

Chapter Two: Review of Literature

Introduction

The corpus of knowledge available on financial management in academia has been structured around long-term investments, procurement of funds, its important components, their significance in business organisations. Ironically, working capital, though a major determinant to the survival and sustenance of the profitable firms, being identified as a short-term indicator, received less attention. It is again a paradox that the main cause of global financial crisis of 2008 which dismantled the financial world, was liquidity shortages yet, working capital management remained out of the realms of academic research. There have been attempts to analyze working capital management theoretically as well as empirically yet a comprehensive and an all-inclusive literature review with impetus on emergence, coinage, and gradual evolution of working capital management along with its components in context of profitability and performance is illusive which creates the need for this literature review. The aim of this study is to contribute to the existing corpus, a detailed, *au courant* literature on working capital management. The literature review deals with working capital management in general and printing industry in particular seeking answers to the following questions:

1. What does working capital mean?
2. What do we mean by the Components of Working Capital?
3. What does management of current assets mean?
4. Why is current assets management important in general and printing industry in specific?
5. What is impact of management of current assets on cost, profitability and thereby sustainability of the business?
6. What is the history and evolution of Printing Industry in India?
7. What is the significance of Working Capital Management in Printing Industry?

With the expanding horizons of corporate business that started experiencing variety of problems and facing practical issues left unaddressed by financial accounting, comprehensive research was carried out with intentions to have innovative and need based

solutions of everyday problems in the corporate world. Surprisingly, huge work was carried out in the field of financial management but, very little amount of efforts was made in the field of working capital management as majority of the work were addressing issues related to financing, long term investments and profit management. The foundation of this research endeavour therefore has been laid on the paucity of academic research on working capital management in context of printing industry as during and post 2008 financial crisis, scenario across the globe has again reiterated the significance of the study of working capital management, liquidity and operational efficiency for profitability. In this context the question arises, how can working capital management enhance corporate profitability. This chapter tries to analyse how has working capital management been conceptualized, evolved, theoretically as well as in practice from its inception. Thus, this chapter focuses on development of different concepts of working capital management, its importance in business over the period and identify importance of different concepts along with their impact on liquidity and profitability. This chapter is divided in three sections: section one deals with meanings and definitions of working capital developed and refined over a period, section two deals with the individual components of working capital, its concepts and importance, and section three deals with working capital practices followed in printing industry. The impact of dynamics of technological changes in printing industry over the period on working capital management has also been discussed. The underlying objective of this chapter is to comprehend the conceptualization and evolution of Working Capital Management in business ecosystems from 1776 till date. The study contributes to the existing knowledge domains and opens new vistas for futuristic research. In this Chapter existing literature on working capital, working capital management, its components, subsequent models developed on these key areas, the relevance of those models to serve managerial needs in the operating environments and speculating future research directions in general and particularly in printing industry with transnational approaches have been discussed critically.

Working Capital

Businesses requires adequate capital to succeed positing the need of two types of capital: Fixed and Working. Fixed capital is required for investment in long term assets while Working Capital is required for day-to-day business operations that is why it is also called as current capital. The origin and practice of the concept of working capital can be traced back to Karl Marx in 1867 parenthetically specified working capital as ‘variable capital’ and

‘constant capital’ associating variable capital to payment of wages to workers whereas, constant capital was identified as ‘dead labour’. Variable capital is the payment to the worker who were involved from the process of production of goods until they are sold as finished products.

The credit of developing the theory of working capital management in the earliest stages of its evolution goes to Adam Smith who in 1776 suggested the difference between circulating and fixed capital Adam Smith asserted: “The goods of the merchant yield him no revenue or profit till he sells them for money and the money yields as little till it is again exchanged for goods. His capital is continuously going from him in one shape and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit. Such capital, therefore, may very properly call circulating capital”. According to Mann (1918) working capital is the amount of money or money equivalent required to finance a company’s operations. It is the amount of capital required keeping a company in operations or staying liquid.

In 2013 Mehrotra also favoured the term circulating capital which identifies that the movement of the capital is spherical in nature emphasizing that requirement of working capital is a continuous phenomenon not bound by the completion of the operating cycle.

In 1996 Weston opined that the agriculture-based industries, when short term finances and loans were preferred till the finished products were sold out, became the key factors in bringing in vogue the term ‘working capital’. Weston et al narrated an interesting anecdote of an Old Yankee Peddler who used to borrow funds to sell his goods on his wagon, this sold merchandise produced profits so, were referred to as working capital. On the other hand, the horse and the wagon that he owned were referred to as fixed assets being financed with ‘equity capital’. Two other interesting terms for working capital were offered in 2006 by Chiou and Padachi- ‘short-term capital’ and ‘trading capital’ respectively. It can be thus generalized that the classification of assets into long term, short term and identification of short-term assets as component of working capital as well as its financing practices existed even at that time. Both, Mehta in 1974 and Brealey in 2006 that working capital is related to current assets and current liabilities. These variegated elaborations on working capital from inception of the idea till date problematize the term working capital itself as even after two

decades and humongous research, the term working capital still yearns for its universally acceptable definition.

The two concepts- quantitative (gross) and qualitative (net) play an important role in comprehending working capital. Kesinmli and Gunay in 2011 and even Weston and Brigham defined Gross concept as referring to the investment of a company in non-fixed assets so can also be understood as current or short-term assets. Initially working capital was identified as Current assets which are acquired by other than immediate source of it i.e. current liabilities. This concept was known as Gross Working Capital.

Current assets are defined as, “Cash and other assets which are expected to be converted in to cash in the ordinary course of business within one year or within such longer period as constitutes the normal operating cycle of a business” (Fitzgerald). Two important characteristics of current assets are: (i) short life span, and (ii) swift transformation into other form of assets.

This concept is useful to finance managers’ whose main objective is to evaluate the magnitude and the extent of current assets utilisation and the amount of financial resources required to support the firm’s level of current assets (Etiennot et al., 2012). The gross concept appeals to the finance manager whose concerns are the sources and uses of funds. Each item on current assets must be financed and it is the responsibility of the finance manager to finance these current assets in line with the company’s capital structure. There are two main arguments in support of the gross concept. First, as fixed assets symbolise fixed capital, so current assets symbolise working capital. Second, most managers’ business operational plans are formulated in line with this concept, current assets are those that are used to run the business’s daily operations.

The qualitative concept, which is originally known as Net concept, refers to net liquid assets. The more common use of working capital is to consider it as the difference between the book value of current assets and current liabilities i.e. excess of current assets over current liabilities (Hoglent J. Bierman and A. K. Mc. Adams). This concept appeals to accountants as it is in line with their mathematical accuracy of tallying the two sides of the balance sheet. This concept is useful and appropriate while assessing the liquidity position of a firm and provides an indication of the sources of working capital finance. Net liquid assets represent the components of the firm’s current assets funded by long-term capital. In cases where the firm has no current liabilities, all current assets are financed by

long-term funds. An argument in favour of the net concept of working capital is that it gives true information on the liquidity of a business which indicates whether the firm has sufficient liquid resources to pay its obligations as and when they mature.

It determines whether the firm will be able to survive in a period of adverse economic condition like depression or meet the contingent needs of the business. It also enables comparison of the financial position of two firms when their current assets are equal. Groups such as creditors, in particular trade creditors, find this concept useful because their main concern to get information about the 'margin of safety' available to them and Should there be any delays in the liquidation of current assets ? (Walker, 1964).

Current liabilities are a company's debt or obligations that are due within one year, appearing on the company's balance sheet and include short term debt, accounts payable, accrued liabilities and other debts. Essentially, these are bills that are due to creditors and suppliers within a short period of time.

In practice, a one-year period was used to distinguish between the short and long terms. In the mid-20th century, the focus shifted towards a going-concern view of the firm. By consequence, the immediate liquidation of the firm was no longer of concern. This strategic shift in the basic view of the firm had material consequences for the concept of working capital. Since then, the new paradigm of working capital management has been to maintain the firm's operating cycle while seeking to maximize its profitability. The operating cycle consists of the whole sequence of cash flows generated by the physical activities of the firm's operations.

In 1947, the committee on Accounting Procedure of American Institute of Accountants issued an (ARB), No.30 which defined working capital and classified the operating cycle. It stated : "working capital, sometimes called net working capital is represented by the excess of current Assets over current liabilities and identifies the relatively liquid portion of total enterprise Capital which constitutes a margin or buffer for meeting obligations to be incurred and liquidated within the ordinary operating cycle of the business (CPA/ATA,1947)."

ARB No.30 specified the operating cycle for current assets and current liabilities to be 12 months because many transactions fall within this time period. However, it also

acknowledged the existence of longer business cycles in certain industries where companies may use extended periods for example wineries, lumber and agriculture. Since 1776, when the journey of working capital management began with Adams introducing the concept and definition of circulating capital, working capital got identified and net working capital got involved which gradually got defined and today are unanimously well accepted from all corners of the globe.

2.2.1. Working Capital

The review of literature traces all the explicit and extensive multiplicities It deals with all the aspects of working capital contributing in showcasing systemic evolution of the term, contributing to the corpus of the existing knowledge system. The review is based on the phased description of the studies undertaken in the global as well as glocal context.

