IMPACT OF AGGRESSIVENESS OF WORKING CAPITAL MANAGEMENT ON FIRM'S PROFIT

Dr. Khurram Sultan1*, Muhammad Muzammal Murtaza2
1Lecturer at Business Administration Department-Lebanese French University Erbil
2PhD Candidate, University of Central Punjab-Lahore Pakistan
k.sultan@ifu.edu.krd, mmmuzammalmurtaza@ucp.edu.pk

Article History: Received on 25th February 2019, Revised on 30th April 2019, Published on 25th May 2019

Abstract

**Purpose of Study:** The study intends to analyze the fact that whether it is better to be aggressive or conservative in formulating strategies for working capital management. The main objective of any firm is to earn the maximum profit but caring for the liquidity is also an important element. Profit of the firm can be increased, the problem comes when profit increases at the cost of liquidity.

**Methodology:** The data we have collected is from Karachi stock exchange (61 companies) in Pakistan for the time tenure of 6 years (2013-2018).

**Results:** This study explores the impact of aggressiveness of working capital management on the firm's profit.

**Implications/Applications:** According to our analysis while considering the Current ratio and Cash conversion cycle as independent variables, there is a significant impact of Current ratio on the firm's profit.

**Keywords:** WCM (Working Capital Management), KSE (Karachi Stock Exchange), APP (Account Payable Period), ICP (Inventory Collection Period), ARP (Account Receivable Period), CCC (Cash Conversion Cycle)

INTRODUCTION

The main purpose of the WCM is to ensure that the specific firm is able to continue its operations and that it has sufficient capability to gratify both maturation short-term debt and imminent operational expenditures. Handling inventories account receivable, account payable and cash all is involved in managing the working capital. WCM is a managerial accounting approach concentrating on sustaining well-organized levels of present assets and present liabilities. Both levels are components of working capital. Working capital management confirms an entity has an adequate cash flow to meet its temporary debt responsibilities and operating expenses.

WCM is a very important factor in firms. Its impact is directly on the liquidity and the profitability of an organization. WCM is about the current asset and the current liabilities. The best working on the WCM including forecasting and scheming present assets and present liability as in any organization, Planning, Organizing, Leading and Controlling the main elements that will help out the organization to minimize the risk and will enable the firm to fulfill the short term responsibilities, the management team should focus on the day to day activities of WC, by daily analysis manager can take a good decision for increasing their firm effectiveness.

The key objective of any firm is to earn the maximum profit but caring for the liquidity is also an important element. Profit of the firm can be increased, the problem comes when profit increases at the cost of liquidity. The main objective is that the firm should not increase the profit by the cost of others if the company does not focus on this point, it will be difficult for firms to live and run the business. Liquidity is another focusing point to the firm if firms are not giving importance to it, Company may bear insolvency and it will effect on the goodwill and the profit. The short-term debt and the upcoming project’s expense are the main points for the manager to handle and how to satisfy both these element at the same time. To find the best of WCM, the manager should ensure the day to day running activities of the firm as mostly the manager of firms is not focusing on small element because of their focus on increasing the profit. Wages, salaries, bills, debts, the daily transaction should be managed properly for the good working of WCM.

Working capital management (WCM) is concerned with the issues that arise in struggling to manage the present assets, the present obligations and the connection that exists between them. The term present assets state to those assets which is in the normal course of business can be or will be transformed into cash indoors one year deprived of undergoing a reduction in value and deprived of disturbing the procedure of the firms. Specimens are cash, marketable securities, account receivables, and inventory. On the supplementary hand, present liabilities are those liabilities which are intended, at their beginning to be salaried in the normal course of business in a year out of present assets or earnings of the concern. The basic present liabilities are account payables, bills payable, bank overdraft and outstanding expenses. The study is conducted to make ensure the efficiency of 61 KSE listed companies in Pakistan. The time period is 2013-2018. The study...
is performed before to check the efficiency of liquidity and profitability in Lahore and Islamabad Stock exchange. And Is it healthier to be used an aggressive or conservative approach in handling working capital?

Justification of Proposed Research

- The data we have collected is from Karachi stock exchange (61 companies) in Pakistan for the time tenure of 6 years from (2013-2018).
- This study will help the managers of organizations, that which policy of working capital management is the most beneficial to generate more profit.

Objective of this study

The objective of this research is to convey out experiential examination whether it is healthier to be aggressive or conservative in formulating approaches for working capital management.

