THOMSON REUTERS
ENDNOTE
[Vasantha et al., 3(5): May, 2016]
ISSN 2349-4506
Impact Factor: 2.265

Global Journal of Engineering Science and Research Management

IMPACT OF WORKING CAPITAL ON THE PROFITABILITY OF THE COMPANY

Dr. S. Vasantha*, P. G. Thirumagal
* Professor, School of Management Studies, Vels University, P.V. Vaithiyalingam road, Pallavaram, Chennai, Ph: 9176132279
Asst. Professor, School of Management Studies, Vels University, P.V. Vaithiyalingam road, Pallavaram, Chennai, Ph: 9094948358

DOI: 10.5281/zenodo.53224

KEYWORDS: Profitability, performance, organization, Working capital.

ABSTRACT
Working capital is a life blood of every organization, as they require a consistent amount of cash in hand is important to make routine payments, cover unanticipated costs and purchase of raw materials used in production of goods and services. A business uses working capital to meet day today expenses and its operations. Working capital is the difference between firm's current assets and current liabilities or debts. The effective management of working capital is important to maintain trade-off between liquidity and profitability. This paper analyzed the impact of working capital on the profitability of the organization but the relationship between working capital management and the profitability of the firm vary from industry to industry Filbeck and Krueger (2005) highlighted the importance of efficient of working capital management by carrying out analysis of working capital management policies of 32 non-financial industries in United States of America. The result revealed that significant differences exist between industries in working capital practice overtime.

INTRODUCTION
Working capital serves as one of the metric to analyse how efficiently the firm is operating and how financially stable it is in the short-term. The working capital ratio is the relationship between current assets and current liabilities, which indicates the adequacy of the firm's cash flow to cover short-term debts and expenses. Chowdhury and Amin (2007) have written an article on "Working Capital Management Practices in Pharmaceutical Companies Listed in DSE". Among all the problems of financial management, the problems of working capital management have probably been recognized as the most crucial one. It is because of the fact that working capital always helps a business concern to gain vitality and life strength and to maximize profit.

The firm should have sufficient amount of working capital to meet its obligations, when it fails financial insolvency can result and lead to legal troubles, liquidation of assets and potential bankruptcy. It is very important for every firm to manage working capital effectively. Kieschnick, LaPlante. andMoussawi (2008), their

study shows that over- invest in net operating working capital reduces firm's net worth. The improper management of working capital may affect the profitability and liquidity of the firm.
Sayaduzzaman (2006) concluded in his study that efficiency of working capital management of British American Tobacco Bangladesh Company Ltd. is highly satisfactory due to the positive cash inflows and planned approach in managing the major elements of working capital helps to maintain all around efficiency in operations. Lambrix and Singhvi (1979) recommended that working capital investment could be optimized by improving the terms on which firms bought goods and by eliminating the administrative delays ie cash conversion cycle

OBJECTIVE OF THE STUDY

To review literature on the impact of working capital on the profitability of the company and to suggest measures to effective management working capital

Working Capital variables impact on the profitability of the company

Ganesan, (2007) studied the working capital management efficiency of firms from telecommunication equipment industry. The different variables used to represent the working capital are day's sales outstanding, days inventory outstanding, days payable outstanding, days working capital, and current ratio while profitability and liquidity represent by cash conversion efficiency, income to total assets and income to sales. This study concluded that even though "day's working capital" is negatively related to the profitability. The same result was witnessed by even his empirical study on Indian National Fertilizer Limited; for 1990-91 to 1999-2000. He also found the decreased amount of working capital was less than the proportion to increase in the profitability of the company.

Falope and Ajilore (2009) conducted a study by examination of using a sample of 50 Nigerian quoted non-financial firms for the period of 1996-2005. They found a significant negative relationship between net operating profit and the average collection period, inventory turnover in days, average payment period and cash conversion cycle.