Natrajan Sundar (1980) propounded the significance of working capital at national as well as corporate level. Working capital at the national level is exercised primarily through credit controls. The study concluded that investment in working capital and investment in fixed assets both are essential for any firm. And especially for a business that is not growing, survival will only be possible as long as you can offset increased operating costs with increased operational efficiency. **Bhattacharyya Hrishikesh (1987)** developed a comprehensive theory and an instrument for managing the working capital of a company from the perspective of the techno-financial operating structure. from the perspective of a business system, suggesting the importance of the role of a finance manager in balancing two sides of the balance sheet so that the net worth of the company increases without increasing the risk of the company. **Rao K.V. and Rao C. (1991)** analysed at the strengths and weaknesses of conventional working capital analysis techniques in order to assess the efficiency of working capital management using conventional techniques i.e., ratio analysis. The study is pertinent to encourage budding scholars to seek a comprehensive and critical benchmark for evaluating working capital efficiency. **Hyderabad R. L. (1999)** investigated the working capital financing policy, a proper assessment of asset liquidity and financial structure liquidity was found to be the "quite essence" of sound working capital. He revealed that working capital investment and financing are very crucial and should be given due significance by the management for framing the overall working capital policy. **Dinesh M. (2008)** explained the concepts of working capital, the challenges tackled by companies in the management of working capital and the strategies for its efficient management. The

study emphasized that most companies fail not due to lack of profit, rather than lack of money. Rapid growth in production and sales can result in the use of financial resources seeking growth and make assets such as inventories, accounts receivable, and others less liquid. **Eljelly (2009)** opined the management of working capital are engaged with arrangement, controlling and planning of short-term assets and short-term liabilities in such a way that elimination of lack of ability of risk, and fulfill short-term obligations with the avoidance of excessive savings in short term assets, and to pay back the short-term debts of the firms, effective management of working capital de motivates the needs of lending funds.

Singaravel, P. (1999) focused on the interdependence between working capital, liquidity and profitability, prioritizing adequate liquidity followed by the adequacy of working capital and profitability, and established a triangular relationship between them. **Arunkumar O. N. and Jayakumar S. (2010)** analysed liquidity and solvency position of the major Public Sector Electrical Industries in Kerala during the years 1997-98 to 2007-08. They concluded that solvency and liquidity position is weak and the sensitivity of changes in the level of current assets.

Batra G S (1999) provided an overview of working capital and its determinants, which play a central role in deciding the composition of current assets and their financing. The study put emphasis on the hedging approach to financing current assets and stated that management can use working capital ratio analysis to verify the efficiency of the use of working capital in the company. **Padachi K. (2006)** stated that efficiency of management of Working Capital is important for the survival, success and achievements of organization to boost the performance and input to economic growth. investigated the relationship between aggressive/conservative working capital policies and Firm's return.

Chatterjee S. (2010) examined the importance of the fixed and current assets in the successful running of any organization by taking a sample of 30 United Kingdom based companies were selected which were listed in the London Stock exchange during the period 2006-2008 and found that management of working capital affects profitability of the firm. She had used the dimensions of working capital management like quick ratios, current ratios Cash Conversion Cycle, Average days of payment, Inventory turnover, and Average

Collection Period and analysed their impact on the net operating profit. **Song et. al (2012)** found that corporate working capital turnover had a positive impact on the performance of competitors in the product market, while corporate working capital liquidity had a negative relationship with the performance of competitors in the market. **Ding et. Al (2012)** found that companies with high working capital have a high sensitivity of investments in working capital to cash flow and low sensitivity of investments in fixed capital to cash flow. Firms with low VCS and high WKS were found to have the highest fixed investment rates despite severe external financing restrictions. It was concluded that active working capital management can help companies mitigate the impact of financing constraints on capital investments.

Kwenda et al. (2013) analysed the working capital structure and financing patterns of companies listed on the JSE Securities Exchange by taking a sample of 92 companies in eight economic sectors for the period 2001-2010 using descriptive statistics and trend analysis. The study revealed that the listed companies heavily depend on trade credit as the source of short term finance and trade receivables and inventory are their main working capital investment. The study concluded that firms in different economic sectors use different approaches to manage their current assets and change working capital policies in line the state of the economy.

Ishubiri Faris. (2010) analyzed the working capital management practices examine the impact of aggressive/conservative working capital investment and financing policy and analyze through cross-sectional regression models the relationship between working capital policies and profitability as well as risk of the firms taking a sample of 59 industrial firms listed on Amman Stock Exchange for the period of 2004 to 2007. The study found that there is a negative relationship between the profitability measures of firms and degree of aggressiveness of working capital investment and financing policy. The firms yield negative returns if they follow an aggressive working capital policy. The study concluded that there is no relationship between the level of current assets and liabilities and risk of the firms.

Kroflin et al. (2015) analysed whether German companies adapt their behavior in terms of handling working capital in the actual economic environment and to describe which practices have been established by taking semi structured interviews of chief finance officers or financial executives of 15 German and Austrian industrial firms for the period

2014 and 2015 by using a qualitative study. The study concluded that adaptation is realized rather by moderating management attention and focus to the topic of capital cost but not by adjusting the financial targets themselves. This is because working capital reduction as become a management routine.

Ben-Nasr (2016) he has found that increasing excess- net working capital in government-controlled firms with a low level of investment in net working capital is associated with higher risk, which in turn reduces firm's value. He also found that the adverse effects of net working capital over-investment on idiosyncratic risk, hence on firm value, are less pronounced in government-controlled firms, which benefit from soft budget constraints.

Zubairi H. J. (2010) studied the impact of management of Working Capital and Capital Structure on productivity in the automobiles sector of Pakistan by using supplementary analysis for the analysing the variability of the variables taken under study. He used Short term ratio, size of the firm and leverage ratio was as variables for the research. He concluded that major variables taken under study have positive correlation between them and revealed that efficient working capital management can lead to increase profitability of the firm.

Sharma and Kumar (2011) examined the effect of working capital on profitability of Indian firms. They collected data about a sample of 263 non-financial BSE 500 firms listed at the Bombay Stock Exchange from 2000 to 2008 and evaluated the data using OLS multiple regression. The results revealed that working capital management and profitability is positively correlated in Indian companies. **Rahman M M. (2011)** analysed the correlation between working capital and profitability. The efficient management of working capital has positive effect on the profitability of companies. The study showed that in the textile industry, profitability and the position of working capital management are upto date. **Chandra et. al (2012)** also concluded that there exists a positive relationship between working capital and profitability of all the selected companies.

Altaf et. al. (2017) opined that the managers increase the investment in working capital in order to increase the performance of the firm when level of working capital of the firm

reaches to lower level. But, he also opined that such action may result into increase in credit risk for the firm. Thus, managers are opined to maintain optimum level of working capital to avoid adverse impact. He revealed that the investments in working capital is sensitive to financial constraints and the lower optimal level of working capital for more financially constrained firm justifies the importance of internally generated funds and the access to capital markets in firm's working capital investment decisions.

Nur Tuğba (2017) examined the relationship between working capital policies and financial performance of firms which carry on business on Istanbul Stock Exchange 100 Index is analyzed by taking a sample of 38 firms carrying out active business in the real sector during the period of 2010-2015. The financial performance, the dependent variable of the study, is measured through Return on Assets (accounting based) and Tobin's q (market based). It is identified that there is a negative and statistically significant relationship among investment and working capital investment policies and Tobin's q while there is a statistically significant and positive relationship between financial policy and Tobin's q. The study found that there is a statistically significant and negative relationship is determined between the financial policy and return on assets. **Thakur Oli & Mukit Dewan (2017)** examined the impact of working capital financing policy on firm profitability from the perspective of Bangladesh by taking a sample of 80 Dhaka Stock Exchange (DSE) listed manufacturing companies for the period of 2009-2014 using fixed effect panel data regression technique. The study found a negative impact of working capital financing policy on firm's profitability measured by return on assets. The study also revealed that at the policy level for implementing working capital financing policy, the study suggests to be conservative by relying more on long-term financing alternatives rather short term ones. The study concluded that it is an important decisional issue in case of working capital financing policy, whether a manager should be aggressive and bear all the hassles of managing current liabilities or remain conservative and let the chance of minimizing cost of capital.

Chongyang Chen (2018) opined that size, the proportion of its assets that are tangible assets, its profit margins, its sales and general administrative expense, its sales growth and its use of fixed claims financing of the firm are the most important factors which affect the working capital policies of firms. A firm's growth in sales effects on requirement of working

capital. He found that macroeconomic factors play less of a role than firm-specific factors do in these decisions and further the working capital policies of bank-dependent and non-bank-dependent firms are significantly different. He concluded that bank-dependent firms tend to hold more amount of current assets and depend more on current liabilities in managing their working capital than less bank-dependent firms do.

Pestonji et al. (2019) investigated the impacts of working capital investment policy and working capital financing policy on firm's performances and the impact of profitability on market value by taking a sample of 68 companies listed in the stock exchange of Thailand covering production sector for the period from 2012 to 2016 by using path analysis. The result revealed a statistically significant positive relationship between working capital investment policy and profitability. However, there are significant negative impacts of working capital financing policy on profitability and market value. The study concluded that companies which adopt conservative working capital investment policy and conservative working capital financing policy can increase their profitability and market value

Different branches of accounting development as and when business world felt present accounting practices inefficient or lacking to address the prevailing problems and challenges. In this series the term corporate finance gained momentum as a concept, then emerged the idea of corporate business form which took care of procurement of fund and to some extent long term investments. During the second world war number of corporate business houses took a quantum leap as well as the existing the business corporates witnessed a substantial growth and experienced that there is paucity of body of knowledge to address day to day business operations. In the late nineteen forties, all these factors necessitated the need to conceptualize and theorize aspects taking care of day to day business operations, contributing to furthering of corporate finance as financial management. There arose a dire need of an umbrella concept that took care of these day to day operations and management issues-leading to the emergence of a new nomenclature - working capital management with added features and functions that took care of day to day business management, in the name of, Thus day to day business management issues related to business operations were covered under aegis of working capital management. Hence, it can be generalized that the journey of working capital management.

