

# Effects of Working Capital Management on Company Value

## A Literature Survey

*Niti Nandini Chatnani\** and *Roshan\*\**

The purpose of this paper is to review the literature published in the past on working capital management (WCM) and company value. The paper highlights the major gaps in the existing studies on working capital management and company value. A key word search method of the research works on WCM has been performed using Google Scholar, JSTORE, Science Direct and Emerald insight. Articles with key words related with working capital management and company value are considered for the detailed analysis. The prominence of research is assessed by studying different themes on working capital management. The main contribution of this paper is to find research gaps to provide guidelines for future research. However, there are very limited research on the relationship between working capital management and company value.

**Keywords:** Working capital management; profitability; company value; financial performance; working capital financing; financing policies.

### Introduction

According to Seth, Chadha, Ruparel, Arora and Sharma (2020) manufacturing companies contribute towards capital formation and promote economic growth. Considering the Indian manufacturing sector, it is regarded as the lifeline and backbone for promoting economic development in the country. The manufacturing sector recorded a compound annual growth rate (CAGR) of 5 per cent during the financial year 2016-2020 and generated US\$397.14 billion as Gross Value Added (GVA) in the year 2020. The manufacturing units that belonged to the basic metal

sector recorded a growth of 10.8 per cent, while tobacco products manufacturing units recorded a growth of 2.9 per cent. The other sectors such as the intermediate goods industry and food products manufacturing units recorded a growth of 8.8 and 2.7 per cent respectively. The major manufacturing companies that contribute towards the growth of the Indian economy are Aditya Birla Group, Larsen & Toubro, Bombay Dyeing, Hindustan Lever Network, Haldia Petrochemicals Ltd., Apollo Tyres, Jindal Steel, Videocon Group, Ranbaxy, and Asian Paints, etc.

The manufacturing industries face issues related to capital and fund management which creates issues in generating optimized returns. Poor working capital management has also been identified as the main reason for

the failure of most firms. Therefore, the manufacturing companies must focus on implementing working capital management aspects as it directly associated with shareholder wealth maximization and enhancing the profitability and liquidity of businesses. Working capital management (WCM) is an integral part of the corporate finance theory that deals with the finance and investment decisions of the company. However, studies related to WCM and the company have been limited and did not receive much attention from the empirical researchers. Therefore, the current research focuses on analyzing facts related to the concept of working capital and accentuates the effects of working capital management on company value. The current research also outlines the evidence from Indian manufacturing companies and identifies the research gap.

\* Associate Professor, Indian Institute of Foreign Trade, New Delhi,

\*\* Research Scholar, Indian Institute of Foreign Trade, New Delhi,

## Comprehending the Concept of Working Capital

The working capital management (WCM) is defined as a strategic process of generating cash and maintaining the cash conversion cycle of the company. It plays a vital role in acquiring the firm's ultimate goal of shareholder wealth maximization by enhancing both the liquidity and profit earning capacities of the company. The working capital includes two main financial aspects of the company which are assets and liabilities. The current assets are mostly funded by the owners and if there is any remaining part, it is managed by the current liabilities. Thus, it can be said that WCM is directly associated with the current assets, liabilities, and liquidity of the company which is essential for running the business smoothly.

Raheman and Nasr (2007) examined that the maintaining of WCM in manufacturing firm is essential as it accounts for more than half of the overall possessions. On the other hand, the significance of WCM rises in distribution and trading businesses as it occupies over half of the entire possessions. It directly impacts the liquidity and profit earning capacities of the company which enhances its working in the competitive markets. An inappropriate WCM practices lead to bankruptcy even when the company exhibits positive profitability characteristics. It is because when the current assets of the company are more in comparison to work

operations, there is a reduction in the return on investment. On the other hand, the companies that have low levels of current assets may also suffer from operating issues owing to a shortage of funds. As a result, under excessive and scarce current assets conditions, the company suffer from operational issues and could not run the business smoothly. Therefore, the business units and corporate must maintain a high level of working capital so that there is an optimization of the organizational value.

Afza and Nazir (2007) analyzed that working capital investments create trade-off associations between risks and profit earning capacity of the company. It highly impacts the value of the firm and reduces the risks related to insolvency. Eljelly (2004) analyzed that maintaining liquidity in daily operations is essential for meeting the obligations and smooth running of the company. If there is any discrepancy in the maintaining of the balance between the current assets and current liability, it creates issues in maintaining the financial position of the company. Therefore, WCM must be included in the business process so that there is précised decision-making in the choice of amount and composition of the current asset as well as the financing of these assets. Moreover, working capital is directly associated with the financial health and operational success of the firm as it allows the business to adapt to the dynamic business conditions.

