed is accepted; and thus, the efficiency of working capital management is relatively similar between TCS and Infosys.

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