Over the period working capital management till date the norms, functions and impact of working capital management are well established and immensely researched considering its immense significance to organizational success and profitability. Notable work has also been carried out by different researchers and scholars in identifying the components of working capital and their importance in business to maintain the liquidity and also to reduce the risks of the organization. In the segment below the research work of different scholars in the area of components of working capital has been analysed:

Components of Working Capital

Right from inception, significant efforts were made to identify the components of working capital and their importance. Impeccable efforts were made to even identify every single component which started from identifying the cash and cash equivalents as discussed below. It deals with all the major areas of working capital management, i.e. management of cash and cash equivalents, management of receivables and management of inventory which have been discussed below:

Cash and Cash Equivalents:

Cash comprises cash on hand and demand deposits with banks. Cash equivalents are short term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes (**IND AS 7**). **Khan and Jain (2013)** define cash as “the ready currency to which all liquid assets can be reduced”. In the narrow sense, cash symbolize currencies and any other financial instruments that is generally accepted as a cash equivalent, such as bank drafts, demand deposits and cheques. In the broader perspective, however, cash includes “near cash” assets - assets that can be readily sold or converted into cash within a shorter time span.

Motives for Holding Cash:

Keynes distinguishes between three motives for holding cash in *The General Theory* as ‘(i) the transactions-motive, i.e. the need of cash for the current transaction of personal and business exchanges; (ii) the precautionary-motive, i.e. the desire for security as to the future

cash equivalent of a certain proportion of total resources; and (iii) the speculative-motive, i.e. the object of securing profit from knowing better than the market what the future will bring forth' (**J. M. Keynes, 1936**). **Von Eije & Westerman, (2002)** pointet out that “cash usually would not be needed if it were not for the market imperfections and resulting transaction costs of urgently needing cash at short notice if the need arises and there is no enough cash”. **J.M Keynes** had suggested only three reasons for holding cash. However, other authors have identified reasons for holding cash are transactional, precautionary, speculative and compensatory reasons. (**Westerfield, Ross, 1996; Von Horne and Wachowicz, 1998**)

Khan and Jain (2013), who indicated that cash can be used to mean actual currency cash on hand or cash equivalents. One of the maiden studies into solving cash management problems in businesses was conducted by **Gentry (1990)** whose recommendation grouped cash-level planning into phases, and further recognised the characteristics of cash inflows and outflows, such as the level and swiftness of cash flows as well as its patterns and steadiness as essential parts that should be included when designing a direct measure of a given cash level. **Brealey and Myers (2006)** also advised that to successfully tackle the problem of short term cash management, it is imperative to ensure consistent guideline and approach to obtain the required level of cash at all times. **Richards and Laughlin (1980)** defined cash conversion cycle to mean the period that funds are engaged in the production, distribution and collection processes, less the period associated with the delays in inflows of receivables. **Lazaridis and Tryfonidis (2006)** also observed a positive relationship between cash conversion cycle and return on assets in a sample of 82 Greek Stock Exchange listed companies.

Efficient management of Liquidity is important for small firms at a time of economic downturn such as the “credit crunch”. Consequently, owner-managers find it more difficult to raise finance for WC due to the higher cost of borrowing, the effect of declining property value on the ability of owner, managers etc. to provide the necessary collateral, and the perception that the banks have become even more risk averse than they were already. (**Michna, A. 2007**). Reduction of working capital while maintaining the optimal level, timely collection of accounts receivable through the creation of periodic overdue reports, maintaining a certain proportion of the various components of working capital based on past experience. (**Das 2008**).

Ramachandran A., & Janakiraman M. (2009) found negative relationship between EBIT and the cash conversion cycle. The study revealed that operational EBIT dictates how to manage the working capital of the firm. Further, it was found that lower gross EBIT was associated with an increase in the accounts payable days. Thus, the study concluded that less profitable firms wait longer to pay their bills, taking advantage of credit period granted by their suppliers. While the positive relationship between average receivable days and firms EBIT suggested that less profitable firms will pursue a decrease of their accounts receivable days in an attempt to reduce their cash gap in the cash conversion cycle.

Uyar A. (2009) examined the relationship between cash conversion cycle with firm size and profitability of 166 firms listed on the Istanbul Stock Exchange for the year 2007. The study found that Retail/wholesale industry has shorter cash conversion cycle than manufacturing industries. Another important result of the study is that the textile industry has the longest cash conversion cycle. There is a significant negative correlation between the length of cash conversion cycle and the firm size. Hence, smaller firms have longer cash conversion cycle. It was also revealed that there is significant negative correlation between the length of cash conversion cycle and the profitability was found.

Mathuva D. (2009) found that a highly significant negative association exists between the time taken by the firms to collect cash from receivables and the profitability. His study was based on a sample of 30 companies on the Nairobi Stock Exchange for the period 1993–2008.

David M. (2010) performed regression analysis on 30 listed companies in Nairobi stocks exchange (NSE) taking data from 1993 to 2008; and come up with the results that (1) there is highly inverse affiliation between average collection period and profitability, (2) there is highly direct affiliation between the inventory conversion period and profitability, and (3) there is highly direct relation between profitability and average payment period. Few researchers are carried out the study of cash conversion cycle and liquidity relationship of Greece's food sector. They concluded that there is positive relationship among short term ratio, average age of inventory, average collection period and cash conversion cycle and negative relationship among cash conversion cycle and average payment period.

Gill A. & Mathur N. (2011) explored that sale growth positively influences cash holding level for the financial period of 2009-2011. The findings also suggest that duality status of the board of directors and its size have reverse effect on the net working capital. By using 83 Iranian companies in Tehran's stock exchange for the period of 2001-2010.

Ray S. (2012) examined the relationship between liquidity and profitability in the manufacturing industry of 311 manufacturing companies over a period of 14 years and examined the effect of various variables on the management of working capital. The study found a strong negative correlation between working capital management metrics and corporate profitability and a negligible negative correlation between company size and net operating profit ratio.

Zakaria Syed. (2014) evaluated the impact of cash management in Iranian banks on their value of stock in 2011 was examined based on the econometrics model and least-square technique. The study revealed a significant and positive impact of the increase in the cash management index on the banks' stock value, meaning that a one percent increase in this index will increase 1.1 percent of the banks' stock value.

John Akinyomi. (2014) examined the relationship between cash management and profitability in the Nigerian manufacturing firms by using Correlation and regression analysis. The results revealed a positive and significant relationship between cash conversion cycle and return on equity the study concluded that efficient cash management affects positively on profitability and suggested future researchers should expand the scope of their studies to include multiple sectors of the economy.

Abioro Matthew. (2013) examined empirically the impact of cash management on the performance of manufacturing companies in Nigeria-A study of Cadbury Nigeria Plc by using both secondary and primary data for data collection and tested using descriptive statistics and correlation coefficients techniques The study found that there is a significant relationship exists between cash management on performance of manufacturing companies in Nigeria. The study concluded that mere availability of cash without proper management does not necessarily translate into favorable performance for manufacturing companies. Hence, need for effective cash management for better performance.

Tanwar S. K. and Shah C. K. (2012) found that among working capital items, cash is considered the most important cash assets which is the criterion of the company's ability to fulfil its obligations. Although cash holding is important for fulfilling the obligations, the idle cash does not add value to the company. Yet, the companies need to maintain cash reserves in order to ensure that timing of cash movement provides the positive cash flow.

So, the optimal level of held reserves is a vital element which allows the companies to enhance their business.

Harford J. & Klasa S. (2014) show that refinancing risk is an important determinant of cash holdings. Consequently, if bank credit becomes more (less) available and the probability of a firm being able to refinance its debt becomes higher (lower), then the firm should hold less (more) cash.

Nwaorgu et al. (2017) examined cash management and performance of listed firms in Nigeria by using descriptive statistics, correlation matrix, and Pool Ordinary Least Square Regression. In the return on assets model, the result showed a significant positive relationship between cash conversion cycle, Cash holding and return on assets of firms while, cash flow and firm size has a negative relationship with the return on assets. In the model of Return on Equity, the variables of firm size, firm growth and cash flow indicated a negative relationship with the variable of firm performance. It also discovered that there exist a positive relationship between the variable of Cash Conversion Cycle and Return on Equity. The study concluded that service firms should adopt policies that enables them sell inventories and collect receivables quickly for improved efficiency and corporate solvency.

Das Somnath. (2017) examined corporate cash management practices of Capitaline corporate data base of Mumbai over the period 2002-2011 and highlighted three factors of a good cash management practices : cash conversion cycle, cash holding and credit score. Influence of one factor to other help organizations manage their corporate cash more appropriately. The study found that due to higher credit score, companies were forced to minimize their cash conversion cycle and helped them maintain lower levels of working capital. The study concluded that Corporate cash management boosts the companies from small to giant in the competitive environment.

Iftikhar, Raja. (2018) analyzed the factors that influence firms' cash holdings and determine whether cash holdings are related to corporate performance and values by taking a sample of KSE listed firms during 2010-2014 using panel data. The study revealed that firms have increased cash holdings because of the trend of higher cash flow uncertainty. It is also shown that with large investment opportunities, the positive relationship between cash holdings and firms' returns on assets, although external investors have highly valued firms since 2008. The study concluded that under a sudden deterioration in the economy, conservative cash holdings could temporarily increase firms' market values, but, in the long

run, a highly conservative liquidity management policy would weaken firms' profitability on assets.

Faque Mustapher (2018) analysed to contribute some insights into cash management practices and how firms can use them to achieve sound financial performance by using a comprehensive literature review on existing theories and cash management practices that are useful in decision making. The study highlighted important theories including tradeoff theory, transaction model, precautionary measures, financial hierarchy, and cash flow theory. Furthermore, management practices such as stochastic cash management model, speeding up cash collections, centralization & decentralization of management, asset portfolio diversification, and cash disbursement. The study concluded that a sound financial performance can be achieved through a hybrid approach and through adaptation and embracing innovations in cash management systems.

Eton et al. (2019) analysed to establish the effect of cash management on financial performance of business entities in Lira district by using a cross sectional study design was adopted and data was collected by use of structured and closed ended questionnaire. The study revealed high abilities are required in managing cash receivable, holding inventories and properly generating sufficient cash for meeting immediate obligations. However, the study found that the aforementioned practices were not sustainable with time due to incompetence in forecasting receipts and payments. The study concluded that cash management has an insignificant effect on financial performance to hire business experts who can use different statistical models to forecast business performance.