Luo, M.M., Lee, J.J., and Hwang, Y. (2009) analyzed the components of the WCM and found that it includes four vital parts which are cash and cash equivalents, inventory, debtors/accounts receivables, and creditors/accounts payable. While focusing on the cash and cash equivalents, it includes determining the most favourable size of the company's liquid balance. The different assets such as short-term investments, equities, and securities that are possessed by the company are included in the estimation of liquid balance. It helps in exercising control over the collection and payout of the cash. As a result, the determination of cash and cash equivalents help in maintaining liquidity and minimum cash requirement in the banking accounts. It improves the credit rating of the company, reduces the cost associated with interest, and eliminates the risks of insolvency.

Zariyawati, M.A, Annuar, M.N., and Abdul Rahim A.S. (2009) analyzed that management of inventories includes three major elements that are managing resources of raw material, work in progress (WIP), and finished products. If the heavy stock is maintained by the company, it increases the burden on cash resources, whereas, insufficient stocking or poor inventory leads to a reduction in sales and delays in delivery of end products to customers. Therefore, management of inventory is an important aspect to be taken into account while carrying out wealth capital management so that the business operations are carried out

smoothly. Raheman and Nasr (2007) examined that to ensure better inventory control, it is essential to regularly review the piling and usage of stocks. The stock management also includes keeping a check on the security procedure and outsourcing some parts of manufacturing so that there are better stocking and production.

Uyar (2009) analyzed that management of receivables is an important component of WCM that highly contribute towards current assets. The investments in receivables include certain costs such as opportunity cost and time value that impact the profitability and company value. It also includes a high risk of bad debts that impacts the valuation and sustainability of the company. Therefore, the fund manager must focus on managing receivables so that sound investment decision is taken in debtors. To manage control over receivables, précised credit practices must be implemented within the company. It will also help in ensuring security and accuracy to the maintaining of the accounts receivable records.

Tahir, M. and Anuar, M.B.A. (2016) ascertained that management of accounts payable is an important WCM aspect that is associated with cash management and positioning of the company. The management of the account payable is essential at is directly associated with cash outflows and purchasing functions. If both aspects are not managed well, issues related to liquidity may arise in the company. Therefore, to ensure

WCM, the firm must centralize financial function and streamline the vendor capacity. The defining of alternative and short-term financing costs will also help in managing accounts payable and implementing WCM.

WCM is impacted by several factors such as length of the operating cycle, nature of the business, scale of operation, and business cycle formation. While focusing on the operating cycle, it is the duration of time that is consumed while producing a product. The length of the operating cycle is estimated from the point when the raw material is acquired tile the product is made ready for final sale purposes. The consideration of working capital forms an essential part of the operating cycle by ensuring its smooth running proves. If the operating cycle duration is more, it requires more working capital and *vice versa*. Considering the nature of the company, the manufacturing units and wholesalers require more working capital as compared to retailers. Manufacturing units require more capital to convert raw material into finished products and wholesalers require more working capital to maintain large stocks. If a company is having a large scale of operation, it requires more working capital, and if a company is having a small scale of operations it requires less working capital. The boom and depression in the market impact the business cycle. If there is a boom in the market, there is an increase in the demand for the product and production

process. Under such conditions, more working capital is required to meet the increasing production requirements. On the other hand, in the case of depression in the market, there is a reduction in the demand for products and production processes. As a result, there is no requirement to maintain large inventories to meet the production requirements which reduce the amount of working capital utilization.

Arunkumar O.N. and Ramanan T.R. (2013) examined that the working capital is fluctuated by different factors such as technology & production cycle, the credit allowed, credit availability, and operating efficacy. Considering the technology & production cycle, it is directly associated with the working capital. For example, if the company is labour-oriented, there is a requirement for more working capital as more capital is required to maintain cash flow to make payments to the labour. On the other hand, in the case of a technology-based company, less working capital is required to maintain the cash flow as technology is related to fixed capital requirements and therefore, involves less operating costs. While focusing on the production cycle, if the production cycle is long, more working capital is required to accomplish the task in comparison to the small production cycle. The credit policy is related to the time taken for performing the sale proceeds. It is impacted by different aspects such as industry norms,

creditworthiness, and client association. When the company adopts a liberal credit policy, there is a requirement for more working capital. On the other hand, if the firm adopts a strict credit policy, there is a requirement of less working capital. The operating efficacy also determines the fluctuations in the working capital. If there is a high degree of operating efficacy, there is less requirement of working capital. On the contrary, if there is low operating efficacy, there is more requirement of working capital.