Deloof (2003) used a sample of 1009 large Belgian non-financial firms for the period of 1992 to 1996 to explore the relationship between working capital management and firm profitability through Cash Conversion Cycle (CCC) as a measure of working capital management. He found that a negative relationship exists between gross operating income and receivables collection period, inventory turnover period and creditors' payment period

Sarbapriya Ray (2012) the study assess the relationship among working capital management components and the profitability for the Indian manufacturing firms using a sample of 311 Indian manufacturing firms through the periods of 1996/1997 to 2009/2010 and have studied the effect of different variables of working capital management including the average collection period, inventory turnover in days, average payment period, cash conversion cycle and current ratio, debt ratio, size of the firm and financial assets to total assets ratio on the net operating profitability of Indian firms. The result suggests a strong negative relationship between the measures of working capital management

including the number of days accounts receivable and cash conversion cycle, financial debt ratio with corporate profitability

This study was conducted by Mohammad MorshedurRahman, and it examines that the Profitability and Working Capital management of Textiles Industries .The study reveals that positive relationship exists between Working Capital Management and Profitability, but the textile industry is not showing working capital management efficiency. KulkanyaNapompech reviewed the impact of working capital management on profitability. The primary objective of this research was to test the effects of working capital management on profitability. The regression analysis was calculated on a panel sample of 255 companies listed on the Stock Exchange of Thailand from 2007 to 2009. Therefore, the results showed an inverse relationship between the operating profits and inventory conversion period and the receivables collection period. However, there are no effects on profitability by extending the payables deferral period. The findings also demonstrated that industry characteristics have an impact on gross operating profits.

DONG (2010) reported that the firms' profitability and liquidity are affected by working capital management in his analysis. He focused on the variables that include profitability, conversion cycle and its related elements and the relationship that exists between them. From his research it was found that the relationships among these variables are strongly negative. This denote that decrease in the profitability occur due to increase in cash conversion cycle. It is also found that if the number of days of account receivable and inventories are diminished then the profitability will increase numbers of days of accounts receivable and inventories

Ganesan, (2007) analyze the working capital management efficiency of firms from telecommunication equipment industry. The variables used to represent the working capital are day's sales outstanding, days inventory outstanding, days payable outstanding, days working capital, and current ratio while profitability and liquidity represent by cash conversion efficiency, income to total assets and income to sales. This study found evidence that even though "day's working capital" is negatively related to the profitability, it is not significantly impacting the profitability of firms in telecommunication equipment industry. While, Chowdhury and Amin (2007) had found positive correlations between WCM with financial performance of the Pharmaceutical industry in Bangladesh.

Deloof (2003) argue that most firms had a large amount of cash invested in working capital. It can therefore be expected that the way in which working capital is managed will have a significant impact on profitability of those firms. Using correlation and regression tests he found a significant negative relationship between gross operating income and the number of days accounts receivable, inventories and accounts payable of Belgian firms. On basis of these results he suggested that managers could create value for their shareholders by reducing the number of days' accounts receivable and inventories to a reasonable minimum. The negative relationship between accounts payable and profitability is consistent with the view that less profitable firms wait longer to pay their bills.

 ISSN 2349-4506
Impact Factor: 2.265

Global Journal of Engineering Science and Research Management

WORKING CAPITAL POLICY

Whilst, Afza and Nazir (2007) studied the relationship between working capital and profitability through cross-sectional regression models on working capital policies, profitability and risk of the firms, found a negative relationship between the profitability measures of firms and degree of aggressiveness on working capital investment and financing policies. Their study result indicates that the firms yield negative returns if they follow an aggressive working capital policy by examining the relative relationship between the aggressive or conservative working capital policies for 208 public limited companies listed at Karachi Stock Exchange for a period of 1998-2005

Impact on Liquidity & Profitability

Padachi (2006) observed in his study that high investment in inventories and receivables is associated with lower profitability for a sample of 58 small manufacturing firms in Mauritius for the period 1998 –2003 and he concluded that firm is required to maintain a balance between liquidity and profitability while conducting its day to day operations. The manager of a business entity is in a dilemma of achieving desired trade-off between liquidity and profitability in order to maximize the value of a firm.

Irene & Lee, (2007) examined the correlation between profitability and the level of working capital of the sample firms and founds that profitability and working capital are linearly

An Empirical Investigation in an Emerging Market," Eljelly (2004) examined the relation between profitability and liquidity by using correlation and regression analyses and found that the cash conversion cycle was of more importance as a measure of liquidity than the current ratio that affects profitability.

SaswataChatterjee (2010) focused on the importance of the fixed and current assets in the successful running of any organization. It poses direct impacts on the profitability liquidity. There have been a phenomenon observed in the business that most of the companies increase the margin for the profits and losses because this act shrinks the size of working capital relative to sales. But if the companies want to increase or improve its liquidity, then it has to increase its working capital. In the response of this policy the organization has to lower down its sales and hence the profitability will be affected due to this action

Safi, Hijazi, Tahir and Kamal, Yasir (2005), in their study, "Impact of Working Capital Management on the Profitability of Firms: Case of Listed Pakistani Companies", investigated the relationship between measures of working capital management and the corporate profitability of the non-financial firms.