Inventory Management:

Inventory management is a systematic approach to sourcing, storing, and selling inventory—both raw materials (components) and finished goods (products). In business terms, inventory management means the right stock, at the right levels, in the right place, at the right time, and at the right cost as well as price. The aim of inventory management is to hold inventories at the lowest possible cost, given the objectives to ensure uninterrupted supplies for ongoing operations. When making decisions on inventory, management has to find a compromise between the different cost components, such as the costs of supplying inventory, inventory-holding costs and costs resulting from insufficient inventories (**Hugo et al., 2002**).

Stevenson B. U. (2010) opined Inventory Management is a framework employed in firms in controlling its interest in inventory. It includes the recording and observing of stock level, estimating future request and settling on when and how to arrange. On the other hand, A study conducted in Kenya by **Naliaka V.W., & Namusonge G. S. (2015)** identified that inventory management affects competitive advantage of manufacturing firms. According to **Li et al., (2006)**, competitive advantage includes capabilities that allow an organization to differentiate itself from its competitors and it is an outcome of important management decisions. In order to run your business smoothly, you must have a well-functioning inventory management system. If you don't have one, it might cause a lot of trouble and start to disturb the execution of orders and day-to-day business.

Inventory control is the activity which organises the availability of items to the customers. It coordinates the purchasing, manufacturing and distribution functions to meet the marketing needs. This role includes the supply of current sales items, new products, consumables; spare parts, obsolescent items and all other supplies. Inventory enables a company to support the customer service, logistic or manufacturing activities in situations where purchasing or manufacturing of the items is not able to satisfy the demand. Lack of satisfaction could arise either because of the speed of purchasing or manufacturing is too protracted, or because quantities cannot be provided without stocks. **(Wild 2002)**.

The well-functioning system is a process of overseeing the flow of items into and out of stock. It's a balance of having just enough products in the warehouse. Effective inventory management keeps the stock costs under control so you can run a successful business. A Number of studies have been conducted to find the determinants of investment in inventories and the process is still going on.

Farzaneh (1997) Presented a mathematical model, to assist the companies in their decision to switch from EOQ to JIT purchasing policy. He defines JIT as "to produce and deliver finished goods just in time to be sold, sub-assemblies just in time to be assembled in goods and purchased material just in time to be transformed into fabricated parts". He highlighted that the EOQ model focuses on minimizing the inventory costs rather than minimizing the inventory. Under the ideal condition, it is economically better off to choose the JIT over the EOQ. **Dave Piasecki (2001)** also focused on inventory model for calculating the optimal order quantity that used the Economic Order Quantity method. He proposed several steps to

follow in implementing the EOQ model. It does not associate the inventory turns with the EOQ formula and fails to mention the profit gain with the quantity is calculated.

Gaur et. al (2005) examined firm-level inventory behaviour among retailing companies by taking a sample of 311 public-listed retail firms during the period 1987–2000 to evaluate the relationship of inventory turnover with gross margin, capital intensity and sales. They observed that inventory turnover for retailing firms was positively related to capital intensity and sales surprise while inversely associated with gross margins. They also suggested models that yield an alternative metric of inventory productivity, adjusted inventory turnover that can be used in study of performance analysis and managerial decision-making.

Lwiki et al (2013) conducted a survey on all the eight sugar manufacturing firms in Kenya. Specific performance indicators were used to see that whether they depend on the level of inventory management practices. The study found that that Return on Equity had a strong correlation with lean inventory system and strategic supplier partnerships. The study concluded that performance of the firm is depends largely on inventory management practices.

S. Singh (2006) Analysed the inventory control practices of single fertilizer company named IFFCO. He statistically examined the inventory system with consumption, sales and other variables along with growth of these variables and inventory patterns. He concluded that an increase in components of inventory lead to an increase in the proportion of inventory in current assets. A special focus was made on stores and spares in order to calculate excess purchases resulting in loss of profit. **Pradeep singh (2008)** also examined the inventory and working capital management of Indian Farmers Fertilizer Cooperative Limited and National Fertilizer Limited and concluded that the overall position of the working capital of IFFCO and NFL is satisfactory. But there is a need for improvement in inventory in case of IFFCO.

Capkun et. al (2009) Statistically analysed the relationship between inventory performance and financial performance in manufacturing companies from a large sample of US-based manufacturing firms over a 26-year period, that is, 1980 to 2005. The study found that a significant relationship existed between inventory performance along with the performance of its components and profitability. Raw material inventory performance was highly correlated to gross profit and operating profit. Work in progress inventory was highly

correlated to gross profit measures while finished goods inventory performance was more correlated with operating profit measures. **Gaur J. & Bhattacharya S. (2011)** also Attempted to study the linkage between the performance of the components of inventory such as raw material, work in progress and finished goods and financial performance of Indian manufacturing firms. The study revealed that finished goods inventory as inversely associated with business performance while raw material inventory and work in progress did not have much effect on same.

Eneje et al (2012) Investigated the impact inventory management on the profitability of brewery firms in Nigeria using a cross sectional data from 1989 to 2008 by using a multiple regression model. The study found that the local variable raw materials inventory management of company has significantly strong and positive relationship with profitability and it influences the profitability of the brewery firms in Nigeria. The study concluded that efficient management of raw material inventory is a major factor to be contained with by Nigerian brewers in enhancing or boosting their profitability. **Nyabwanga R., & Ojera P. (2012)** highlighted the association between inventory management practices and business performance of small scale enterprises, in Kisii Municipality, Kisii County, Kenya. The study found that the major part of the current assets is in the form of inventory, and inefficient management of working capital is one of the major reasons for failures of small scale enterprises. The study revealed that effective inventory management practices enhances business performance. **Sahari et. al (2012)** analysed the relationship between inventory management and firm performance along with capital intensity by taking a sample of 82 construction firms in Malaysia for the period from 2006 to 2010by using regression and correlation analysis methods. The study found that inventory management is positively correlated with firm performance and there is a positive link between inventory management and capital intensity. **Ganas Ioannis & Hyz Alina. (2015) and Edwin S. & Florence M. (2015)** have also evaluated the effects of inventory management on the profitability of a select firms under study. Both the study revealed that there is a significant relationship between inventory management and profitability. The study concluded that firms' must maintain an effective inventory systems which enhances profitability and also reduce the cost of maintaining inventory. **Blinder and Manccini (1991)** opined that maintaining high level of inventory can reduce the cost of potential production process disruptions or the cost of business losses due to material shortages. It can also help to reduce shipping costs and protect against price fluctuations. **Soni A. (2012)** investigated the inventory management

practices followed in the engineering goods industry in Punjab by taking a sample of 11 companies for a period five years from 2004–2009 by using panel data analysis. The study found that inventory constitutes more than half of the current assets and due to excessive stock of inventory companies' inventory turnover is low. Due to increased in sales and favourable market conditions inventory levels have increased. It was also found that the proportionate increase in sales more than inventory. The study concluded that for the success of industry adequate and timely supply of inventory is precedence.

Ruankaew T. and Williams P. (2013) investigated the impact of inventory inaccuracy in the food manufacturing industry plants in Pennsylvania, United States. Data was collected by observing the inventory management process and interviewing inventory management associates at food manufacturing. The study found that inventory inaccuracy can be occurred at various stages during the process such as receiving, the material usage recording process, and cycle counting and as a result it impacts an organization's resources and performance in terms of time, cost, and risk.

Panigrahi A. K. (2013) studied inventory management practices followed by Indian cement companies and its affect on working capital efficiency using a sample of the top five cement companies of India over a period of 10 years from 2001 to 2010. The study also investigated the relationship between profitability and inventory holding period. The study, found that there exist is a negative correlation inventory holding period and profitability.

Madishetti S. & Kibona D. (2013) tried to analyse the association between inventory holding period and profitability, and the impact of inventory management practices of small and medium-sized enterprises on profitability by taking a sample of 26 Tanzanian firms for the period from 2006 to 2011 by using regression analysis. The study found that there is a significant negative relationship exist between inventory holding period and profitability. The study concluded that a well designed and executed inventory management system affects positively to the performance of small and medium-sized enterprises.

Srinivasa R. K. (2014) conducted a study on Inventory Management in Commercial Vehicle Industry in India by taking a sample of five companies. The study found that all the select units in the commercial vehicle industry have significant relationship between Inventory and Sales and Proper management of inventory is important to maintain and

improve the health of an organization. The study concluded that efficient management of inventories will improve the profitability of the organization.

Rashid Aamir (2016) tried to find out the link between inventory management and customer satisfaction in Pakistani manufacturing enterprises' downstream by taking a sample size 160 people, with 100 of them being retailers and 60 being distributors by using a quantitative study design. The study discovered that Inventory management had a considerable impact on customer happiness. The study concluded that chain members needed to use improved and superior information systems for better inventory management and well-coordinated customer collaboration, resulting in higher customer satisfaction.

Daniel et al. (2018) evaluated the impact of inventory management practises on a company's competitiveness and performance by taking a sample of 188 micro and small enterprises in the manufacturing sub-sector with the help of structural equation modelling to examine the correlations and hypotheses presented in the conceptual framework. The study found that efficient inventory management practices gives competitive advantage and better performance. It was also revealed that competitive advantage can have a direct and positive impact on the performance of an organisation. The study concluded that Policymakers, universities, NGOs, and any other interested parties involved in assisting micro and small enterprises should seek to provide the required skills and resources to encourage efficient inventory management practices, which will improve competitiveness and organisational performance.

Elsa George (2019) analysed whether the inventory management has any direct impact on the net profits of the company for the period of five years from 2011-2015 with the help of tools such as ratio analysis, trend analysis and correlation analysis. The study found that inventory holding period has direct relationship with the net profits of the company. The study concluded that an efficient inventory management system not only lowering overhead costs like transporting and holding cost as well as the cost of replenishing goods but also increasing the company's profitability.