Thus, it can be said that different factors such as operating cycle, nature of the business, the scale of operation fluctuation, the credit allowed, credit availability, and operating efficacy impact the working capital fluctuation in the company. The implementation of working capital management facilitates company operations, enhances the firm's earning, and augments profitability levels. WCM also promotes inventory management, accounts payables, and accounts receivables that reduce the cost of capital of the company. Working capital is associated with maintaining the liquidity, efficacy, and overall workings of the firm. It helps in commencing different company activities such as debt management, gathering revenue, and managing payments to the suppliers. Thus, it can be said that working capital is an accounting strategy that highly focuses on establishing a balance between current liabilities and assets. It helps in meeting business obligations and boosting company earnings.

### **Accentuating on Effects of Working Capital Management on Company Value**

According to Soenen (1993) working capital management includes different approaches such as Conservative Approach, Aggressive Approach, Matching Approach, Zero Working Capital Approach, and Working Capital Policies for the management of company's financial working. A conservative approach is associated with working capital management in stable environments. It includes evaluating current assets against the sales so that there is a determination of deficient or surplus current assets. If there is a surplus current asset, variations could be introduced in the procurement time, sales, and production plans without any disruptions. It also includes maintaining high working capital levels with the help of long-term funds such as securities and share capital. The provision of sufficient working capital will help in smoothing the operational activities without any stoppages in terms of raw materials or consumables. It facilitates sufficient stocking that helps to meet market fluctuations and eliminating risks of insolvency. It is estimated by taking the sum of fixed assets, total permanent current assets, and part of temporary current assets in terms of long-term funds and part of temporary current asset in case of short-term funds. The use of this approach helped in reducing business risk and ensuring a continuous flow of company operations.

Vaidya (2011) analyzed that the aggressive approach is included the working capital management to meet the current liabilities of the company without considering any buffer in the working capital. Under this approach, the core working capital is administered with the help of long-term capital. On the other hand, seasonal variations are administrated with the help of short-term borrowings. The implementation of an aggressive approach helps in minimizing investments related to net borrowings and reduces the cost of funding in working capital. However, the major limitation with the approach is that it requires frequent financing that increases the risks of vulnerability and sudden shocks. The financing strategy included in this approach includes summing up fixed assets and part of permanent current assets for long-term funds and summing up part of permanent current assets and total temporary current assets for short-term funds.

Padachi (2006) examined that matching approach is one of the most common working capital management approaches in which a balance sheet is maintained to create a balance between assets and financing instruments. The main purpose of implementing this approach is to create a balance by ascertaining that current and fixed assets meet long-term fund requirements. It includes creating a balance between seasonal variations finance and short-term debt to meet the short-term fund requirements. Once the long-term and short-term fund requirements

of the company are met, it helps in correcting the mismatches in the financial activities. It includes a financing strategy in which long-term funds are met by putting together fixed assets and total permanent current assets and short-term funds are met through total temporary current assets. The matching approach also includes managing the operating cycle and inventory management to establish a balance between long-term and short-term funds. For example, in an efficient WCM, there is a compressing of the operating cycle as it is directly associated with receivables and inventory period. On the other hand, the just-in-time inventory management practices help in reducing costs related to overstocking and reducing receivables credit period.

Velnamby, T. and Niresh, J.A. (2012) examined that zero working capital approach has been recently included in the working capital management process in which the current liabilities is equal to current assets at all times. Under this approach, excessive investment is avoided in the segment of a current asset, and the firm is supposed to balance current liability by making minimum or just-in-right investments. For example, if the current ratio estimation is recorded to be 1 and the quick ratio estimation is also recorded to be 1, under such conditions, there is a rise in the risks of high liquidity. However, when the current assets are performing and can be resized at any moment, the fear related to liabilities reduces. Under such conditions, the company saves in

terms of opportunity cost by increasing investment in the current assets. It includes saving costs related to inventory and interests as opportunity cost savings are directly associated with improving bank cash credit limits. Thus, by implementing a zero working capital approach the financial activities of the firm are disciplined. It also helps in managing activities related to current assets and liabilities and reduces the tendency to divert funds or over-borrow. In this approach, financial management is balanced by equating total current assets and total current liabilities. As a result, due to the adoption of the zero working capital approach, there is the smooth and uninterrupted working of the firm so that there is an improvement in the quality of current assets at all times.

