Critical Evaluation on Liquidity-Profitability Relationship of Indian IT Sector

Dr. Kaushik Chakraborty

Assistant Professor Department of Commerce Netaji Mahavidyalaya Arambagh, Hooghly

ABSTRACT: *In the present world economy India is the largest exporter of information technology (IT). The IT industry of India has increased its contribution towards India's GDP from 1.2 per cent in 1998 to 7.7 per cent in 2017. However it is a big challenge for the industry to be competitive with the growing IT companies all over the world. In order to survive, Indian IT companies have been changing their business policies to face the diverse challenges emanated from the changing global scenario of the industry. With the changing scenario in the business environment, the liquidity-management in the Indian IT industry has failed to maintain its conventional practices. Liquidity-management ensures financial stability of a business by financing properly the day-to-day operations of a business. It is claimed that skillful liquidity-management has a positive impact on the profitability of the business. In this backdrop, the present paper seeks to reexamine the relationship between the liquidity-management and profitability in the Indian IT sector during the period 2001-2002 to 2015-2016 and also to examine whether its findings conform to the theoretical arguments. While carrying out this study ten IT companies have been selected. These ten IT companies have been selected following purposive sampling procedure. The data of the selected companies relating to the period 2001-2002 to 2015-2016 collected from secondary sources have been used in the present study. The issues analyzed in this study have been tackled using relevant statistical tools and techniques.*
Key words: Indian IT Sector, Liquidity, Profitability, Financial Performance

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I.   INTRODUCTION:

During the last two decades IT sector of India has become globally competitive. In fact, the sector transformed India from an agriculture based economy to knowledge based economy and contributed significantly in almost all sectors of the Indian economy. IT sectorincreased its contribution to India's GDP from 1.2% in 1998 to 7.7% in 2017. The sector also provides job to about 3.9 million Indians in the financial year 2017.

In the modern business world, prime challenge of every business organisation is to maintain efficient financial management. The efficiency of an organization is measured in terms of certain parameters such as profitability, liquidity, efficiency of assets management etc. One of them is liquidity which is a pre-requisite for the development, survival and growth of any business organization. Success of any organisation largely depends on the management of current assets and current liabilities in such a manner so that an enterprise can eliminate the risk of inability to meet the matured short term obligations on the one hand and avoid excessive investment in these assets on the other hand.Liquidity-management ensures financial stability of a business by financing properly the day-to-day operations of a business. It is claimed that skillful liquidity-management has a positive impact on the profitability of the business. In this backdrop, the present paper seeks to reexamine the relationship between the liquidity-management and profitability in the Indian IT sector during the period 2001-2002 to 2015-2016 and also to examine whether its findings conform to the theoretical arguments.

II.   LITERATURE REVIEW:

A brief review of the different efforts of research in the field of liquidity management of Indian IT companies was analysed in the following studies:

Joshi (2016) in his study made an attempt to analyse and evaluate the liquidity position of the selected five Indian IT companies for the period from 2004-05 to 2013-14. He concluded that financial health of an enterprise depends on the profitability as well as liquidity position of the concern.

Sumathi and Narasimhaiah(2016) examined the effect of different components of working capital of the Infosys Ltd. on its profitability during the period from 2011 to 2015. One of the significant outcomes of the study was that overall working capital position of the company was satisfactory. They suggested that firm can increased the value for their shareholders by decreasing the credit period allowed and also created more returns for their shareholders by improving the inventory position.

Kumar and Agarwal (2015) carried out a study to analyse the efficiency of liquidity management of the three firms from Indian IT industry for the period 2007 to 2013. The relationship between liquidity and profitability of the selected firms was examined through correlation coefficient. In their study, t- test was done to determine the impact of working capital management on profitability. They concluded that there was no significant impact of working capital on profitability of firms in IT industry under study.

Kaur and Singh (2013) in their study made an empirical investigation regarding the relationship between liquidity and profitability and also examined the impact of working capital management on profitability of 14 companies in Indian IT sector for the period 2000 to 2010. The study was based on secondary database collected from CMIE database. Karl Pearson correlation and regression analysis were used to analyse data of the study. The study revealed that there was a strong significant relationship between the liquidity and profitability of the selected companies during the study period.