Accounts Receivable Management:

Accounts Receivable Management mainly deals with planning and controlling of debt owed to business resulting from credit sales. The main objective of Accounts Receivable Management is to optimize the return on investment in debtors. As large amount is blocked up in receivables enhance bad debts and collection costs. The study of the effect of receivables management on corporate profitability has become necessary because many organizations have fallen victims of premature death. This is as a result of inadequate attention paid receivables. Receivable management is very important for all business be it small or large. The extent to which firms manage their receivables go a long way to the level of their profit. This means the customers who have not yet made payment for goods and services which the firms have provided. Profit may only be called real profit after the receivables are turned into cash. The management of accounts receivable is largely influenced by the credit policy and collection procedure. Study is deemed necessary because of the frequency of illiquidity problems in corporates in India in recent times owing to improper management of accounts receivables.

Accounts receivable management includes establishing a credit and collections policy. Credit policy consists of four variables: credit period, discounts given for early payment, credit standards and collection policy. **Chambers and Lacey (2011)** opined that there are three primary issues in the management of accounts receivable: to whom to extend credit, what the terms of the credit should be, and what procedure should be used to collect the money. The major decision regarding accounts receivable is the determination of the amount and terms of credit to extend to customers.

Accounts receivable represents a sizable percentage of most firms' assets. Investments in accounts receivable, particularly for manufacturing companies, represent a significant part of short-term financial management. **Grzegorz M. M. (2008)** in his study a portfolio management approach in accounts receivable management used portfolio management theory to determine the level of accounts receivable in a firm. He found out that there was an increase in level of accounts receivable in a firm increase both net working capital and cost of holding and managing account receivables.

Ksenija D. M. (2013) investigated how public companies listed at the regulated market in the republic of Serbia manage their accounts receivable during recession times taking a sample of 108 firms for a period from 2008 to 2011. The short-term effects are tested. The study found that accounts receivables and two dependent variables on profitability i.e. return on total asset and operating profit margin, have a positive but not significant relationship exist. The study suggested that the impact of receivables on firm's profitability is changing in times of crisis.

Singh J. P. & Pandey S. (2008) had an attempt to study the working capital components and its impact on profitability of Hildalco industries limited for a period 1990 to 2007. The study found that receivable turnover ratio had statistically significant impact on the profitability of Hildalco industries limited. **Mekonnen M. (2011)** also found that there is statistically significant negative relationship between profitability and average collection period. These studies revealed that firms' profitability can be improved by reducing the Average collection period. The study concluded that the less the time it takes for customers to pay their bills, the more cash is available to replenish inventory and hence leads to high profitability of the firm.

Adusei Charles (2017) studied how Zoomlion Company Limited manages its accounts receivables by using multiple linear regression analysis, Kendall coefficient of concordance and One sample t-test. The study found that there is effective credit control systems by the company but due to poor monitoring and lack of effective follow up measures were the key challenges to debt management. The study concluded that credit policies be adhered to more strictly, that effective recovery techniques be pursued more aggressively, and that best practices in accounts receivables management be prescribed.

Divya J. and Simran J. (2017) undergone a study on effect of receivables management on profitability by taking a sample of commercial vehicle industry in India. This study empirically examines the effect of efficiency of receivables management, measured by debtor's turnover ratio, in the commercial vehicle industry in India on the firm's profitability. Profitability was measured using Return on Capital Employed. The study found that efficient receivables management have significant impact on profitability.

Abuhommous, Alaa Adden & Mashoka, Tareq. (2017) studied the trade credit policy of firms for a sample of Jordanian listed firms in the period from 2000 to 2014 to tests whether the accounts receivable decisions follow a model of partial adjustment. The study found that short term finance, internal cash flow, positive sales growth, product quality, and profitability are playing an important role in the trade credit policy. The study recommends that firms must pay attention to their relationship with customers because they represent an important investment opportunity. The study concluded that firms should maintain close relationships with banks because it influences their trade credit policy.

Kakeeto, F. et al. (2018) This study sought to explore the effect of Accounts Receivable Management on Organizational Profitability by using a descriptive research design and a case study strategy and sample size of 181 was taken from the population of 345 staff. Likert type scale questionnaires were used to collect data from the respondents in terms of the two variables. The findings revealed that accounts receivable management positively affected organizational profitability The study concluded that, accounts receivable management as practiced by Gumutindo Coffee Cooperative Enterprise Limited was adequate. Recommendations were made to better enhance accounts receivable management in Gumutindo Coffee Cooperative Enterprise Limited.

Acikgoz, Ali & Demirkol, Celal. (2019) examined a set short or long-term bank credit consequence on accounts receivable of the Forestry Products Sector in Turkey. The study found that time constraints of bank credits have both significant roles on the level of account receivables. However, the significance is barely higher for the effect of long-term bank credit. The study concluded that the businesses of the forestry products sector in Turkey should also be sensitive primarily on the level of their long-term bank credit along with the level of short-term bank credit amongst the liabilities in balancing the accumulation of accounts receivable. Thus, businesses of the sector would better consider the level of bank credits in the conditions of risky, non-performing or accumulating accounts receivable.

During all these years researchers and scholars have consistently worked upon defining and determining the different components of working capital. Cash and cash equivalents which we are using today as per Accounting Standards is the result of continuous efforts made by scholars and researchers as discussed above. Besides, inventory and receivables also are recognized as significant components and are in the focus of the study. Working capital management has intrigued scholars and researchers over the years as being significant in financial management which has been discussed in the next segment.

Working Capital Management

Owing to industrial revolution, technological advancements, business competition a paradigm shift was observed in the understanding and functionality of Working Capital Management Practices. Working capital management refers to a company's managerial accounting strategy designed to monitor and utilize the two components of working capital, current assets and current liabilities, to ensure the most financially efficient operation of the company. The primary purpose of working capital management is to make sure the company always maintains sufficient cash flow to meet its short-term operating costs and short-term debt obligations.

Working Capital Management initiatives release working capital and increase liquidity which companies can use for strategic investments or debt reduction. Unfortunately, many companies lack a systematic approach to managing their working capital and treat the issue in an ad-hoc and decentralised way, as such they find it hard to optimise working capital. However, as the magnitude of assets under management grew and competition intensified, The finance function in many organizations tended to expand to the extent that financial management was necessarily affected with not just paying bills, but focusing on the entire range of funds i.e. finance extended so that attention was paid to the origins of all financial sources contain in the balance sheet asset side. When the Size of the Business continued to grow and as competition intensified, the finance function again tended to expand as it was not only concerned with paying bills and all sources of financing, but also how all the financial resources of the company are invested. This meant that the finance function had finally reached the point of being involved in the balance sheet of the company.

As per companies act auditing of corporate have become mandatory which is to be done by independent chartered accountant which have aided to the management of working capital. Auditors have started commenting on various aspects related to working capital like reserves for accounts receivables, the quality of inventory and efficiency of working capital in their report to management and stake holders. Financial ratios began to be stressed, especially the current and the quick ratio –these were widely used as measures of working capital adequacy. **Beranek (1988)** stated that the commercial banks had also contributed to working capital management as prior to 1920, they were largely advancing working capital loans.

Smith K. V. (1973) and **Bansal S. P. (1999)** in their studies conducted in different time periods, using different approaches focused on management of current assets and current liabilities for maintaining the efficient working capital management practices. The former proposed eight distinct approaches to working capital management: the first three - aggregate guidelines, constraints set and cost balancing are partial models; two other approaches - probability models and portfolio theory, emphasize future uncertainty and interdependencies, the remaining three approaches - mathematical programming, multiple goals and financial simulation have a wider systematic focus while the latter on the three main components -cash, receivables and inventories. **Jain P. K. and Yadav S. S. (2007)** studied the different trends of working capital management in 137 public sector enterprises by contextualizing the relationship between current assets and current liabilities, the financing of working capital, and ways of dealing with excess or shortage of working capital. The study concluded that the sample Public Sector Enterprises have been suffering from long duration of net working capital cycle.

M. Beaumont Smith and E. Begemann (1997) analysed the relationship between working capital (a liquidity measure) and return on investment (a measure of profitability) by using chi-square analysis and stepwise forward regression. The statistical test results showed that a traditional working capital leverage ratio, current liabilities divided by funds flow, displayed the greatest associations with return on investment. It revealed that the current and quick ratios have an insignificant associations whilst the comprehensive liquidity index, indicated significant associations with return on investment.

Meredith (1986) defined working capital management as one of those aspects related to financial management, which is concerned with all management areas regarding finance – not only sources and uses of finance in the company, but also the financial implications of investment, production, marketing or personnel decisions and the total performance of the company.

Zaman M. (1991) examined the working capital management practices of public sector jute companies in Bangladesh and found that low demand for jute products and strong competition in the international market, inadequate inventory management policies, collection policies Poor and ineffective cash policies affect working capital management. The author formulated a long-term and flexible working capital management model that would improve the working capital management practices of the jute industry and other public companies as a whole. **Soenen et. al (1993)** examined the effect of working capital management on profitability by taking a sample of 20 different industries during period 1970 – 1989 by analysing effect of cash conversion cycle on profitability and observed that it is too often a neglected part of finance management in many companies. They concluded that shorter the net trade cycle, higher will be the profitability and vice versa. The results of this study coincided with the results from **Shin H.H. and Soenen L. (1998)** examined the efficiency of working capital management and corporate profitability by using a sample of 58,985 firm and opined that shorter trade cycle creates higher profits. **Lambrix R. J. & Singhvi S.S. (1979)** focused on optimization of investment in working capital management and adopted working capital cycle approach further suggested that cash flows can be improved by efficient inventory management. **Ganesan (2007)** evaluated telecommunication equipment industry to study the effectiveness of working capital management by taking a sample 349 telecommunication equipment companies covering the period 2001 to 2007 analysed with the help of statistical tools like correlation, regression analyses and Analysis of variance. The study concluded that working capital cycle affect negatively to the profitability of the firm and had no impact on the transportability of firms.