Development of Hypothesis

H0: There is no significant influence of working capital management as a financial strategy on the liquidity of a firm.
H1: There is a significant influence of working capital management as a financial strategy on the liquidity of a firm.
H01: There is no significant influence of Cash conversion cycle on Operating profit
H11: There is a significant influence of Cash conversion cycle on operating profit
H02: There is no significant influence of Current ratio on Operating profit
H12: There is a significant influence of Current ratio on Operating profit

LITERATURE REVIEW

Previous literature shows that there exists an adverse relation among receivables revenue, inventory revenue, and gathering period and productivity. Working capital management is very important for all the corporations not considering of their extent but the little firms should be more aware of that (Kargar & Blumenthal, 1994). Generally, industries have vast part of working capital as linked to total resources, thus, this part should be controlled efficiently and effectively. Small industries are not decent in handling their working capital. Lesser industries generally undergo from below capitalization and they cannot afford to waste away of cash. Hawawini, Viallet, and Vora (1986) told that WC manage the profitability of the firm, managers should work on WC by adding value in a number of days and receivable and in inventory to minimize the risk, author’s article has used the regression and correlations test. Lazonick (1983)Have finished that there exists a negative relation between receivables turnover, inventory turnover, and collection period and profitability.

Lambersen (1995) Focus on to WC theory that WCM has two main goals first is profitability and second is WCM. The problem arises when maximizing the return affect the liquidity of the firm, the result got by the regression showed that return on investment was linked with the current asset, leverage ratio, and current liabilities over the fund's flow. Evcimen, Kaytaz, and Cinar (1991) Working capital have obtained abundant importance in new years with a goal of productivity and liquidity. The greater expanse of working capital will rise the liquidity but at the similar period will generate the force on productivity. A minor quantity of working capital will refuse the liquidity but day to day working of business will also be affected.

Filbeck and Krueger (2005) They said that the relationship among the piece of Net Trading Cycle, company effectiveness and risk accustomed stock return was examined by correlation and regression analysis. They found a solid adverse affiliation between lengths of the firm’s net trading Cycle and its productivity. Vishnani and Shah (2007) observe the connection among cash adaptation cycle and productivity by association analysis. The outcome shows that selling and comprehensive business use smaller cash adaptation cycle as associated with business productions. There is an adverse correlation among cash adaptation cycle and productivity. Afza and Nazir (2008) the relationship between working capital and productivity of Indian companies. there are two dissimilar schools of thought: first one thought is WC is not an aspect of refining productivity there is an adverse affiliation among them and the other school of thought asset in working capital playing a very important part to expand business productivity and there is a least stock level and production and sales cannot be continued in reality so the deficiency of working capital would go on a stable advantage.

Nazir and Afza (2009) rise the productivity of a corporation and ensure enough liquidity to meet up small duration obligation as they drop is two central goals of working capital management. Productivity is associated with the objective of shareholders’ wealth expansion, and deal in present resources is complete only if a suitable return is obtaining. While liquidity is compulsory for a corporation to maintain the industry, a company could want to grip more cash than wanted for working or transactional needs i.e. for safety or speculative aims. Chhapra and Naqvi (2010) Results concerning working capital and small period financing are referred to as working capital management. These include supervision the
association among a company’s little period resources and its small period responsibilities. The objective of working capital is to make sure that the firm is capable to run its procedures and that it has a satisfactory amount cash movement to fulfill both growing small period obligation and helpful operative expenditures.

Raheman, Afza, Qayyum, and Bodla (2010) for a long period of time liquidity it must be synchronized. By reducing the number of days of receivables and inventories managers can enhance the potential of a corporation. This is for little rising corporations who want investment. The standard we set to extend for WCM is cash cycle and existing a durable association among working capital management. Sharma and Kumar (2011) Maximum of the productions has to small period working capital at some spot in their procedures. The primary values of working capital management are to cut the capital working and to develop productivity in the parts of receivables, inventories and payables. Fertilizer Inadequate, for 1990-91 to 1999-2000 indicate that working capital management and effectiveness of the corporation reveal both adverse and constructive association. He also establishes a sign that rises in the productivity of a corporation was less than the proportion to the reduction in working capital.

Singleton (2013) working capital results mostly involving to the next year. These results are then not in use on the similar center as capital asset results rather they will remain based on cash flows and on productivity. Management will concern a mixture of strategies and procedures for the management of working capital. Muhammad, Jan, and Ullah (2008) Results indicated that the cement industry of India was underperforming and proper WCM strategy need to be implemented. Positive cash inflows planned move toward managing the key basics of WC the efficiency of WCM of British American Tobacco Bangladesh Company Ltd. is highly satisfactory. Multi-dimensional representation of current assets mixes affects positively on the continuous developing of this business which operates in several countries.

