ORIGINAL RESEARCH PAPER

Volume-6 | Issue-11 | November-2017 | ISSN No 2277 - 8179 | IF : 4.176 | IC Value : 78.46

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

WORKING CAPITAL MANAGEMENT TOWARDS THE PROFITABILITY OF EMERGING PRIVATE SECTOR BANKS

Commerce

Dr.P.N.Harikumar Associate Professor & Head, Post-graduate Department of Commerce, Catholicate College, Pathanamthitta, Kerala, India, 689645.

Dr.Susha D Associate Professor & Head, Research and Post-graduate Department of Mathematics, Catholicate College, Pathanamthitta, Kerala 689645, India.

ABSTRACT

Working capital management involves the relationship between a firm's short-term assets and its short-term liabilities. The goal of working capital management is to ensure that a firm is able to continue its operations and that it has sufficient ability to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash. Working capital indicates the operating liquidity or financial strength of a business to meet the routine obligations. In financial term it is concerned with current assets and current liabilities those differences is called net working capital. Profitability and liquidity are considered to have a trade-off. Imbalance between these two can put the existence of the firm in danger either through the solvency or unprofitability. Status of working capital decides the effective utilization of long term assets which are the major source of earning. Hence working capital indirectly but significantly influences the profitability of a company. This paper is an endeavor to measure the impact working capital position on the profitability of new private sector banks of India by collecting data from published annual reports of banks over the period of five years (i.e. 2011-12 to 2015-16) which is secondary in nature. Analysis has been done through correlation and trend study.

KEYWORDS

Working Capital, Profitability, Current Ratio & ROA

Introduction:

Working Capital (abbreviated WC) is a financial metric which represents operating liquidity available to a business, organization or other entity, including governmental entity. Along with fixed assets such as plant and equipment, working capital is considered a part of operating capital. Gross working capital equals to current assets. Working capital is calculated as current assets minus current liabilities. If current assets are less than current liabilities, an entity has a working capital deficiency, also called a working capital deficit.

A company can be endowed with assets and profitability but short of liquidity if its assets cannot readily be converted into cash. Positive working capital is required to ensure that a firm is able to continue its operations and that it has sufficient funds to satisfy both maturing short-term debt and upcoming operational expenses. The management of working capital involves managing inventories, accounts receivable and payable, and cash.

Working capital in a business has the same role as blood in the human body. It represents the operating capital of the firm. It is also identified as short term financial management. Two major liquidity indicators are current ratio and acid-test ratio. Current ratio is calculated by dividing current assets by current liabilities where as acid-test ratio is one step ahead of the current ratio. It can be derived from current ratio by excluding prepaid expenses and inventory from the current assets and keeping the denominator unchanged. The financial metric of acid-test ratio is quick assets/current liabilities. Acid-test ratio is also called the corrected version of current ratio as inventory and prepaid expenses considered in current ratio cannot be converted immediately into cash for paying the current debts.

A balanced extent of working capital or adequate liquidity is mandatory for the proper utilization of funds and smooth operations of any institution. Excessive level of current assets may have a negative effect on the firm's profitability whereas a low level of current assets may lead to lower level of liquidity and stock outs resulting in difficulties in maintaining smooth operations (Van Horne and Wachowicz, 2004). In general term Net Working Capital (NWC) is cared about to find out the efficient amount of operating liquidity. It is the difference between current assets and current liabilities. Higher this difference is more is the capability to pay due obligations and lower will be the risk of insolvency. But more than required variation may adversely affect profitability as the idle funds do not generate any revenue.

Firms having conventional cash inflows may operate with zero or very low level of NWC. The ideal NWC varies from industry to industry on the basis of its nature. Normally manufacturing firms require more working capital in comparison of service industry like banks. New private sector banks are chosen in this paper to examine the impact of working capital on profitability.

Firstly the objective of the paper is discussed. The second part is the review of literature. The third part of the paper is covering research methodology and analysis. The last section has the conclusion of the results, limitations of the study and recommendations for the new private sector banks of India.