Weinraub H J and Visscher S (1998) studied the different strategies employed by companies to manage their working capital (aggressive, moderate or conservative) across different industries. The seeks to found out whether industries that tend to have aggressive investment policies also follow aggressive financing strategies or not and also the stability of working capital policies over time. The study revealed that different industries follow

significantly different strategies i.e. aggressive or conservative, in their working capital management, and such strategies remain stable over the period of time. **Taghizadeh K. V. et al. (2012)** investigated the impact of working capital management policies (aggressive and conservative policies) on the firms' profitability and value taking a sample of 28 Iranian Companies listed on Tehran Stock Exchange for a period of 5 years from 2005 to 2009. The results found that a conservative investment policy and aggressive financing policy has a negative impact on a firm's profitability and value. The study concluded that firm Size and firm Growth has a positive impact on the firm's profitability and value, while firm leverage show negative impact.

Ahmed Habib (1998) studied that on including the interest rate money loses its predictive power on output. He proposed a rational expectations model for those firms whose production decisions requires debt finance as working capital. He concluded that adverse fluctuations of monetary policy affects the interest rate and the supply side. **Pathania Kulwant Singh (1999)** profound the bank to focus on maximum profitability and optimal use of available liquid funds, while at the same time ensuring that cash is kept in moderation without affecting the bank's overall liquidity needs. For creating a strong financial base of the bank, equity capital or any other long term source of finance should be used for financing permanent working capital, whereas short term sources of finance should be used for financing temporary working capital. The study found that the working capital management practices followed by the bank is satisfactory but also suggested future scope for improvement. **Flannery M. and Lockhart B. (2009)** suggested that the trade-off does not exist for financially constrained firms. Consequently, the effect of a positive or negative shock to the availability of bank credit on firms' cash holdings is an open issue. **Sufi A. (2009)** examined how the trade-off between a firm's use of bank lines of credit and its cash holdings varies as its operating cash flow varies. The study concluded that there is a trade-off between a firm's use of revolving lines of credit and cash holdings. **Filbeck Greg and Krueger Thomas M. (2005)** examined evaluations of working capital and working capital management performance on share prices and illustrated the influence of macroeconomic factors, interest rates, and competition on working capital management. The results of this study coincided with the results from **Chittenden et al (1998)**. It had also shown that working capital management practices have a significant impact on a company's liquidity and profitability.

Filbeck and Krueger (2005) conducted a study analyzing CFO magazine's annual reports on working capital management to discover the differences in working capital management between industries. The study found that how different industries have different working capital requirements and how different working capital metrics differ from industry to industry.

Maness T. S., & Zietlow J. T. (2005) raised the relationship between fixed asset management and working capital management, stating that fixed asset management falls within the purview of capital planning, while working capital management is an ongoing function that controls the flow of funds circulating in the company in one way or another.

Anvar et al (2007) investigated relationship between working capital management and corporate performance using panel data method of companies accepted in Malaya Stock Exchange during 1996-2006. Cash conversion cycle is used as evaluating criterion of working capital management to show meaningful relationship between cash conversion cycle and corporate profitability. **Terual and Martinez-Solano (2007)** examined the empirical relationship of both the variables by taking a sample of about 8872 small and medium sized Spanish firms for the period from 1996 to 2002. The study found that there is a negative relationship between the profitability of small and medium sized firms' and the average collection period and inventory holding period. It failed to provide the precise impact of accounts payable period on return on assets. **Samiloglu F. and Demirgunes K. (2008)** proposed statistically significant relationship between the firm's profitability and the components of cash conversion cycle at length on select Istanbul Stock Exchange listed manufacturing firms during 1989 and 2007 using multiple regression model. Empirical findings of the study showed that accounts receivable period, inventory period and leverage affect firm's profitability negatively, while growth (in sales) affects firm's profitability positively. Similar assertions were propounded by **Singh and Pandey (2008)** who analysed 131 Athenian firms and found that the firms' can increase their profitability by managing cash conversion cycles efficiently and, maintaining the different components of working capital viz., account receivables, account payables, inventories at an optimum level. **Zariyawati et al. (2009)** using pooled OLS regression of a panel of Malaysian firm over the period 1997–2006 also indicated a negative relationship between working capital proxy and profitability leading to an inference that profitability can be increased by decreasing the length of cash conversion period. **Sen and Oruc (2009)** investigated the efficiency of

working capital management and its relationship with profitability of 49 corporations listed on Istanbul stock market exchange for the period from 1993 to 2007. The study found that the shorter cash conversion cycle and aggressive work capital management policy leads to increase in profitability. **Gill et al (2010)** examined the relationship between Working Capital Management and Profitability in United States by taking a sample of 88 American firms listed on New York stock exchange during period of 3 years from 2005 to 2007 and found that there is a significant relationship between the cash conversion cycle and profitability. **Mekonnen, M. (2011)** investigated the impact of working capital management on firms' profitability by taking a sample of thirteen companies for the period of five years (2005-2009) with the total of 65 observations by using Pearson's correlation and OLS regression analysis. The study found that there is statistical significance negative relationship between profitability and working capital management, significant negative relationship between liquidity and profitability, and there is strongly significance positive relationship between size and firm profitability, there is no statistically significance negative relationship between debt used and firms profitability. The study concluded that the managers can create profits or value for their companies and share holders by handling correctly the cash conversion cycle and keeping each different component of working capital to a possible optimum level. **Thiago G. et al. (2018)** examined the working capital management measured by cash conversion cycle and how the components of the cash conversion cycle influence the profitability of world leading beer brewery firms. The study used multiple regression equations to a cross sectional time series data of five world leading beer brewery firms after ensuring that the data are stationary and co-integrated. The study found that working capital management as represented by the cash conversion cycle, sales growth and shorter average collection period impacts on beer brewery firms' profitability. **Huynh Phuong Dong and Jyh-tay Su (2010)** investigated the relationship existing between profitability, the cash conversion cycle and its components for listed firms in Vietnam stock market for the period from 2006 to 2008. It was found that there is a strong negative relationship between profitability, measured through gross operating profit, and the cash conversion cycle i.e. increase in cash conversion cycle result into decline in profitability of firm. The study concluded that managers can create positive shareholder value by managing the proper cash conversion cycle and keeping each component at an optimal level. **Tauringana V. and Afrifa G. A. (2013)** analysed on the basis of 133

companies' panel data that accounts receivable and accounts payable management is important for profitability but inventory and cash conversion cycle are not so important.

Şamiloğlu and Demirgüneş (2008) used a sample consisting of 5,843 Firm / quarter data of Istanbul Stock Exchange listed manufacturing firms period 1998-2007 by using multiple regression model. The study found that accounts receivables period, inventory period and leverage affect negatively to the firms' profitability, while growth (in sales) affected positively to firms, profitability. **Nazir and Afza (2008)** used external and internal factors to explore the determinants of working capital requirements of a firm. Internal factors were operating cycle, operating cash flows, leverage, size, return on assets, Tobin's q and growth while industry dummy and level of economic activity as external macroeconomic factors. The study found that operating cycle, leverage, return on assets and Tobin's q had an influence on the working capital requirements significantly. The study concluded that different industries are having different working capital requirements and hence following different working capital management practices. **Oghloo and Jence (2008)** examined the effect working capital management on corporate profitability in Turkey for during a period 1998-2007 by using regression method and accounting variables for evaluating working capital management. The study found that average collection period, inventory turnover and leverage were affecting negatively on corporate profitability, but corporate size affects positively on profitability.

Narender et. al (2008) examined the determinants of working capital management in the cement industry in India using net liquidity and working capital needs as investment measures in the management of working capital in the industry. The study took into account factors such as size, business metric, company performance, company growth, leverage, and operating cash flow. The study found that the size of the company affects its net needs for cash and working capital.

Olufemi I. Falope and Olubanjo T. Ajilore (2009) used a sample of 50 Nigerian quoted non-financial firms for the period 1996 -2005 using panel data econometrics in a pooled regression where time-series and cross sectional observations were combined and estimated. The study found a significant negative relationship between net operating profitability and the average collection period, inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange.

The study concluded that there is no significant variations in the effects of working capital management between large and small firms.

Nobanee et al (2010) recommend that keeping the working capital components at their optimum levels is a better tool for increasing profitability than the focus on cash conversion cycle. This position is corroborated by the findings of **Hao et al (2009)** which show that maximum operating shortfall is a better predictor of the amount of cash holding a firm requires to remain profitable than the cash conversion cycle. Nobanee et al (2009) also contradicts a priori expectation for inventory conversion period, indicating that shortening the inventory holding period negatively affect the profitability. However, this may only be possible for firms dealing in fast moving inventories.

Singh and Pandey (2008) studied the relationship of working capital management with profitability for Hindalco Industries Ltd. for the period 1990–2007 and found that current ratio, liquid ratio, receivables turnover ratio, and working capital to total assets ratio had statistically significant impact on the profitability of the firm. **Dong H. P. (2010)** analysed the effect of firms' profitability and liquidity on working capital management of the companies listed in stock market of Vietnam during a period 2006-2008 and found that there is the variables taken under study were negatively correlated and the profitability is affecting due to increase in cash conversion cycle. He also found that profitability can be increased by decrease in accounts receivable period and inventory holding period. **H. Jamal Zubairi (2010)** studied Pakistan automobile sector and checked the impact of Working Capital Management and capital structure on profitability of the firm. To measure the profitability they used earnings before interest and taxes. Panel data set was analyzed using regression. The results showed that profitability variations due to the above mentioned four variables give three quarters of total variation. They also reported positive relation between profitability and size of the firm. **Raheman et al. (2010)** investigated the impact of working capital management on firms performance in Pakistan for the period 1998 to 2007 . The results indicate that the cash conversion cycle, net trade significantly affecting the performance of the firm. The study also concludes that the firm in in Pakistan are following conservative working capital management policy and the firm are needed to concentrate and improve their collection and payment policy. **Raheman and Afza (2010)** analysed the

working capital management practices and their impact on corporate performance of a sample of 204 manufacturing firms of Karachi Stock Exchange for the period 1998–2007 and found cash conversion cycle, net trade cycle, and inventory turnover affecting the performance of the firms significantly. **Charitou et al. (2010)** investigated the effect of working capital Management on firms' profitability by taking sample of firms listed in Cyprus stock exchange during the period 1998 – 2007 by using multivariate regression analysis. They found that the cash conversion cycle and all components of working capital have association with profitability of the firm. **Gill et. al (2010)** examined the relationship between working capital management and profitability taking sample of 88 American firms listed on New York Stock Exchange during 2005 and 2007 and revealed significant relationship between the cash conversion cycle and profitability measured on gross operating profits. The study concluded that profits can be created by proper handling of cash conversion cycle with optimal level of accounts receivable. **Karaduman et al (2011)** examined the relationship of Working Capital Management and profitability by taking sample of 127 non financial companies listed at Istanbul Stock Exchange with data of five years and cash conversion cycle was used as a measure of working capital management. They concluded that there is efficient management of cash conversion cycle can increase the profitability of the firms.