Chadamiya andPithadia (2012) conducted a study to make a comparative analysis of cash management, as well as, working capital position of two major companies (i.e. Infosys Ltd. and Wipro Ltd.) in Indian IT sector for the period 2001-02 to 2005-06. The study was based on secondary database which was collected from various relevant websites and magazines. Simple mathematical and statistical tools and techniques were used to analyze the data under the study. The study revealed that quick ratio and cash ratio of Infosys Ltd. were higher than the Wipro Ltd. during the study period.

Kasisomayajula (2012) made a study on liquidity and the working capital management of the Indian Banking and IT Industries for the period 2000-01 to 2009-10. In his study, liquidity and profitability aspects of selected companies were assessed through analysis and interpretation of selected liquidity ratios (i.e. demand deposit to total deposit, liquid assets to demand deposit, liquid assets to total assets, loans to assets, cash conversion cycle) and selected profitability ratio i.e. return on capital employed (ROCE) and also some relevant statistical tools were used in this study such as regression and correlation. The main outcome of the study was that regression and correlation between CCC and ROCE illustrated that there was a negative relationship between liquidity and profitability of the companies under study.

From the above review of literature, it is clear that several studies on the area of liquidity management of Indian IT sector were made during the past decade. But, there was no exploration by research exclusively on liquidity and its impact on profitability in Indian IT industry. However, no significant study on liquidity management and its impact on profitability of Indian top IT companies during the post LPG era by taking the major aspects of liquidity management were made. Therefore, it is the high time to discuss the liquidity management of IT industry during the post LPG era. In order to bridge the gap, the present study takes an attempt to analyse the liquidity position of IT in India in post reform era.

Objectives of the study:
The main objective of the study is to make a comprehensive study on the overall liquidity position of the selected Indian ITcompanies during the study period. Specifically, the study has the following objectives:
- To determine the closeness of association between liquidity and profitability of the companies under study and to test the significance of such associations.
- To assess the joint effect of the liquidity management indicators of the companies on their overall profitability under study and to test the significance of such effect.
- To examine whether the findings of the study conform to the theoretical arguments (i.e. liquidity-profitability trade off theory).

Research Methodology:
Sample design:
In this study, ten Indian IT companies were selected by following purposive sampling procedure. The list of the companies was displayed in Appendix.

Collection of data:
The data of the ten selected Indian IT companies used in this study for the period from 2001 – 02 to 2015-16 were collected from the secondary source i.e. 'Capitaline Corporate Database' of Capital Market Publishers (l) Ltd., Mumbai. The data pertains to the financial year figures of each year under study. In this study, other secondary sources for collecting data like books, journals, research papers etc. were also used.

Analysis of data:
For analyzing the data used in this study, simple mathematical tools such as summation, subtraction, percentage, average, ratio etc. were used. In order to determine the liquidity position of the selected companies, liquidity indicators like Current ratio (CR) , Quick ratio (QR) and Cash & Bank to Current Assets ratio (CBCAR) were used. The ratios relating to the measurement of profitability of the companies used in this study

were Return on Capital Employed (ROCE) and Return on Net worth (RONW). The degree of relationship between liquidity and profitability of the companies under study was assessed through simple Pearson, Kendall and Spearman's rank correlation. For judging joint influence of all selected liquidity parameters on profitability, multiple correlations and multiple regressions were used. The computed values of simple correlation coefficients and partial regression coefficients were tested by "t" test and multiple correlation coefficient was tested using "F" test to examine whether the such computed values were statistically significant or not.