Objectives:

The key objective of this research paper is to know the liaison between position of working capital and profitability of new private sector banks of India (indicated by current ratio and return on assets respectively). The data is collected from the published annual reports of Reserve Bank of India and other banks along with the online databases. The time period for the analysis is five years i.e. between 2011 through 2015. The quantitative objectives are below:

1. To know the trends in the Current Ratio (CR), Acid-Test Ratio and Return on Assets (ROA) of the Private Sector Banks of India
2. To measure the degree of relationship between CR and ROA of the mentioned banks with the help of correlation
3. To measure the degree of relationship between Acid-Test Ratio and ROA of the mentioned banks with the help of correlation

Review of Literature:

A number of researches have been carried out in order to examine the impact of working capital on the profitability or some other factor. Most of them have considered working capital management or any single element of working capital as the independent variable. Concise evidence for the same is presented in the following paragraphs.

Carpenter & Johnson (1983) provided empirical evidence that there is no linear relationship between the level of current assets and revenue. However, some indications of a possible non-linear relationship were found which were not highly statistically significant.

Soenen (1993) investigated the relationship between the net trade cycle as a measure of working capital and return on investment in U.S firms. The results of chi-square test indicated a negative relationship between the length of net trade cycle and return on assets. Furthermore, this inverse relationship between net trade cycle and return on assets was found different across industries depending on the type of industry.

Lamberson (1995) studied how small firms respond to changes in economic activities by changing their working capital positions and

level of current assets and liabilities. Current ratio, current assets to total assets ratio and inventory to total assets ratio were used as measure of working capital while index of annual average coincident economic indicator was used as a measure of economic activity. The study found that there is very small relationship between changes in economic conditions and changes in working capital.

Jose, (1996) examined the relationship between aggressive working capital management and profitability of US firms using Cash Conversion Cycle (CCC) as a measure of working capital management where a shorter CCC represents the aggressiveness of working capital management. The results indicated a significant negative relationship between the cash conversion cycle and profitability indicating that more aggressive working capital management is associated with higher profitability.

Pandey and Parera (1997) retrieved that most companies in Sri Lanka have informal working capital policy and company size has an influence on the overall working capital policy (formal or informal) and approach (conservative, moderate or aggressive). Moreover, company profitability has an influence on the methods of working capital planning and control.

Shin and Soenen (1998) and Deloof (2003) show profitability and risk-adjusted returns are inversely related to the cash conversion cycle suggesting that aggressive working capital policy significantly improve firm performance. A firm may adopt an aggressive working capital management policy with a low level of current assets as percentage of total assets or it may also be used for the financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities.

Dr Ioannis Lazaridis) and MSc Dimitrios Tryfonidis (2004) analyzed the relationship of corporate profitability and working capital management by using a sample of 131 companies listed in the Athens Stock Exchange (ASE) for the period of 2001-2004. The results of the research showed that there was statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle.

Grzegorz Michalski (2008) evaluated financial effectiveness of investment in working capital and concluded that liquid assets management decisions are very complex. If too,much money is tied up in working capital, the business face higher costs of managing liquid assets with additional high alternative costs. While the higher liquidity assets policy could help enlarge income from sales.

H. Jamal Zubairi (2010) tried to investigate how profitability of firms, in the automobile sector of Pakistan, was influenced by working capital management and capital structure of firms and found that a firm can enhance its profitability either by increasing its currents assets or by reducing its current liabilities. The degree of operating leverage appeared to be statistically significantly linked to profitability in their model.

Faris Nasif AlShubiri (2011) explored the potential relationship of aggressive/conservative policies with the accounting and market measures of profitability as well as the risk factor of 59 industrial companies and for 14 banks listed at Amman Stock Exchange for the period of 2004-2008. The result indicated a negative relationship between the profitability measures of firms and banks and degree of aggressiveness of working capital investment and financing policies. The firms yield negative returns if they follow an aggressive working capital policy.

Research Gaps Identified:
The blend of working capital indicator and profitability indicator i.e. current ratio and return on assets; is also used for the first time. Rather one of these indicators has been definitely considered with some other variable but both, current ratio and ROA together are considered in this paper only for such kind of analysis. Moreover no such previous evidence exists for the case of new private sector banks of India.