Mekonnen, Mulualem (2011) examined that working capital policies are necessary to be determined and implemented so that there is maintaining adequate WCM within the firm. It includes implementing three types of policies such as restricted policy, relaxed policy, and moderate policy. While focusing on restricted policy, it includes a rigid evaluation of the working capital as per the company requirements and then sticking to the estimated value for the conduction of work. In this policy, deviations from the estimations are not permitted and do not consider the occurrence of any unexpected event. On the other hand, in relaxed policy, fluctuations are allowed in the funds by including funds for contingencies and unexpected

events. In the case of moderate policy, the working capital level is measure by considering restricted and relaxed policy considerations. Most of the companies adopt a moderate policy as it helps in eliminating risks and increasing profitability levels by increasing investments in current assets as per need.

According to Gill, A., Biger, N., and Mathur, N. (2010) net trade cycle could also be used as an appropriate measure to ascertain the working capital and return on assets (ROA) in the firms in the United States. As per the study analysis, it was found that there was a negative association between the period of the net trade cycle and return on investment. The other aspects such as industry type and level of competition are also to be taken into account while determining the working capital for the industrial working purpose. A study was conducted by Makori, D.M. and Jagongo, A. (2013) to analyze the impact of working capital management on the firms located in the United States during the period 1982 to 2011. The study included nonlinear regression and linear regression and found that in most of the US firms optimal level of the working capital policy was implemented. By implementing the working capital policy, the firms could optimize their efficacy by augmenting or reducing investment levels. It helps in establishing a balance between current liabilities and current assets, improving stock performance, and operational efficacy. As a result, by

implementing efficient WCM, there is the attainment of superior performance by redeploying underutilized corporate resources to higher-valued use, such as the funding of cash acquisitions.

Maheshwari, M. (2014) examined that WCM facilitates company workings and allows the fund managers to make decisions regarding future growth and reducing financing costs. It also includes improving pay back short-term financing by optimizing the working capital utilization. However, a major issue that is faced by the fund managers is that the value of working capital cannot be reduced without making compromises in the future growth and sales. A certain buffer amount of working capital is required for maintaining customer credit and inventory. It helps to satisfy consumer needs and creates a balance between risk and efficiency. A study was conducted by Banos-Caballero, S., Garc ~ ya-Teruel, P.J. and Mart~nez-Solano, P. (2010) by taking French companies into account and found that the investors of the French companies were worried as there was an increase in the cash in the units but the value of the firms was less as compared to the US companies. The investors of French companies were highly concerned related to the investment or even an extra Euro in the company as it decreased the value of the company in the competitive market. However, it was ascertained that the operating working capital highly depended on the financial

structure of a company which impacted its valuation and performance.

Bernard, A.B. and Jensen, J.B. (2004) analyzed facts related to the association between WCM and performance of a company by taking non-financial United Kingdom companies into account. As per the study analysis, it was found that there was a U-shaped relationship between the performance of the company and working capital. Due to a U-shaped relationship, an optimal level in a company can only be acquired by balancing costs and benefits. It would help the firm to gain maximum firm value by improving overall performance during difficult times. Chadha, S. and Seth, H. (2020) analyzed that high investments in working capital may lead to adverse implications and destruct the value of the firm in front of the shareholders. The main reason behind it is that any investment in the company in terms of working capital requires financing which is associated with opportunity costs. As a result, the firms that are having high working capital values hold more risks of bankruptcy and an increase in expenses in terms of interests. Thus, it can be said that the maintenance of high values of working capital is not beneficial for the company as it hampers firm performance and company value.

Shin and Soenen (1998) conducted a study to examine the association between working capital and company value by using net-trade cycle (NTC) for assessment. The study also

included the use of correlation and regression analysis to determine the working capital intensity and industry workings. As per the analysis of 58,985 firms, it was found that there was a negative relationship between the net-trade cycle and the profit earning levels of the firm. It was also found that the low levels of NTC were related to high risks in the stock returns and a reduction in the NTC levels could bring significant improvements in the shareholder's value. Lyroudi and Lazaridis (2000) conducted a study to examine the facts related to working capital management and company value in the food industry in Greece. The study included the cash conversion cycle as a measure to determine the liquidity of the firm. The associations between the current and quick ratios were also determined with the help of component variables. The implications of the cash conversion cycle in terms of profitability, indebtedness, and firm size were analyzed and found that there was a positive association between the liquidity and cash conversion cycle. It was also found that a positive association was established between current and quick ratios concerning the cash conversion cycle.