Valipour S. and Jamshidi H. (2012) found that there are positive relationship between performance index, efficient index, and utilization index with the efficiency of the asset. However, the results show that cash conversion cycle inversely significant relationship on efficiency of the assets. They concluded that index developed by Bhattacharya is more promising as a proper indexes and more significant in determining the working capital management compared to the conventional one.

Kartik C. N. (2011) examined the influence of working capital management on corporate profitability taking a sample of National Thermal Power Corporation Ltd. during the period of 10 years i.e. from 1999-2000 to 2008-09 using pearson's coefficient of correlation and multiple regression analysis and ratios relating to working capital management and the important measure relating to profitability ratio i.e. return on investment, have been computed and applied. An attempt has also been undertaken for measuring the sensitivity of return on investment to changes in the level of working capital, working capital leverage has been computed and applied. It concluded that the increase in the profitability of the company is less than the proportion to decrease in working capital throughout the study period.

Meryem Bellouma (2011) provided the empirical evidence about the effects of working capital management on the profitability of 386 Tunisian export small and medium enterprises for the period from 2001 to 2008. The results of fixed and random effects models showed a negative relationship between corporate profitability and the different working capital components. This revealed that Tunisian export small and medium enterprises should shorten their cash conversion cycle by reducing the number of days of accounts receivable and inventories to increase their profitability.

Viskari et. al (2011) working capital has a necessary part in term of short-term investment and cash flow. For their research they studied various components of management of Working Capital including, inventories, accounts receivable and account payables. These all components of management of Working Capital have positive relation with the productivity of the firms.

Haq et al (2011) conducted a study in Pakistan on Working Capital Management of cement industry by taking a sample of 14 cement firms listed on Karachi Stock Exchange during the period 2004-2009 by using eight accounting ratios (CR, QR, CATA ratio, CATS, cash turnover ratio, ITO ratio, DTO, creditor turnover ratio) as independent variables and ROI as the dependent variable. They concluded that there is moderate relationship between Working Capital Management and profitability of firm.

Baveld M. B. (2012) investigated how public listed firms in the Netherlands manage their working capital by taking a sample of 37 firms which are among the fifty largest companies in the Netherlands by comparing the non-crisis period of 2004-2006 and the financial crisis of 2008 and 2009. This comparison investigates whether companies have to change their non-crisis working capital policies when the economy is into a recession. The results indicated that, in crisis periods, firms do not need to change their working capital policy concerning accounts payables and inventory, if their goal is to enhance profit. For the working capital policy managing accounts receivables this is not the case. This is because during a crisis accounts receivables have a positive effect on a firm's profitability of the next year. These results are on short-term basis. On the long-term, benefits of aiding customers during crisis periods are likely to grow, because future sales will still be there. Also the risks taken by these aiding firms are relatively low and for large reputable firms it is also relatively cheap.

J.U.J Onwumere et al. (2012) investigated the impact of working capital policies of Nigerian firms on profitability for the period from 2004 to 2008. The study revealed that aggressive investment working capital policies of Nigerian firms have a positive significant impact on profitability while aggressive financing policies have a positive non-significant impact on profitability. The study concluded that appropriate management of working capital is therefore essential if the firms wants to achieve their objective of improved profitability and value creation for shareholders.

Matarneh B. (2012) analysed the problem of working capital management of Small Scale Industries in Rajasthan for a period of five years. The study found that the working capital management is to decide the pattern of financing of the current assets, which is one of the biggest problems of working capital management. The problem of managing working capital in small industries is not new, it is prevalent throughout India. SSI units have a low capital base with less investment in fixed assets. Without the support of the government and the cooperation of financial institutions, solving the problem of managing the working capital of the CSIs of Rajasthan in particular and India in general proved to be very difficult.

Chandra H. and Selvaraj A. (2012) analysed the effective utilization of working capital management of selected Steel Companies in India for the period from 2000-01 to 2009-10 based on working capital, operating cycle and cash conversion cycle. Cash conversion cycle were measured by using the Kieschnick model. The study concluded that the size of a company plays a important role in determining the efficient working capital management. The working capital ratios across the small, medium and large sized steel companies have played a important role in determining the working capital management of the selected Indian steel companies.

Gill et. al (2010) and **Mathuva (2009)** suggested a positive relationship between inventory turnover in days and profitability. Maintaining sufficiently high inventory levels reduces costs of possible interruptions in the production process and loss of doing business due to scarcity of products, while investing too much in inventories unnecessarily blocks the funds in working capital that could be invested in revenue generating activities. Since inventory determines the level of activities in a company, managing it strategically contributes to profitability (**Brigham and Houston, 2003**). The key to manage inventory of a business is to know how quickly firm's overall stock is moving, how long each item of stocks its on

shelves before being sold. Managing inventory is a juggling act. Excessive stocks can place a heavy burden on the cash resources of a business. Insufficient stocks can result in lost sales, delays for customers etc. The key issue for a business is to identify the fast and slow stock movers with the objectives of establishing optimum stock levels for each category and, thereby, minimize the cash tied up in stocks. The stock sitting on shelves for long periods of time ties up money which may reduce the profitability of firms.

Kushalappa S. and Kunder Sharmila (2012) examined the relationship between working capital management policies and profitability of the thirteen listed manufacturing firms in Ghana. The study found that there is significant negative relationship between profitability and accounts receivable days and further Profitability is positively related with cash conversion cycle, current assets ratio and current asset turnover. Similar study is done by **Akoto et. al (2013)** by taking a sample of thirteen listed manufacturing firms in Ghana and arrived the similar conclusion. Their study is extended by **Samson et. al (2012)** by taking a sample of 30 SME's of Nigeria during 2009 and concluded that managers can create wealth for the share holders by reducing accounts receivable period and inventory holding period and the firm's profitability could be improved by reducing the cash conversion cycle. **Alipour M. (2011)** has taken the sample of the firms listed at Tehran stock exchange also concluded that value of the share holders' can be created by reducing accounts receivable period and inventory holding period.

Richard et.al (2013) examined the effects on working capital management on profitability in manufacturing firms in Ghana by using account receivable days, account payable days, cash conversion cycle, current assets ratio, size and current asset turnover as an independent variable and return on assets as present for profitability for the dependent variables and found that problem of liquidity can be solved by efficient management of components of working capital.

Kaur and Singh (2013) examined the effect of working capital management on profitability by taking a sample of 164 manufacturing companies from 19 different industries listed in Bombay stock exchange during period 2000 to 2010 data and found that there is direct relationship between working capital management and productivity of firm and inventory

holding period and accounts payable period were negatively correlated with each other. They concluded that working capital management on profitability are significantly.

Ramiah et. al. (2014) their results confirm that working capital management (involving cash, inventory, accounts receivable, accounts payable and risk) is a neglected area as 60% of the respondents of their survey emphasise the importance of working capital management. Fundamental factors, such as size, foreign sales and industry, are important when managing working capital, whereas other factors, such as performance, age and education, have negligible contribution. One possible explanation for performance is that corporate treasurers in poor performing firms have a tendency to mimic the working capital structure of successful firms. Education and age are not important, as it requires a lot of experience to be appointed as a corporate treasurer.

P. R. Halani (2014) evaluated the impact of fluctuation in fixed assets, current assets and sales on effectiveness and profitability of working capital and liquidity position of the select companies by using ratio analysis as accounting tool and descriptive statistics and ANOVA test as statistical tools. The study found that there is a significant difference in current ratio and quick ratio of select companies under study. The study concluded that the company must structure its liquidity position so that it can meet its short-term obligations as they mature without relying on the sale of shares.

Ntui P. et al (2014) investigated the effect of working capital management on company profitability by taking a sample of three manufacturing companies listed on the Dar es Salaam Stock Exchange for a period of ten years (2002-2012) with the total of 30 observations by using Pearson's correlation and Regression analysis (Ordinary Least Square). The study found that there exists a positive relationship between cash conversion cycle and profitability of the firm, there is a negative relationship between liquidity and profitability, there exists a highly significant negative relationship between average collection period and profitability, there is a highly significant positive relationship between average payment period and profitability and there exists a highly significant negative relationship between inventory turnover in days and profitability. The study found that by maintain sufficiently low inventory levels reduce the cost of storing the inventory which results to higher profitability. The study concluded that increase in cash conversion cycle will increase the profitability of the firm.

Ulius E., Michael G. and Jussi N. (2014) examined the role of business cycles on the working capital–profitability relationship using a sample of Finnish listed companies over an 18-year period. The study found the impact of business cycle on the working capital–profitability relationship is more pronounced in economic downturns relative to economic booms. It also found the significance of inventory holding period and average collection period during periods of economic downturns. The study concluded that efficient working capital management has significant impact on profitability hence should be included in firms' financial planning.