Analysis:

Table 1: Return on Assets of New private Sector Banks

Name of the Bank	2011-12	2012-13	2013-14	2014-15	2015-16
Axis Bank	1.44	1.67	1.68	1.68	1.7
Development Credit Bank	-1.25	-1.3	0.3	0.68	1.06
HDFC Bank	1.23	153	1.58	1.77	1.9
ICICI Bank	0.98	1.14	1.46	1.57	17
Indusind Bank	0.58	1.14	1.46	1.57	1.63
Kotak Mahindra Bank	1.03	1.72	1.77	1.83	1.8
Yes Bank	1.59	1.79	1.58	1.57	1.57

(Source: RBI Bulletin)

Return on assets is the most common profitability measure considered in case of banks. It is net profit after tax to average assets ratio. However it does not explain the profitability of different sources of finance rather it tells about profitability of the total investments of the banks. HDFC Bank has consistent profitability in last financial years due to strong operating and financial parameters and diversity in three primary franchises- retail banking, wholesale banking and treasury. ICICI Bank and Indusind bank has also been able to have regular growth.

Table 2: Current Ratio of New Private Sector Banks

Name of the Bank	2011-12	2012-13	2013-14	2014-15	2015-16
Axis Bank	0.37	0.63	0.56	0.75	18.74
Development Credit Bank	0.69	0.78	0.68	0.65	17.6
HDFC Bank	0.27	0.28	0.5	0.58	7.42
ICICI Bank	0.78	1.94	1.73	1.97	9.94
Indusind Bank	0.61	0.88	0.76	0.97	21.93
Kotak Mahindra Bank	0.49	0.49	0.49	0.75	18.16
Yes Bank	0.45	0.68	0.84	0.73	0.89

(Source: RBI Bulletin)

We can see that current ratio for all the banks except yes bank has taken an acute jump in the fiscal year 2016. The reason can be derived by comparing it with the table number 4 where acid-test ratio is not showing any big sudden change like CR. It can be due to two reasons either a large change in inventory or prepaid expenses or any sharp decline in the level of current liabilities but we do not find any swift variation in the current liabilities of the concerned banks after studying their balance sheets. This implies that there has been a tremendous change in either inventory or prepaid expenses.

Table 3: Correlation of Current Ratio and Return on Assets for New Private Sector Banks

		Current Ratio	Return on Assets
Current Ratio	Pearson Correlation	1	.572
	Sig.(2-tailed) N		0.314
	N	5	5
Return on Assets	Pearson Correlation	.572	1
	Sig.(2-tailed) N	0.314	
	N	5	5

Inference: There is correlation between Current Ratio and profitability of new private sector banks as r > .5 (at 5% significance level) but this correlation is insignificant. That means correlation is by chance having no importance.

Outlook:
The result of correlation between CR and ROA seems to be in alignment with that of subjective ideology as current ratio cannot have any significant correlation with ROA due to the presence of inventory and reserves in its numerator of CR.

Table 4: Acid-test Ratio of New Private Sector Banks

Name of the Bank	2011-12	2012-13	2013-14	2014-15	2015-16
Axis Bank	9.52	19.19	19.6	21.63	20.1
Development Credit Bank	10.78	16.11	17.38	16.62	18.58
HDFC Bank	5.23	7.14	6.89	6.2	7.84
ICICI Bank	5.94	14.7	15.86	16.71	10.53
Indusind Bank	9.16	17.94	17.65	21.94	23.48
Kotak Mahindra Bank	5.91	8.46	10.86	16.85	18.95
Yes Bank	5.14	14.54	15.34	7.83	10.18

(Source: RBI Bulletin)

Outlook:
Acid-test ratio of HDFC Bank has remained significantly less than other new private sector banks in all the financial years indicating that this bank has great scope to take more risk in terms of liquidity. Its idle

resources are less which is helpful in the augmentation of its revenues. Indusind Bank has very big stock of quick assets which is reflecting its liquidity strength. Other banks are also having sufficient gap between quick assets and CLs which predicts that all the new private sector banks are able to accommodate any kind of surprise in future.

Table 5: Correlation of Acid-test Ratio and Return on Assets for New Private Sector Banks

		Acid-test Ratio	Return on Assets
Acid-test Ratio	Pearson Correlation	1	.902*
	Sig.(2-tailed) N		0.036
	N	5	5
Return on Assets	Pearson Correlation	.902*	1
	Sig.(2-tailed) N	0.036	
	N	5	5

*Correlation is significant at the 0.05 level (2-tailed).