Appuhami (2008) analyzed the union between WCME and Earnings before Interest & Tax (EBIT) of Paper Industry in India. Outcome proves Paper Industry handled WC well. Accounts payables had a major negative effect with EBIT and overall efficiency of industry is good. Reason (2008) analyzed WCME in seven banks associated with State Bank of India for the period 1990-1991 to 2003-2004. Performance, operation and on the whole efficiency index are intended to measure the efficiency of WCM. The result shows that the overall performance of connect banks was not bad, but the performance of individual banks varies. Studies like Muhammad et al. (2008) focused that the purpose of cash management is to found the optimal level of cash needed for business operations and invested in marketable securities, which proper for the nature of business operation cycle. Managers spend considerable time on the day to day problems that involve working capital decision (Lazaridis and Tryfonidis, 2006). Working capital management is an important factor in financial management.

Deloof (2003) Large inventory and free trade credit policy make it achievable to increase sales volume. Besides large inventory stock reduces the risk of a stock out. Findings of this study show that firms having a great amount of cash invested in working capital also have wide amounts of short-term payables as a source of finance. Moreover delaying payments to suppliers allow a firm to evaluate the control of the products buy, and can be an economical and flexible source of financing for the firm. Shin and Soenen (1998) examined comparative association among aggressive/conservative WC guiding principle of 208 public ltd. companies registered at KSE from 1998-2005. Cross-sectional regression models are used for checking the effect of aggressive/conservative WC financing & investment strategy. The result shows a negative relation among the profitability methods of firms and the level of aggressiveness.

Uyar (2009) connection between cash conversion cycle and profitability using correlation analysis. The results showed that retail and wholesale industry use shorter cash conversion cycle as compared to manufacturing industries. There is a depressing correlation between cash conversion cycle and profitability. Working capital management which states that reducing the working capital increases the profitability. Efficient working capital management helps to maximize the value of the firm and increases the returns of shareholders. Chowdhury and Amin (2007) They examine the practices regarding the management of cash, methods, and skill of inventory management of receivable and payable. They do not need to check the impact of economic and political on Working capital management. Due to the competitive nature of the textile industry which are operated in Bangladesh are competently deal with their investment and liquidity.

Das et al. (2008) the relationship between working capital and profitability of Indian companies, there are two different schools of thought: first one thought is WC is not a factor of improving profitability there is a negative relationship between them and the other school of thought investment in working capital playing a very important role to improve corporate profitability and there is the least investment level and output and sales cannot be sustained in reality so the insufficiency of working capital would go on fixed asset. Mehmet and Eda (2009) Working capital management is important for creating value for shareholders. Working capital management was found to have a significant impact on both profitability and liquidity in studies in different countries. The final objective of any firm is to maximize profit. Zhuquan, Yongmei, and Jianqiang (2007) Working capital management initiative release capital employed and rise profitability that can be used for strategic reserves or the decrease of debt. Working capital management increase ease of use of liquid assets in a business.
**RESEARCH METHODOLOGY**

We have conducted a panel data approach by considering different firms over different years from 2013-2018. The data is collected from the annual reports of KSC 61 listed companies in Pakistan. The secondary data from this source is preferable because such a source is free from biases and accurate. The straightforward approximation approach is to pool the remarks across KSE 61 listed companies and apply the regression examination on the joint sample. That is, a pooled OLS (POLS) equation will be probable in the form of:

Equation

\[ Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \mu \]

Where,

- \( Y_{it} \): operating profit
- \( X_{1it} \): Cash Conversion Cycle
- \( X_{2it} \): Current Ratio
- \( i \): 61 listed companies
- \( t \): 2011-2016
- \( \mu \): error term

Variables

**Independent Variables:**

Cash Conversion Cycle

CCC is a metric that states the length of time, which a corporation takes to exchange its reserve inputs into cash movements (liquidity), in days.

\[
\text{CCC} = \frac{\text{Account Receivable Period} + \text{Inventory Collection Period} - \text{Account Payable Period}}{\text{Net Purchases}}
\]

- **Account Receivable Period**
  - This formula is used to determine the number of days in which receivables will be collected.
  - \( \text{ARP} = \frac{\text{Average Debtors} \times 365}{\text{Net Sales}} \)

- **Inventory Collection Period**
  - ICP formula evaluates that in what number of days the inventory will be changed with new inventory.
  - \( \text{ICP} = \frac{\text{Average Inventory} \times 365}{\text{Net Sales}} \)