Data analysis and findings:
Table- 1 depicts that out of thirty correlation coefficients between CR and ROCE in the selected IT companies thirteen coefficients were positive, out of which three coefficients were found to be statistically significant whereas the remaining seventeen correlation coefficients were negative, out of which nine coefficients were found to be statistically significant.
Table-2 exhibits that out of thirty correlation coefficients between QR and ROCE in the selected companies' fourteen coefficients were positive, out of which only three coefficients were statistically significant while the remaining sixteen correlation coefficients were negative, out of which none was found to be statistically significant.
Table- 3 reveals that the correlation coefficients between CBCAR and ROCE was found to be positive in ten out of thirty cases of which two were found to be statistically significant, whereas in the remaining twenty cases, the correlation was found to be negative, out of which thirteen were found to be statistically significant.
Table-4 exhibits that out of thirty correlation coefficients between CR and RONW in the selected companies' twelve coefficients were positive, out of which only two coefficients were statistically significant while the remaining eighteen correlation coefficients were negative, out of which five coefficients were found to be statistically significant.
Table-5 exhibits that out of thirty correlation coefficients between QR and RONW in the selected companies' thirteen coefficients were positive, out of which only three coefficients were statistically significant while the remaining seventeen correlation coefficients were negative, out of which one coefficient was found to be statistically significant.
Table- 6 reveals that the correlation coefficients between CBCAR and RONW was found to be positive in eleven out of thirty cases of which two were found to be statistically significant, whereas in the remaining nineteen cases, the correlation was found to be negative, out of which ten coefficients were found to be statistically significant.
The joint influence of the selected ratios indicating liquidity on the profitability of each of the companies under study was analysed in Table 7 and Table 8. The multiple regression equations which were fitted in this study considering ROCE and RONW as the profitability measures were: (a) $ROCE = b_0 + b_1.CR + b_2.QR + b_3.CBCAR$ where b_0 was the constant, b_1, b_2, and b_3 were the partial regression coefficients and (b) $RONW = B_0 + B_1.CR + B_2.QR + B_3.CBCAR$ where B_0 was the constant, B_1, B_2, and B_3 were the partial regression coefficients respectively.
Table 7 exhibits that when CR increased by one unit, the ROCE went up in four out of ten companies but the increase in ROCE was found to be statistically insignificant whereas for one unit increase in CR, the ROCE came down in remaining six companies, out of which in three cases (Larsen &TurboInfotech Ltd., Mindtree and TCS) the decrease in ROCE was statistically significant. When QR improved by one unit, the ROCE went up in seven companies, out of which in two cases ((Mindtree and TCS) the increase in ROCE was statistically significant whereas for one unit increase in QR ROCE (statistically insignificant) in three out of ten companies. When CBCAR increased by one unit, the ROCE went up in only two companies out of which in one case (HCL Technology) this improvement in ROCE was statistically significant, whereas for one unit increase in CBCAR, the ROCE decreased in eight companies out of which in three cases (Infosys Ltd, TCS and Wipro Ltd) this deterioration were statistically significant.
Table 8 exhibits that when CR increased by one unit, the RONW went up in four out of ten companies but the increase in RONW was found to be statistically insignificant whereas for one unit increase in CR, the RONW came down in remaining six companies, out of which in two cases (Mindtree and TCS) the decrease in RONW was statistically significant. When QR improved by one unit, the RONW went up in six companies, out of which in one case (TCS) the increase in RONW was statistically significant whereas for one unit increase in QR, RONW came down (statistically insignificant) in four out of ten companies. When CBCAR increased by one unit, the RONW went up in only three companies out of which in one case (HCL Technology) this improvement in RONW was statistically significant, whereas for one unit increase in CBCAR, the RONW decreased in seven companies out of which in three cases (Infosys Ltd, TCS and Wipro Ltd) this deterioration were statistically significant.
Table 9 reveals that the multiple correlation coefficient of ROCE on CR, QR and CBCAR in the selected companies ranged between 0.351 (Tech Mahindra Ltd) and 0.876 (TCS). The Table shows that the joint

influence of firm's efficiency in managing its liquidity on profitabilitywas notable in four companies (Infosys Ltd., Larsen &TurbroInfotech Ltd., Mndtree and TCS). The coefficient of multiple determination in the selected companies due to the variation in CR, QR and CBCAR ranged between 12.30 per cent and 76.80 per cent.

Table 10 discloses that the multiple correlation coefficient of RONW on CR, QR and CBCAR in the selected companies ranged between 0.267 (Tech Mahindra Ltd) and 0.873 (Infosys Ltd.). The Table reveals that the joint influence of firm's efficiency in managing its liquidity on profitability was notable in two companies (Infosys Ltd., and TCS). The coefficient of multiple determination in the selected companies due to the variation in CR, QR and CBCAR ranged between 7.10 per cent and 76.30 per cent.

Concluding remarks:

1. The study confirms that in case of the majority of the selected IT companies, liquidity management has negatively significant impact on profitability during the study period.

2. The study of the partial regression coefficients conforms that in the majority of the cases CR and CBCAR made negative as well as significant contribution towards improvement of profitability of the companies under study. Whereas, in majority of the cases QR made positive contribution towards improvement of profitability of the selected companies.