Wang (2002) performed a study to examine the association between the operating performance, company value, and liquidity management in firms located in Taiwan and Japan. As per the analysis, it was found that there was a negative association between cash conversion cycle and return on assets in Taiwan and

Japanese companies. It was also ascertained that there was a negative relationship between cash conversion cycle and return on equity in Taiwan and Japanese firms. The study provided that low levels of cash conversion cycle contributed towards better operating performance. It also revealed that aggressiveness in liquidity management was associated with an increase in the company value even though there were differences in the financial system of the company.

Deloof (2003) conducted a study by considering 1,009 large Belgian non-financial firms into consideration. The study included inventory policy and credit policy as important measures to determine the association between working capital and company value. The facts related to working capital were analyzed by taking several days accounts receivable and cash conversion cycle into account. The other factors such as inventory management and account payable aspects were also considered while analyzing working capital. As per the analysis, it was found that there was a negative association between the number of days accounts receivable and operating income. It was also found that there was a negative association between accounts payable and operating income of the company. A similar finding was also observed in the case of inventory management which was negatively associated with operating income. Thus, it can be said that the fund managers can create value for the firm and shareholders by decreasing the high stocking of inventories and

the number of days accounts receivable to low levels.

Lazaridis and Tryfonidis (2006) conducted a study to examine the relationship between working capital management and firm value in 131 companies that were listed in the Athens Stock Exchange (ASE). The facts related to the cash conversion cycle and profit earning capacities of the firms were also included in the study. As per the analysis, it was found that there was a statistical association between the gross operating profit and profit earning abilities of the firm. A similar finding was also recorded with the cash conversion cycle which was found to be positively associated with the profit earning capacities of the firm. It was also found that the gross operating profits had a direct relationship with several days' accounts payables and it tends to decrease with an increasing number of days accounts payables. It helps the managers to generate profits for the company by making correct use of the cash conversion cycle and maintaining other components such as inventory management, account receivables, and account payables at an optimized level.

Teruel, P. and Solan, P. (2005) conducted a study to determine facts related to working capital and company value in small and medium firms (SMEs) that were operating in Spain. The study included the use of panel data regression methodology and found that the value of the firm can be created by reducing the stocking levels in the inventory and lowering the number of

outstanding days in the accounts. The study revealed that the major concern of the SMEs is to maintain working capital as it is responsible for carrying out operational activities. The managers in SMEs can create value for the company by reducing the levels of cash conversion cycle to a minimum.

Teruel, P.J.G. and Solano P.M. (2007) analyzed the impact of working capital management and company value in the companies that were listed in the Istanbul Stock exchange (ISE). The study included the use of multiple regression models and found that there was a negative association between the accounts receivables period and profit earning abilities of the firm. A similar association was also found between inventory periods which were found to be negatively associated with the company value. The study also revealed that there was a negative relationship between leverage and the value of the company. On the other hand, a positive association was found between growth and company value as it increased the profit earning capacity of the company.

Padachi (2006) conducted a study to examine the association between working capital management and company value by taking 58 manufacturing units located in Mauritius into account. The study also analyzed the impact of working capital on the performance of the company by making use of regression analysis. As per the study assessments, it was found that investment in inventory was negatively

associated with the company value and profitability levels. A negative association was also found between receivables and profitability as an increase in receivables resulted in low profitability levels. However, positive implications were recorded in the paper and printing industry concerning working capital and profitability. Thus, it can be said that working capital management is associated with company value in both positive and negative terms depending upon the structure, capacity, inventory position, and receivables of the company.

### Outlining the Evidence from Indian Manufacturing Companies

According to Sharma and Kumar (2011) financial decisions in the Indian manufacturing industry are taken by considering the financial issues faced by the firms and analyzing which actions could help in eliminating the problems. While making financial decisions, the major issues that are faced by the fund manager are associated with working capital management. While focusing on working capital management, it is the difference between current assets and current liabilities. The current asset is the readily convertible cash and current liabilities are associated with cash that will be required by the firm in the future. Goel and Sharma (2015) examined that the working capital in each company is different and depends upon the different characteristics such as inventory, debtors, creditors, and other aspects of the company. The study included 1,200 firms that

were working in the Indian manufacturing sector and analyzed the facts related to the impact of working capital management on the company value and profitability. As per the study analysis, it was found that WCM levels in the Indian manufacturing sector showed statistically significant variation from 2004 to 2013. A significant improvement was recorded in the working capital efficacy during 2004-2007 because of the global financial crisis. On the other hand, the efficacy of working capital remained low during 2008-2010 which further improved in the later years.