Mathuva (2009) studied the impact of working capital management on the performance. He took almost 30 listed firms as a sample and all these companies were listed in Nairobi stock exchange and the data was taken from 1993 to 2008. There were certain findings of his research by analyzing the fixed effects regression models. Firstly, there is a negative relationship between the time when the cash is collected from the customers and the firm's productivity. This

 ISSN 2349-4506
Impact Factor: 2.265

depicts, firms that are more profitable enjoys less time period for the collection of cash from the customers as compare to ones which are less profitable.

The study was conducted by SarbapriaRai. Therefore, according to this study, there is a positive relationship between working capital management and profitability of the company; hence for this purpose, the author took sample of 311 Indian manufacturing firms of 14 years from 1996-2010 and studied the impacts of working capital management on profitability, and including the debtors turnover ratio, inventory turnover ratio, debt ratio and many other ratios for measuring the working capital and return on assets and others for measuring profitability of Indian manufacturing firms. After analyzing the results, it was proved that there is a significant relationship between working capital management and the profitability of company.

Mohammad Neab and Noriza BMS (2010) worked on crating the relationship between Working Capital Management (WCM) and performance of firms. For their analysis they administered the perspective of market valuation and profitability. They used total of 172 listed companies from the databases of Bloomberg. They randomly selected five year data (2003-2007). This research likewise the researches quoted before studied the impact of the dimensions of working capital component i.e. C.C.C., current ratio (C.R.), current asset to total asset ratio (C.A.T.A.R), current liabilities to total asset ratio (C.L.T.A.R.), and debt to asset ratio (D.T.A.R.) in effect to the firm's performance whereby firm's value dimension was taken as Tobin Q (T.Q.) and profitability i.e. return on asset (R.O.A.) and return on invested capital (R.O.I.C). They found that there is a negative relationship between working capital variables and the firm's performance.

Shin and Soenen, (1998): highlighted that efficient Working Capital Management was very important for creating value for the shareholders. The way working capital was managed had a significant impact on both profitability and liquidity. The relationship between the length of Net Trading Cycle, corporate profitability and risk adjusted stock return was examined using correlation and regression analysis, by industry and capital intensity. They found a strong Malik Muhammad, WaseemUllah Jan, and KifayatUllah empirically tested that effective Working capital management is very important for the success of a business because it has a direct positive impact on the profitability of the business. For this purpose, secondary data were collected from listed firms in Karachi stock exchange for the period of 2001-2006 with an attempt to examine the relationship between profitability, and working capital management criteria. The population of the study is Pakistan textile industry, and the findings of the study demonstrate that there is a strong positive relationship between profitability and cash, accounts receivable and inventory; but there is a negative relationship between profitability and accounts payable. Therefore, this indicates that increase in cash, inventory and credit sales will result in an increase in the profitability of firm.

RESULTS AND DISCUSSIONS

Literature review Extensive research works on working capital management have been done in both public and private sectors including multinational companies in Bangladesh. Ganesan (2007) suggest that efficient working capital

management increases firms' free cash flow, which in turn increases the firms' growth opportunities and return to shareholders. Finance manager should take his decisions on the basis of cash budget and total current assets position instead of traditional working capital ratios. This is important because efficient finance manager can avoid borrowing from outside even when his net working capital position is low. Efficient working capital management is necessary for achieving both liquidity and profitability of a company. A poor and inefficient working capital management leads to tying up funds in idle assets and reduces the liquidity and profitability of a company (Reddy and Kameswari, 2004). Many study shows that there was a statistically significant relationship between profitability and cash conversion cycle. Finance managers can increase the profits for their companies by properly managing the cash conversion cycle and keeping each different components (accounts receivables, accounts payables, inventory) to an optimum level.

CONCLUSION

This paper reviews the extensive literature review on factors influencing working capital management. Research shows that cash conversion cycle is one of the important measure of liquidity than the current ratio. Many studies evidence that the working capital variables impact on the profitability vary from industry to industry. The study conducted by sagan evidenced that Industry practices, company size, future sales growth of company, the proportion of outside directors on a board, executive compensation (current portion) and CEO share ownership significantly influence the working capital management efficiency of a company.