2. The study of multiple correlation coefficients reflects that the joint impact of liquidity on profitability was notable in four out of ten companies under study

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Table - 1

Analysis of correlation between management of liquidity (CR) and profitability (ROCE) of the selected companies in Indian IT sector during the study period

Sl	Name of the Company	Correlation Coefficient between CR and ROCE		
		Pearson	Kendall	Spearman
1	HCL Technology	0.086	0.086	0.136
2	Hexaware Technologies Ltd.	-0.544*	-0.448*	-0.575*
3	Infosys Ltd.	-0.353	-0.306	-0.499
4	Larsen &TurbroInfotech Ltd.	-0.824**	-0.529**	-0.671**
5	Mindtree	-0.761**	-0.478*	-0.638*
6	Mphasis	-0.411	-0.134	-0.39
7	Oracle Financial Services Software Ltd.	0.236	0.067	0.157
8	TCS	0.601*	0.581**	0.736**
9	Tech Mahindra Ltd.	0.285	0.143	0.232
10	Wipro Ltd.	0.077	-0.134	-0.141

* Correlation is significant at 5% level
** Correlation is significant at 1% level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.

Table - 2

Analysis of correlation between management of liquidity (QR) and profitability (ROCE) of the selected companies in Indian IT sector during the study period				
Sl.	Name of the Company	Correlation Coefficient between QR and ROCE		
		Pearson	Kendall	Spearman
1	HCL Technology	0.152	0.181	0.232
2	Hexaware Technologies Ltd.	-0.363	-0.352	-0.482
3	Infosys Ltd.	-0.167	-0.124	-0.207
4	Larsen &TurbroInfotech Ltd.	-0.338	-0.314	-0.454
5	Mindtree	-0.477	-0.276	-0.454
6	Mphasis	-0.336	-0.200	-0.332
7	Oracle Financial Services Software Ltd.	0.482	0.257	0.339
8	TCS	0.703**	.695**	.832**
9	Tech Mahindra Ltd.	0.184	0.086	0.139
10	Wipro Ltd.	-0.022	0.010	0.054
* Correlation is significant at 5% level ** Correlation is significant at 1% level				
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.				

Table - 3

Analysis of correlation between management of liquidity (CBCAR) and profitability (ROCE) of the selected companies in Indian IT sector during the study period				
Sl.	Name of the Company	Correlation Coefficient between CBCAR and ROCE		
		Pearson	Kendall	Spearman
1	HCL Technology	0.538*	0.352	0.518*
2	Hexaware Technologies Ltd.	-0.238	-0.2	-0.25
3	Infosys Ltd.	- 0.864**	-0.581**	-0.754**
4	Larsen &TurbroInfotech Ltd.	0.237	0.347	0.286
5	Mindtree	-0.622*	-0.390*	-0.561*
6	Mphasis	-0.535*	-0.505**	-0.648**
7	Oracle Financial Services Software Ltd.	-0.061	-0.048	0.082
8	TCS	-0.555*	-0.276	-0.443
9	Tech Mahindra Ltd.	0.334	0.086	0.093
10	Wipro Ltd.	-0.694**	-0.600**	-0.782**
* Correlation is significant at 5% level ** Correlation is significant at 1% level				
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.				

Table - 4

Analysis of correlation between liquidity management (CR) and profitability (RONW) of the selected companies in Indian IT sector during the study period				
Sl.	Name of the Company	Correlation Coefficient between CR and RONW		
		Pearson	Kendall	Spearman
1	HCL Technology	0.085	0.153	0.231
2	Hexaware Technogies Ltd.	-0.565*	-0.467*	-0.607*
3	Infosys Ltd.	-0.385	-0.402*	-0.556*
4	Larsen &TurbroInfotech Ltd.	-0.382	-0.183	-0.258
5	Mindtree	-0.263	-0.172	-0.202
6	Mphasis	-0.414	-0.191	-0.416
7	Oracle Financial Services Software Ltd.	0.127	-0.029	0.032
8	TCS	0.459	0.543**	0.693**
9	Tech Mahindra Ltd.	0.191	0.143	0.232
10	Wipro Ltd.	0.055	-0.057	-0.105
* Correlation is significant at 5% level ** Correlation is significant at 1% level				
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.				
Table - 5				