The study examined that the WCM was highly impacted by exogenous factors such as technology and saving rates. It was found that there was a positive association between net fixed asset and WCM and a negative association was recorded between debt ratio and efficacy of the firm. The study examined that there was a positive relationship between profitability and WCM as with the increase in the working capital there was an increase in the profit-earning capacity of the firm. A similar association was found between sales growth and age of the firms concerning working capital management as with the increase in the working capital, an increase was recorded in the sales and sustainability of the manufacturing firms.

A study was conducted by Seth, Chadha, Ruparel, Arora and Sharma (2020) by including Indian manufacturing firms that were dealing in exporting activities. The study included 563

Indian manufacturing firms that were listed in the Bombay Stock Exchange and examined the association between working capital management and company value. As per the analysis, it was found that there was an appositive association between the positive relationship with the Size of the firm, Firms' growth, and Interest rate. On the other hand, the cash conversion cycle (CCC) showed a negative association with Net fixed asset ratio, Size of the firm, Asset turnover ratio, Total assets growth rate, Productivity, and Export. It was found that the Leverage, Firms' age and the Gross domestic product did not show any significant association towards CCC. The study specified that an improved working capital model is essential for the growth and advancement of the company. The main reason behind it is that it helps in reducing the cash conversion cycle levels and creating new avenues for working capital management. Additionally, the outcomes of the research were also useful to the stakeholders like investors, capital managers, fund managers, financial consultants, and debt holders as they could monitor and exercise control over the company workings.

Baker, Kumar and Singh (2019) conducted a study by including 269 Indian small and medium enterprises (SMEs) into account. The study examined the practices and policies that were adopted by the SMEs in India concerning working capital management. As per the analysis, it was found that



most of the SMEs in India adopted an informal approach towards the management of working capital. The manufacturing firms mainly tried to match the financial sources with the maturity of assets. The manufacturing units were depended on internal and external funding to carry out company functionaries. The internal funding supported the activities related to retained earnings and the external funding supported the functionary related to the line of credit. It helped in meeting the working capital requirement of the company. The measures such as net working capital and cash conversion cycle were considered to be important factors for evaluating the value metrics and exercising control over working capital. It was found that the working of micro, small, and medium-sized enterprises (MSMEs) was different from that of SMEs. MSMEs also had different working capital management needs, practices, and implementations in comparison to SMEs.

Bhatia & Srivastava (2016) conducted a study to examine the working capital management in Indian companies especially that worked as small and medium enterprises. The study included Feasible Generalized Least Square (FGLS) regression models to analyze the facts related to WCM in Indian small and medium scale enterprises over the period spanning from 2010 to 2017. As per the analysis, it was found that there was a negative association between account receivables and working capital management. On the other hand,

a positive association was recorded between inventories and profit earning abilities of the SMEs. A similar association was also recorded between account payables concerning the profit earning ability of the SMEs. Thus, it can be said that fund managers in SMEs can increase the profit earning capabilities of the firm by changing credit sales into cash. The main reason behind it is that the conversion of credit into cash will increase the days of accounts payable and facilitate inventory management activities. It was also found that there was a negative association between Account receivable, and working capital and a positive association between Account Payables and Return on assets. The study concluded that in the case of Indian SMEs, the efficacy of the firms can be improved by maintaining an accurate inventory level for which appropriate inventory management is required.

Bhatia and Srivastava (2016) conducted a study by considering 2,327 non-financial firms that were enlisted in the Bombay Stock Exchange (BSE) of India for the period from 2002 to 2014. The study included regression analysis to analyze the facts related to the association between working capital and the performance of the firm, especially in the emerging market. As per the analysis, it was found that the cash conversion cycle (CCC) laid a significant impact on the company value and efficacy of the firm. In the context of Indian firms, a negative association was found between

the cash conversion cycle and financial efficacy as there was a reduction in profit earning levels of the firm with a reduction in the cash conversion cycle. Thus, it can be said that managers of the Indian firms must bring improvement in the inventory turnover and extend credit period with suppliers so that improvements could be brought in the working capital pipelines of the company. Therefore, it becomes vitally important for the firms in India to manage working capital efficiently and release the fund that may be unnecessarily tied up in working capital to fund the long term projects and the expansion of their operations.