- **Account Payable Period**
  - This formula is used to determine the number of days in which the payables will be paid.
  - \( \text{APP} = \frac{\text{Average creditors} \times 365}{\text{Net Purchases}} \)
    - Average Creditors (Current Liabilities)
    - Net Purchases = Closing Inventory + Raw Material consumed - Operating Inventory

**Current Ratio**

Current ratio measures a company’s ability to pay its debt over the year by comparing its current assets to its current liabilities.

\[
\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}
\]
Dependent Variable:
Operating profit

Operating profit is a measure of income that tells investors how much of revenue will finally become profit for a company.

\[ \text{Operating Profit} = \text{Opening Revenue} - \text{COGS} - \text{Operating Expenses} - \text{Depreciation & Amortization} \]

**Calculated Analysis:**

| Variable            | Observations | Mean   | Std. Dev. | Min    | Max    |
|---------------------|--------------|--------|-----------|--------|--------|
| Firm id             | 366.00       | 31.00  | 17.63     | 1.00   | 61.00  |
| years               | 366.00       | 2010.50| 1.71      | 2011.00| 2016.00|
| Operation profit    | 366.00       | 3489.41| 10073.30  | -4571.66| 96905.58|
| Current ratio       | 366.00       | 1.74   | 2.45      | 0.00   | 42.08  |
| Cash conversion cycle| 366.00     | -70.69 | 492.58    | -5300.00| 890.33 |

Descriptive statistics results for all the variables are shown in the above table. Mean is the value which shows the central significance of entire data or set. The range for the mean is determined \(-70.69 \leq \text{Mean} \leq 3489.41\). Closest observations in the data set to mean are of Operation Profit by the Standard Deviation 10073.30. The value of the maximum and minimum Operation profit is 96905.58 and -4571.66 respectively. Total observations in our study data set are 366.

**Table 2: Correlation Analysis**

|                      | Operating profit | Current ratio | Cash conversion cycle |
|----------------------|------------------|---------------|-----------------------|
| Operating profit     | 1                |               |                       |
| Current ratio        | 0.1576           | 1             |                       |
|                      | 0.0025***        |               |                       |
| Cash conversion cycle| 0.003            | 0.0489        | 1                     |
|                      | 0.9546           | 0.3509        |                       |

In the above table, correlation is defined between variables. The correlation between Current ratio and Operating profit is 0.1576 with positive change and significant at a level of 1%.

**Table 3: Variance Inflation Factor**

| Variable             | VIF  | 1/VIF  |
|----------------------|------|--------|
| Cash conversion cycle| 1    | 0.997609|
| Current ratio        | 1    | 0.997609|
| Mean VIF             | 1    |        |
VIF means value should fall under 5%, then it will be considerable. This means that if the mean value falls under 5% we can consider all the outcomes and predictor variables for further data analysis. Our calculation shows the VIF mean is 1, so we can perform further analysis.

| Table. 4: Regression Analysis |
|--------------------------------|
| Number of observations | 366 |
| $F(2, 363) = 4.63$ |
| Prob. > F | 0.0103 |
| R-squared | 0.0249 |
| Adj. R-squared | 0.0195 |
| Root MSE | 9974.6 |
| Operation profit | Co-efficient | P>|t| |
| Current ratio | 648.659 | 0.003*** |
| Cash conversion cycle | -0.09681 | 0.927 |
| _cons | 2356.341 | 0 |

The above-mentioned tables show that our model is a good fit under 5%. The coefficient values indicate that if we change 1 unit in Current ratio (independent variable), 648.659% change will be there in Operating profit (dependent variable). The Independent variable Current ratios is significant at 1%.

**CONCLUSION**

This study explores the impact of aggressiveness of working capital management on the firm’s profit. 61 KSE listed companies are considered from Pakistan. The time period is of 6 years (2013-2018). This study will help the manager of an organization that which policy of working capital management is the most beneficial to generate more profit. For this determination, two suggestions have been established for examining the result of working capital management as a financial strategy on the liquidity of a firm. According to our analysis, while considering the Current ratio and Cash conversion cycle as independent variables, there is a significant impact of Current ratio on Operating profit at 1%. It means that there are 99% chances that this factor is problematic to the firm’s liquidity under normal circumstances. While the other factor Cash conversion cycle has an insignificant impact on the liquidity of firm which means this factor is non-problematic for these firms under normal circumstances.