Analysis of correlation between liquidity management (QR) and profitability (RONW) of the selected companies in Indian IT sector during the study period

Sl	Name of the Company	Correlation Coefficient between QR and RONW		
		Pearson	Kendall	Spearman
1	HCL Technology	0.152	0.249	0.313
2	Hexaware Technologies Ltd.	-0.389	-0.371	-0.514*
3	Infosys Ltd.	-0.191	-0.181	-0.225
4	Larsen &TurbroInfotech Ltd.	-0.304	-0.333	-0.361
5	Mindtree	-0.084	-0.086	-0.114
6	Mphasis	-0.334	-0.257	-0.407
7	Oracle Financial Services Software Ltd.	0.418	0.2	0.246
8	TCS	0.567*	0.657**	0.804**
9	Tech Mahindra Ltd.	0.102	0.086	0.139
10	Wipro Ltd.	-0.139	0.010	-0.011

* Correlation is significant at 5% level
** Correlation is significant at 1% level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers (I) Ltd., Mumbai.

Table - 6

Analysis of correlation between management of liquidity (CBCAR) and profitability (ROCE) of the selected companies in Indian IT sector during the study period

Sl	Name of the Company	Correlation Coefficient between CBCAR and RONW		
		Pearson	Kendall	Spearman
1	HCL Technology	0.524*	0.345	0.522*
2	Hexaware Technologies Ltd.	-0.3	-0.181	-0.246
3	Infosys Ltd.	-0.873**	-0.562**	-0.771**
4	Larsen &TurbroInfotech Ltd.	0.092	0.061	0.05
5	Mindtree	-0.079	0.029	0.029
6	Mphasis	-0.538*	-0.448*	-0.625*
7	Oracle Financial Services Software Ltd.	-0.207	-0.086	-0.114
8	TCS	-0.618*	-0.314	-0.475
9	Tech Mahindra Ltd.	0.249	0.086	0.093
10	Wipro Ltd.	-0.648**	-0.524**	-0.693**

* Correlation is significant at 5% level
** Correlation is significant at 1% level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers(I) Ltd., Mumbai.

Table - 7

Analysis of Multiple Regression of ROCE on CR, QR and CBCAR of the selected companies in Indian IT sector
Regression Equation of ROCE on CR, QR and CBCAR: ROCE = b_0 + b_1.CR + b_2.QR + b_3.CBCAR

Sl. No.	Name of the Company	Partial Regression Coefficients			
		Constant	CR	QR	CBCAR
1	HCL Technology	17.915 (2.678)	-5.982 (-1.094)	2.159 (0.855)	56.519 (2.223)*
2	Hexaware Technologies Ltd.	31.646 (4.320)	-3.013 (-1.734)	0.213 (0.300)	-13.709 (-0.884)
3	Infosys Ltd.	78.459 (11.439)	0.671 (0.385)	-0.055 (-0.112)	-63.283 (-5.234)***
4	Larsen &TurbroInfotech Ltd.	79.794 (8.439)	-17.020 (-4.338)***	-0.447 (-0.190)	-45.883 (-1.139)
5	Mindtree	32.793 (4.749)	-14.887 (-3.898)***	9.286 (2.522)**	-2.727 (-0.069)
6	Mphasis	37.480 (4.326)	-5.089 (-0.832)	1.037 (0.280)	-66.490 (-1.575)
7	Oracle Financial Services Software Ltd.	15.420 (1.392)	2.593 (0.324)	2.450 (0.826)	-35.351 (-0.906)
8	TCS	49.266 (4.904)	-31.872 (-2.231)*	24.905 (3.386)**	-90.773 (-3.240)**
9	Tech Mahindra Ltd.	30.587 (1.374)	9.801 (0.711)	-2.883 (-0.304)	33.715 (0.518)
10	Wipro Ltd.	52.629 (4.390)	1.071 (0.253)	0.650 (0.343)	-87.432 (-3.228)**

Note: Figures in the parentheses indicate t values
*** Significant at 1 per cent Level
  ** Significant at 5 per cent Level
    * Significant at 10 per cent Level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers(I) Ltd., Mumbai.