ACKNOWLEDGEMENT

I am greatly indebted to Nair RemyaRadhakrishnan, MBA Student, remyanrk@gmail.com

REFERENCES

1. Afza, T. and M. Nazir, 2009. Impact of aggressive working capital management policy on firm's profitability. IUP J. Applied Finance, 15: 19-30
2. Chowdhury, A. and Amin, M.M (2007). "Working Capital Management Practiced in Pharmaceutical Companies Listed in Dhaka Stock Exchange". Brac University Journal, Vol. iv, No. 2, pp.75-86
3. Dong H. P. (2010), "Relationship The between Working Capital Management and. Profitability". International Research Journal of Finance and Economic. Issue-49
4. Deloof, M. (2003), Does Working Capital Management Affect Profitability of Belgian Firms?, Journal of Business, Finance and Accounting, 30(3-4), 573-587. http://dx.doi.org/10.1111/1468-5957.00008 Dong, H. P., & Su, J. (2010). The relationship between working capital management and profitability: A. Vietnam Case. International Research Journal of Finance and Economics, 49, 59-67.
5. Dr.Sarbapriya Ray,2011, Evaluating the Impact of Working Capital Management Components on Corporate Profitability: Evidence from Indian Manufacturing Firms, International Journal of Economic Practices and Theories (IJEPT) ISSN: 2247 – 7225 (online).

ISSN 2349-4506
Impact Factor: 2.265

Global Journal of Engineering Science and Research Management

6. Ernest W. Walker, "Towards A Theory of Working Capital", The Engineering Economist, Winter 1967, pp. 21- 35.
7. Eljelly,A. (2004). "Liquidity-Profitability Tradeoff: An Empirical Investigation in an Emerging Market", International Journal of Commerce and Management, Vol. 14, No. 2, pp. 48-61
8. Filbeck and Krueger (2005) Lamberson M. (1995). Changes in working capital of small firms in relation to changes in economic activity. Mid-American Journal of Business 10(2): 45-50.
9. Falope,O.I. and Ajilore,O.T.(2009): Working Capital Management and Corporate profitability: Evidence from panel data analysis of selected companies quoted in Nigeria.Research Journal of Business Management 3:73-84
10. Ganesan, V. (2007). "An Analysis of Working Capital Management Efficiency in Telecommunication Equipment Industry", Rivier Academic Journal, Vol. 3, No. 2, pp 1-3.
11. Ganesan (2007), "An Analysis of Working Capital Management Efficiency in telecommunication Equipment Industry". Rivier Academic Journal. vol. 3(2), pp. 1-10
12. Ganesan, Vedavinayagam. (2007). An analysis of working capital management efficiency in telecommunication equipment. Industryrivier Academic Journal, 3, No. 2, Mohammad MorshedurRahman, 2011, Working Capital Management and Profitability: A Study on Textiles Industry, ASA University Review, Vol. 5 No. 1.
13. Irene T.W.K & Lee S. F. (2007). An empirical exploration into optimal working capital management on public listed companies in Malaysia, Proceedings of the 3rd UNITEN International Business Conference (UIBMC),16-18 December, Malaysia. Jose M.L, Lancaste, C & Stevens, J.L. (1996).
14. J. F. Weston and E.F. Brigham, Managerial Finance, Holt, Rinehart and Winston, 4th edition, 1972.
15. Kieschnick.R, LaPlante.M&Moussawi.R. (2008). Working capital management, agency costs, and firm value. [Online] Available: http://www.fma.org/Texas/Papers/valnowc_fma2008.pdf.
16. KulkanyaNapompech , 2012, Effects of Working Capital Management on the Profitability of Thai Listed Firms, International Journal of Trade, Economics and Finance, Vol. 3, No. 3.
17. Lazaridis, I. and Tryfonidis, D. (2006). "Relationship between Working Capital Management and Profitability of Listed Companies in the Athens Stock Exchange", Journal of Financial Management and Analysis, Vol. 19, No. 1, pp 26-35
18. Mohammad MorshedurRahman, 2011, Working Capital Management and Profitability: A Study on Textiles Industry, ASA University Review, Vol. 5 No. 1.
19. Mathuva D.M. (2009), "The Influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms", Research Journal of Business Management, www.docsdrive.com/pdfs/academicjournals/rjbm/0000 /15988-15988
20. Mohammad Neab and Noriza BMS. (2010), "Working Capital Management: The Effect of Market Valuation and Profitability in Malaysia", International Journal of Business and Management, Vol. 5, No. 11, Page 140-147.