Inference:
There is strong, significant and positive correlation between Acid-test Ratio and profitability of new private sector banks as value of r is greater than 90%. Positive correlation says that acid-test ratio and profitability move in the same direction. If Acid test Ratio will increase, the profit will also increase. Visa a Vis.

Outlook:
Existence of positive and significant correlation between ROA and acid test ratio replicates that if one of these variables increases other will also increase with almost same degree. High level of acid-test ratio will positively contribute in profitability of the new private sector banks. Visa a Vis.

Limitations:
Though the data calculation is objective, outlook is totally based on the personal interpretation of the researchers which subjective in nature. Hence it may not be able to touch actual rationale of the result. Due to lack of data availability for longer period researcher is not able to study about long term perspective.

Conclusion:
Return on assets (ROA) of Axis Bank, Development Credit Bank, HDFC Bank, ICICI Bank, Indusind Bank, Kotak Mahindra Bank and Yes Bank has increased .26, 2.31, .62, .72, 1.05, and .77 respectively while it has decreased 0.02. Apart from Yes Bank, all the new private sector banks are showing continuously increasing trend. There is one exception only i.e. ROA of Kotak Mahindra Bank in FY 2015-16 has decreased from that of FY 2014-15. However ROA for Yes Bank is either decreasing or consistent in the last three fiscal years.

Current Ratio (CR) of Axis Bank, Development Credit Bank, HDFC Bank, ICICI Bank, Indusind Bank, Kotak Mahindra Bank and Yes Bank has increased 18.37, 16.91, 7.15, 9.16, 21.32, 17.67 and .44 respectively from FY 2011 to FY 2016. Where Indusind Bank is showing the maximum increase and Yes Bank is showing the minimum increase in current ratio among all the new private sector banks. HDFC Bank is continuously increasing its current ratio in every fiscal year. CR of other banks is not showing any fixed trend in all the five years.

Acid test ratio of Axis Bank, Development Credit Bank, HDFC Bank, ICICI Bank, Indusind Bank, Kotak Mahindra Bank and Yes Bank has increased 10.58, 7.8, 2.61, 4.59, 14.32, 13.04 and 5.04 respectively from FY 2011 to FY 2016. Where Indusind Bank is showing the maximum increase and HDFC Bank is showing the minimum increase in acid-test ratio among all the new private sector banks. Kotak Mahindra Bank is continuously increasing its acid-test ratio in every fiscal year. In other cases this trend is very much fluctuating.

References

1. Baumol, W. J. 1952. The Transactions Demand for Cash: An Inventory Theoretic Approach, Quarterly Journal of Economics, p. 545-556, Vol. 66, No. 4, Nov. 1952.
2. Smith K. (1980). "Profitability versus Liquidity Tradeoffs in Working Capital Management", in Readings on the Management of Working Capital. Ed. K. V. Smith, St. Paul, West Publishing Company, pp. 549-562.
3. COX, R. SHULMAN, J. 1985. An Integrative Approach to Working Capital Management, Journal of Cash Management, March-April 1985.
4. Fazzari S. M. and B. Petersen (1993). "Working Capital and Fixed Investment: New evidence on Financing Constraints", Rand Journal of Economics 24, 328-342.
5. Soenen LA (1993) "Cash conversion cycle and corporate profitability", Journal of Cash Management, Vol.13, No.4, pp. 53-58.
6. Kargar, J. and Blumenthal, R. A. 1994. "Leverage Impact of Working Capital in Small Businesses", TMA Journal, Vol.14, No.6, pp. 46-53
7. Morris Lamberson, (1995) "Changes in Working Capital of Small Firms in Relation to Changes in Economic Activity", American Journal of Business, Vol. 10 Iss: 2, pp.45 – 50.
8. Jose ML, C Lancaster and JL Stevens (1996). Corporate Returns and Cash Conversion Cycle. Journal of Economics and Finance 20(1): 33-46.
9. Peel, M. and N. Wilson (1996). "Working Capital and Financial Management Practices in the Small Firm Sector", International Small Business Journal 14 (2), pp. 52-68.
10. Pandey IM and KLW Parera (1997). Determinants of Effective Working Capital Management - A Discriminate Analysis Approach." IIMA Working Paper # 1349. Research and Publication Department Indian Institute of Management Ahmedabad India.