Table - 8

Analysis of multiple regression of RONW on CR,QR and CBCAR of the selected companies in Indian IT sector during the study period
Equation of RONW on CR, QR and CBCAR: RONW = B_0 + B_1.CR + B_2.QR + B_3.CBCAR

Sl. No.	Name of the Company	Partial Regression Coefficients			
		Constant	CR	QR	CBCAR
1	HCL Technology	17.802 (2.881)	-5.615 (-1.111)	2.065 (0.885)	49.676 (2.115)*
2	Hexaware Technologies Ltd.	30.075 (4.876)	-2.696 (-1.843)	0.174 (0.291)	-15.341 (-1.175)
3	Infosys Ltd.	76.585 (10.075)	0.470 (0.244)	-0.091 (-0.170)	-71.432 (-5.331)***
4	Larsen &TurbroInfotech Ltd.	80.053 (4.573)	-13.405 (-1.845)	-1.011 (-0.232)	-44.030 (-0.590)
5	Mindtree	38.577 (2.894)	-14.675 (-1.990)*	3.132 (0.441)	92.139 (1.203)
6	Mphasis	35.332 (4.092)	-3.932 (-0.645)	0.565 (0.153)	-67.727 (-1.610)
7	Oracle Financial Services Software Ltd.	13.634 (1.191)	4.533 (0.548)	2.175 (0.709)	-55.610 (1.378)
8	TCS	55.731 (5.522)	-34.863 (-2.429)*	23.437 (3.172)**	-102.722 (-3.649)**
9	Tech Mahindra Ltd.	32.529 (1.787)	6.432 (0.305)	-2.484 (-0.321)	22.143 (0.416)
10	Wipro Ltd.	51.768 (4.410)	0.551 (0.133)	-0.413 (-0.223)	-73.072 (-2.755)**

Note: Figures in the parentheses indicate t values
*** Correlation is significant at 1% level
** Correlation is significant at 5% level
* Correlation is significant at 10% level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers(I) Ltd., Mumbai.

Table – 9

Analysis of Multiple Correlation of ROCE on CR , QR and CBCAR of the selected companies in the Indian IT sector

Sl	Name of the Company	R	R²	F Value
1	HCL Technology	0.632	0.399	2.434
2	Hexaware Technologies Ltd.	0.587	0.344	1.924
3	Infosys Ltd.	0.866	0.750	10.980**
4	Larsen &TurbroInfotech Ltd.	0.867	0.752	11.143**
5	Mindtree	0.874	0.763	11.814**
6	Mphasis	0.586	0.344	1.919
7	Oracle Financial Services Software Ltd.	0.606	0.367	2.125
8	TCS	0.876	0.768	12.138**
9	Tech Mahindra Ltd.	0.351	0.123	0.514
10	Wipro Ltd.	0.700	0.490	3.518

Note: ** Correlation is significant at 1 per cent level
*Correlation is significant at 5 per cent level

Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers(I) Ltd., Mumbai.

Table - 10

Analysis of multiple correlation of RONW on CR, QR and CBCAR of the selected companies in Indian IT sector during the study period

Sl	Name of the Company	R	R²	F Value
1	HCL Technology	0.619	0.383	2.278
2	Hexaware Technologies Ltd.	0.629	0.396	2.401
3	Infosys LTd.	0.873	0.763	11.78**
4	Larsen &TurbroInfotech Ltd.	0.605	0.366	2.114
5	Mindtree	0.52	0.27	1.356
6	Mphasis	0.574	0.33	1.802
7	Oracle Financial Services Software Ltd.	0.656	0.43	2.765
8	TCS	0.852	0.725	9.669*
9	Tech Mahindra Ltd.	0.267	0.071	0.281
10	Wipro Ltd.	0.649	0.421	2.668

** Correlation is significant at 1 per cent level
* Correlation is significant at 5per cent level
Source: Compiled and computed from 'Capitaline Corporate Database' of Capital Market Publishers(I) Ltd., Mumbai.

Appendix

Sl. No.	Name of the companies
1	HCL Technology
2	Hexaware Technologies Ltd.
3	Infosys LTd.
4	Larsen &TurbroInfotech Ltd.
5	Mindtree
6	Mphasis
7	Oracle Financial Services Software Ltd.
8	TCS
9	Tech Mahindra Ltd.
10	Wipro Ltd.

Note: Serial number has been made alphabetically on the name of the company.