ISSN 2349-4506
Impact Factor: 2.265

21. Malik Muhammad∗, WaseemUllah Jan∗∗, &KifayatUllah, Working Capital Management and Profitability An Analysis of Firms of Textile Industry of Pakistan, Journal of Managerial Sciences Volume VI Number 2
22. Padachi, Kesseven (2006). "Trends in Working Capital Management and Its Impact on Firm's Performance: An analysis of Mauritian Small Manufacturing Firms", International Review of Business Research Papers, Vo. 2 No. 2 (October), pp 45-58
23. Pandey, I.M., 2003. Financial Management. 8th Edn.,Vikas Publication Limited, India.
24. Padachi, Kesseven (2006). "Trends in Working Capital Management and Its Impact on Firm's Performance: An analysis of Mauritian Small Manufacturing Firms", International Review of Business Research Papers, Vo. 2 No. 2 (October), pp 45-58. Raheman, A. and Nasr, M. (2007). "Working Capital Management and Profitability- Case of Pakistani Firms", International Review of Business Research Papers, Vol.3, No. 1, pp. 279-300.
25. Pandey, I. M. (2005). Financial Management, Ninth Edition, New Delhi; Vikas Publishers Raheman A., & Nasr, M. (2007).
26. R. J. Lambrix and S.S. Singhvi, "Managing the Working Capital Cycle", Financial Executive, June 1979, pp.32-41.
27. Reddy, D.R. and P. Kameswari, 2004. Working capital management practices in pharma industry: A case study of Cipla Limited. Management Accountant, Aug. 2004, pp. 638-644.
28. Shanmugam, R. and Poornima, S. (2001): "Working Capital is Still Most Crucial", Indian Management, April Issue, pp.62-65. IRJC International Journal of Marketing, Financial Services & Management Research Vol.1 Issue 8, August 2012, ISSN 2277 3622 www.indianresearchjournals.com 186
29. S.Afza,T. andNazir, M.S (2007):Working capital policies of Firms: Empirical Evidence from Pakistan. Presented at 9th South Asian Management forum (SAMF) ON Feruary 24- 25, North South University, Dhaka, Bangladesh
30. SaswataChatterjee (2010), "Impact of Working Capital Management on the Profitability of the Listed Companies in the London Stock Exchange", www.papers.ssrn.com/sol3/papers.cfm?abstract_id=1587249 Sayaduzzaman MD. (2006), "Working Capital Management: A case study on British American Bangladesh Company Ltd." The Journal of Nepalese Business studies. Vol-3(1), 78-84. Sen M. and Eda ORUC. (2009), "Relationship Between Efficiency Level of Working Capital Management and Return on Total Assets is ISE" International journal of Business and Management, Vol. 4, No.10, Page 109-114.
31. Soenen L A (1993), "Cash Conversion Cycle and Corporate Profitability", Journal of Cash Management, Vol. 13, No. 4, pp. 53-58. Teruel PJG. & Pedro MS. (2007), "Effect of Working Capital Management on SME Profitability", International Journal of Managerial Finance, Vol. 3, No. 2 Page 164-177.
32. Safi, HijaziTahir and Kamal, Yasir (2005): "Impact of Working Capital Management on the Profitability of Firms – Case of Listed Pakistani Companies", Social Science Research Network (SSRN), Social Science Electronic Publishing Inc. 20.

ISSN 2349-4506
Impact Factor: 2.265

33. Sarbapriya, R. (2012). Evaluating the impact of working capital management components on corporate profitability: Evidence from Indian Manufacturing Firms International Journal of Economic Practices and Theories, 2(3), 2247-7225.
34. Shin, H.H. and Soenen, L. (1998), "Efficiency of Working Capital and Corporate Profitability", Financial Practice and Education, Vol. 8, pp. 37-45.
35. Sayaduzzaman MD. (2006), "Working Capital Management: A case study on British American Bangladesh Company Ltd." The Journal of Nepalese Business studies. Vol-3(1), 78-84. Sen M. and Eda ORUC. (2009), "Relationship Between Efficiency Level of Working Capital Management and Return on Total Assets is ISE" International journal of Business and Management, Vol. 4, No.10, Page 109-114.