### Research Gap

Most of the studies have focused on the profitability that is short-term performance measure but limited researches are available on the long-term performance measure i.e. company value. Limited studies have found the optimum level of WCM and there is no consensus between measurements of optimum value to suggest which measure is best to find out the best optimum level of WC. According to EY reports, there are lots of cash tied up in working capital. However, there is no research available in India at present who studied the same problem, to conclude what we can do for this excess cash tied as working capital. Rather than using Net Working Capital (NWC) as an independent variable, excess NWC is not used, although using this; unnecessary part of the working capital can be

captured. There is no literature available according to the researcher's knowledge, examine the peer effect on a company's investment decision in working capital. So far the existing literature has examined the impact of WC on firm performance but the impact of NWC on corporate investment has not been investigated for Indian firms. There is no study available that discusses the optimal level of each component of working capital separately; accounts receivable accounts payables, and inventory.

## REFERENCES

1. Afza, T. and Nazir, M.S. (2007), Working Capital Management Policies of Firms: Empirical Evidence from Pakistan, in the Proceedings of 9th South Asian Management Forum (SAMF), 24-25 February, North South University, Dhaka, Bangladesh.
2. Arunkumar O.N. and Ramanan T.R. (2013), Working Capital Management and Profitability: A Sensitivity Analysis, *International Journal of Research and Development: A Management Review*, Vol. 2, pp. 52-58.
3. Baker, H.K., Kumar, S., and Singh, H.P. (2019), Working Capital Management: Evidence from Indian SMEs, *Small Enterprise Research*, 26(2), pp. 143-163.
4. Banos-Caballero, S., Garc ~ yateruel, P.J. and Mart ~ ynez-Solano, P. (2010), "Working Capital Management in SMEs", *Accounting and Finance*, Vol. 50 No. 3, pp. 511-527. doi: 10.1111/j.1467-629X.2009.00331.x.
5. Bernard, A.B. and Jensen, J.B. (2004), "Why Some Firms Export", *Review of Economics and Statistics*, Vol. 86 No. 2, pp. 561-569.
6. Bhatia, S., and Srivastava, A. (2016), Working Capital Management and Firm Performance in Emerging Economies: Evidence from India, *Management and Labour Studies*, 41(2), pp. 71-87. <https://journals.sagepub.com/doi/10.1177/0258042X16658733>
7. Chadha, S. and Seth, H. (2020), "Ownership Structure and Capital Structure: A Panel Data Study", *International Journal of Business Innovation and Research*, doi: 10.1504/IJBIR.2020.10024975, available at <https://www.inderscience.com/info/ingeneral/forthcoming.php?jcode=ijbir>.
8. Deloof, M. (2003), "Does Working Capital Management Affect the Profitability of Belgian Firms", *Journal of Business Finance and Accounting*, Vol. 30, Nos. 3 & 4, pp. 573-588.
9. Eljelly, A. (2004), Liquidity-Profitability Tradeoff: An Empirical Investigation in An Emerging Market, *International Journal of Commerce & Management*, 14(2), pp. 48-61.
10. Gill, A., Bigger, N., and Mathur, N. (2010), "The Relationship between Working Capital Management and Profitability: Evidence from the United States", *Business and Economics Journal*, 10, pp. 1-9.
11. Goel, U., and Sharma, A. (2015), Working Capital Management Efficiency in Indian Manufacturing Sector: Trends and Determinants, *International Journal of Economics and Business Research*, 10(1), pp. 30-45. [https://www.researchgate.net/publication/280107028\\_Working\\_capital\\_management\\_efficiency\\_in\\_Indian\\_manufacturing\\_sector\\_Trends\\_and\\_determinants](https://www.researchgate.net/publication/280107028_Working_capital_management_efficiency_in_Indian_manufacturing_sector_Trends_and_determinants)
12. 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(1), pp. 26-35.
13. Luo, M.M., Lee, J.J., and Hwang, Y. (2009), Cash Conversion Cycle, Firm Performance, and Stock Value. Retrieved from [www90.homepage.villanova.edu/michael.../ML\\_CCC\\_20090420.pdf](http://www90.homepage.villanova.edu/michael.../ML_CCC_20090420.pdf) (accessed on 17 August 2009).
14. Lyroudi, K., and Lazaridis, Y. (2000), The Cash Conversion Cycle and Liquidity Analysis of the Food Industry in Greece. [Electronic Version] EFMA, Athens. Retrieved from <http://ssrn.com/paper=236175> (accessed on 12 August 2009).
15. Maheshwari, M. (2014), "Measuring Efficiency and Performance of Selected Indian Steel Companies in the Context of Working Capital Management", *Pacific Business Review International*, Vol. 6 No. 11, pp. 18-23.