Huge corporations pay consideration to WC for a similar object as little ones do. WC is an amount of liquidity, and this is an amount of their future credit-worthiness. Corporations who need to use by allotting bonds or buying commercial paper will find it more expensive if they do not have sufficient WC. If they are a public corporation, their stock price may decrease if the market doesn’t trust they have enough WC. For little industries and start-ups, not capable to access financial markets for borrowing, WC has more want allegations. WC can also be defined as the quantity of money that a small corporation or start-up want to stay in acts. Start-ups want to pay devotion to their WC because it is the quantity of money they want to keep the corporation running until they break-even.

On one hand, WC is significant because it is an amount of a corporation’s capability to pay off short-term expenditures or debts. On the other hand, too much working capital means that some stocks are not being invested for the long-term, so they are not being put to good use in serving the corporation rises as much as possible.

**REFERENCES**

Afza, T., & Nazir, M. S. (2008). Working capital approaches and firm’s returns in Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 1(1), 25-36.

Appuhami, B. R. (2008). The impact of firms’ capital expenditure on working capital management: An empirical study across industries in Thailand. *International Management Review*, 4(1), 8.
Chhapra, I. U., & Naqvi, N. A. (2010). Relationship between efficiency level of working capital management and profitability of firms in the textile sector of Pakistan.

Chowdhury, A., & Amin, M. M. (2007). Working capital management practiced in Pharmaceutical companies in Dhaka stock.

Das, A., Pisana, S., Chakraborty, B., Piscanec, S., Saha, S., Waghmare, U., . . . Ferrari, A. (2008). Monitoring dopants by Raman scattering in an electrochemically top-gated graphene transistor. *Nature nanotechnology, 3*(4), 210-215.

Deloof, M. (2003). Does working capital management affect profitability of Belgian firms? *Journal of business finance & accounting, 30*(3-4), 573-588.

Evcimen, G., Kaytaz, M., & Cinar, E. M. (1991). Subcontracting, growth and capital accumulation in small-scale firms in the textile industry in Turkey. *The Journal of Development Studies, 28*(1), 130-149.

Filbeck, G., & Krueger, T. M. (2005). An analysis of working capital management results across industries. *American Journal of Business, 20*(2), 11-20.

Hawawini, G., Viallet, C., & Vora, A. (1986). Industry influence on corporate working capital decisions.

Lamberson, M. (1995). Changes in working capital of small firms in relation to changes in economic activity. *American Journal of Business, 10*(2), 45-50.

Lazonick, W. (1983). Industrial organization and technological change: the decline of the British cotton industry. *Business History Review, 57*(2), 195-236.

Mehmet, D., & Eda, O. (2009). RELATIONSHIP BETWEEN EFFICIENCY LEVEL OF WORKING CAPITAL MANAGEMENT AND RETURN ON TOTAL ASSETS IN ISE (ISTANBUL STOCK EXCHANGE). *International journal of Business and Management, 4*(10), p109.

Muhammad, M., Jan, W. U., & Ullah, K. (2008). Working Capital Management and Profitability An Analysis of Firms of Textile Industry of Pakistan. *Journal of Managerial Sciences Volume VI Number, 2*, 156.

Nazir, M. S., & Afza, T. (2009). Working capital requirements and the determining factors in Pakistan. *IUP Journal of Applied Finance, 15*(4), 28-38.

Raheman, A., Afza, T., Qayyum, A., & Bodla, M. A. (2010). Working capital management and corporate performance of manufacturing sector in Pakistan. *International Research Journal of Finance and Economics, 47*(1), 156-169.

Reason, J. T. (2008). *The human contribution: unsafe acts, accidents and heroic recoveries*: Ashgate Publishing, Ltd.

Sharma, A., & Kumar, S. (2011). Effect of working capital management on firm profitability empirical evidence from India. *Global Business Review, 12*(1), 159-173.

Shin, H.-H., & Soenen, L. (1998). Efficiency of working capital management and corporate profitability. *Financial practice and education, 8*, 37-45.

Singleton, J. (2013). *World Textile Industry*: Routledge.

Uyar, A. (2009). The relationship of cash conversion cycle with firm size and profitability: an empirical investigation in Turkey. *International Research Journal of Finance and Economics, 24*(2), 186-193.

Vishnani, S., & Shah, B. K. (2007). Impact of working capital management policies on corporate performance—An empirical study. *Global Business Review, 8*(2), 267-281.

Zhuquan, W., Yongmei, P., & Jianqiang, S. (2007). A Review and Prospect of the Working Capital Management [J]. *Accounting research, 2*, 012.