16. Makori, D.M. and Jagongo, A. (2013), "Working Capital Management and Firm Profitability: Empirical Evidence from Manufacturing and Construction Firms Listed on Nairobi Securities Exchange, Kenya", *International Journal of Accounting and Taxation*, Vol. 1 No. 1, pp. 1-14.
17. Mekonnen, Mulualem (2011), "The Impact of Working Capital Management on Firms' Profitability", Unpublished Master Thesis, Addis Ababa University: Ethiopia.
18. Padachi, K. (2006), Trends in Working Capital Management and its Impact on Firms' Performance: An Analysis of Mauritian Small Manufacturing Firms, *International Review of Business Research Papers*, 2(2), pp. 45-58.
19. Raheman, A., and Nasr, M. (2007), Working Capital Management and Profitability-Case of Pakistani Firms, *International Review of Business Research Papers*, 3(1), pp. 279-300.
20. Seth, H., Chadha, S., Ruparel, N., Arora, P.K., and Sharma, S.K. (2020), Assessing Working Capital Management Efficiency of Indian Manufacturing Exporters, *Managerial Finance*. [https://www.researchgate.net/profile/Namita\\_Ruparel/publication/340077296\\_Assessing\\_working\\_capital\\_management\\_efficiency\\_of\\_Indian\\_manufacturing\\_exporters/links/5e7b258a299bf1f3873fdf72/Assessing-working-capital-management-efficiency-of-Indian-manufacturing-exporters.pdf](https://www.researchgate.net/profile/Namita_Ruparel/publication/340077296_Assessing_working_capital_management_efficiency_of_Indian_manufacturing_exporters/links/5e7b258a299bf1f3873fdf72/Assessing-working-capital-management-efficiency-of-Indian-manufacturing-exporters.pdf)
21. Sharma, A.K. and Kumar, S. (2011), "Effect of Working Capital Management on Firm Profitability Empirical Evidence from India", *Global Business Review*, Vol. 12 No. 1, pp. 159-173.
22. Shin, H.H., and Soenen, L. (1998), Efficiency of Working Capital Management and Corporate Profitability, *Financial Practice and Education*, 8(2), pp. 37-45.
23. Soenen, L.A. (1993), Cash Conversion Cycle & Corporate Profitability, *Journal of Cash Management*, 13(4), pp. 53-58.
24. Tahir, M. and Anuar, M.B.A. (2016), "The Determinants of Working Capital Management and Firms Performance of the Textile Sector in Pakistan", *Quality and Quantity*, Vol. 50 No. 2, pp. 605-618.
25. Teruel, P. and Solan, P. (2005), "Effects of Working Capital Management on SME Profitability", *Working Paper Series: Spain*.
26. Teruel, P.J.G. and Solano, P.M. (2007), "Effects of Working Capital Management on SME Profitability", *International Journal of Managerial Finance*, Vol. 3 No. 2, pp. 164-177.
27. 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, pp. 186-193.
28. Vaidya, R.R. (2011), "The Determinants of Trade Credit: Evidence from Indian Manufacturing Firms", *Modern Economy*, Vol. 2 No. 5, p. 707.
29. Velnampy, T. and Niresh, J.A. (2012), "The Relationship between Capital Structure and Profitability", *Global Journal of Management and Business Research*, Vol. 12 (13).
30. Wang, Y.J. (2002), Liquidity Management, Operating Performance, and Corporate Value: Evidence from Japan and Taiwan, *Journal of Multinational Financial Management*, 12(2), pp. 159-69.
31. Zariyawati, M.A, Annuar, M.N., and Abdul Rahim A.S. (2009), Effect of Working Capital Management on the Profitability of Firms in Malaysia, Paper presented in International Symposium on Finance and Accounting (ISFA), 6-8 July, Malaysia. Retrieved from [list.academicjournal.org/submissions/isfa2009\\_submission\\_13.doc](http://list.academicjournal.org/submissions/isfa2009_submission_13.doc) (accessed on 15 August 2009)