Jayarathne (2014) on the impact of the working capital management on profitability and used Sri Lanka listed company as sample. He summarized on his results that the liberal credit policy would be influencing to the profitability of the company and suggestet that manufacturing companies can make more profit if they can manage the working capital management efficiently. **Aktas et. al. (2015)** also found that there is a significant relationship between working capital management and firm performance and concluded that firm's performance can be improved by efficient working capital management practices.

Basman Al Dalayeen (2017) examined the impact of working capital management on the profitability of selected real estate companies in Jordan. ROCE is used as dependent proxy variable for profitability and current ratio, debtors turnover ratio, inventory are used as independent proxy variable for substantiating the impact of working capital management on the profitability of companies. The results of data analysis found that there is a significant impact of working capital management on the profitability of selected real estate companies.

Korent D. & Orsag S. (2018) Analysed Impact of working capital management on profitability of Croatian software companies using descriptive and correlation as well as panel regression analysis for six-year period (2008-2013). The study found that there is existence of a nonlinear, concave quadratic relationship between the net working capital and return on assets. It revealed that the select companies under study have optimal level of net working capital which balances costs and benefits and maximizes. The study concluded that characteristics of the company and macroeconomic conditions working capital management significantly affects the profitability of Croatian software firms.

Pinku P. and Paroma M. (2018) examined the impact of working capital management on profitability of the firms of Indian steel industry for the period of 17 years from 2000 to 2016 by using panel data regression. The study taking into consideration four independent variables, Current ratio, Quick ratio, Debtors turnover ratio and Finished goods turnover ratio which act as the indicators of working capital use in the industry and return on total assets which represents the profitability of the industry and acts as a dependent variable to develop an empirical model in order to establish relationship between working capital management and profitability of the steel industry in India. The study discovered that there is a significant impact of working capital management on profitability of the firms of Indian steel industry.

Umar N. K. et al. (2019) Aimed to provide a review of the existing literature available on working capital and working capital management using 187 articles selected from referred journals, books and international conferences for the period 1980-2017 using a systematic literature review methodology. The study revealed that much of the focus in the existing literature is paid on investigating the empirical relationship between working capital management and firm performance. It found that The behavioural aspects, qualitative studies, survey studies and systematic theory development have been ignored in most of the prior studies. It suggested that these areas have a broader scope for future research. The study concluded that the reviews provide various emerging trends that may be considered in future research for providing a deep understanding of working capital management.

Indian Printing Industry:

Today Printing industry changes a lot and those are great changes – new technologies are coming into it and its surroundings; technological progress and innovations are changing the whole printing industry. The printing industry is one of the top five economic contributors in many countries (**T. Hall, 2008**). A wide range of products are produced in the printing industry. In addition to magazines, books, and some small newspapers, other examples of printed products include direct mail, labels, manuals, and marketing material. Less obvious printed goods include memo pads, business order forms, checks, maps, T-shirts, and packaging. The industry also includes establishments that provide quick printing of documents for the consumer or support services, such as prepress, embossing, binding, finishing, and mailing.

Producers are doing everything to increase efficiency of their machines, shorten the time of preparing materials for print and as a result to decrease cost of the whole procedure. On the other hand, all the producers take care of the quality of their products, working conditions and natural environment. Businesses will always be in need of quality printing products, as well as the expertise and advice that they can expect with doing business with a professional print company (**Minuteman press, 2016**). All those changes in the printing sector are also determined by its whole surrounding. Innovation has long been recognized as a key element of economic development. Today there is a great need for understanding the state of the printing industry which is playing very important role in growth and development of other industry. This is due to the digitalization and digital transformation and their effect on the consumption of printed products and innovations in printing production. No organization can opt out from the digital transformation taking place at the moment (**Viljakainen, 2015**). Companies need to build their own business strategy for digitization – how to react and how to get benefits from it and what are the concrete actions they should take.

According to **Vehmas et al. (2011)**, printing houses have not been willing to move to completely new business areas due to large investments and Research & Development needed for old printing machines to produce totally new products and the risk is seen to be too high to enter new customer markets.

To be successful, novel innovative solutions must take into account opportunities provided by new technology, but they cannot lose sight of the customers and users (**Thomke and von Hippel, 2002**). A report by **Aistrup (2009)** states that collaboration is important as companies cannot handle the cascade of complex knowledge and they should cooperate in complementary innovation networks to expand value rather than simply improving their existing value share.

The commercial print industry is experiencing a reduction in the use of printed material as more and more information is being distributed via electronic means through the internet and email. Consumers are increasingly favoring digital alternatives, such as online media, over printed materials. There has also been a shift towards shorter print runs with less volume and tighter deadlines. Additionally, there has been an increase in demand for paper finishes or laminates such as soft touch on printed material. As a result, commercial printers have been continuing to invest in new technology and equipment to remain competitive

Paul J. Beckert (2019).

Pew research (2010) presents an analytical and comparative account of print industry in the world and in India and came up with a startling finding that out of the top 100 dailies according to circulation, 19 are from India. While newspaper circulation declined by 9.2% in USA, it has increased by a phenomenal 16% in India over 2000-2010. The advertising revenues have gone down by 25% in the American print media industry while they have increased 13% in India. And this is when the newspaper reach is only around 38% of Indian population. With growing literacy, the newspaper circulation is slated to grow by 8.7 percent between 2012 and 2017.

Kumar S. and Sharma V. V. S. (2010) in his study relates the escalation in printing industry to the burgeoning middle class and its preference of the regional, vernacular press and media. The printing industry operates in a dynamic environment in which the needs and preferences of readers are constantly changing. In such an environment, it is essential that publishers are constantly innovative and also interact and engage with their readers in real time. There are many options that flexible players could benefit from as they can adapt to the changing environment. Moving forward, we can see an expansion into regional markets and a consolidation into established markets, with only the fittest players surviving the changing environment.

In the 1990s, Indian Newspapers experienced a major make over in order to compete with the attractive and colorful magazines and Satellite Television channels which began the era of commercialization and information revolution. The new face of Newspapers was more attractive and colorful features related to latest trends, lifestyle and entertainment were added. Thus, the Print Media has always been serving the people of India. The main objectives of Print Media are to comprehend the popular feelings and give expression to those, then, to instill among the people desired sentiments, and unflinchingly uncover prevailing discrepancies and flaws. Newspapers are archives, objects of records. They can be referred to, checked again and leave a long impact. Also, the Newspapers or print media has power to describe the events at greater length whereas other mediums have limitations.

Nair R. (2003). An important fact related to Indian Print Media industry is that most of the Newspapers and Publications are owned by private firms and thus, they are free from government control and rather keeping a check on the policies and actions of government to ensure a healthy democracy is a huge challenge. Thus, the Newspapers have been major

players since independence in the welfare, betterment and development of the society at regional as well as national level. Despite of the advent of several media conglomerates and commercialization of media industry, Newspapers are playing a vital role in the daily life of people of India and it is contributing to a democratic deficit in the world's largest democracy **Thussu. D.K. (2007).**

2.6 Research Gap and Conclusion

The critical and in-depth review of existing research in the field of working capital has revealed that there arose a significant need to explore working capital management in the post second world war scenario which further got augmented after the financial crisis of 2008. The literature review establishing the relationship between working capital management and profitability of the firm also unfolded the realization that academic research exploring the relationship between working capital management and profitability of organisations in printing industry in India is non-existent. Now, a lot of hue and cry from last century for defining working capital and identifying its importance in business in the field of financial management necessitated the exploration of working capital management in printing industry. The literature review also unfolded that little efforts have been made to identify working capital cycle as well as cash conversion cycle along with the role of different components of current assets and current liabilities in the length of the cash conversion cycle. This review leads to the research question, whether working capital management has any impact on operating cost as well as profitability and thereby on sustainability of the business organisations. Therefore, this research endeavour seeks answers to the research questions and the research gap established, addressing the issues related to impact of working capital management on operating cost and thereby, on profit of an organization especially, in printing industry in the section of the study.

References :

- Neural Network Model. Systems Engineering Procedia, 5,
A.K. Sharma & Satish Kumar (2011) Effect of Working Capital Management on Firm Profitability: Empirical Evidence from India Global business review. Vol 12, Issue 1, 2011
- Abioro, Matthew. (2013). The impact of cash management on the performance of manufacturing in Nigeria. *Uncertain Supply Chain Management*. 1. 177-192.
- Acikgoz, A. F., & Demirkol, C. (2019). Bank Credits and Their Influence on Accounts Receivable: The Case of the Forestry Products Sector in Turkey. *Journal of Economics, Management and Trade*, 23(3), 1-15,.
- Adam Smith (1776) *An Inquiry into the Nature and Causes of the Wealth of Nations*
- Adusei, Charles. (2017). Accounts Receivables Management: Insight and Challenges. *International Journal of Finance & Banking Studies*
https://www.researchgate.net/publication/313840465_Accounts_Receivables_Management_Insight_and_Challenges
- Afza T. & Nazir M. S. (2008). Working Capital Approaches and Firm's Returns in Pakistan. *Pakistan Journal of Commerce and Social Sciences*, 1, 25-36.
- Ahmed Habib, (1998), Responses in Output to Monetary Shocks and the interest Rate: Working Capital, *Economics Letters*, Vol.61, pp. 351-358 129
- Aistrup Consulting, (2009). Linking into the Value Chain for the Printed Electronics Industry. <http://www.aistrupconsulting.com/resources/linkingintothevaluechain_printedelectronics.pdf>
- Akino O. O. (2012). Determinants of Working Capital Requirement in Selected Quoted Companies in Nigeria. *Journal of African Business*, 13(1), 40-50.
- Akoto R. K., Dadson V. A. & Angmor P. L. (2013). Working Capital Management and Profitability: Evidence from Ghanaian Listed Manufacturing Firms. *Journal of Economics and International Finance*, 5(9), 373-379.
- Alipour M. (2011). Working capital management and corporate profitability: Evidence from Iran. *World Applied Sciences Journal*, 12(7), 1093-1099.
- AlShattarat W. K., Nobanee H., Haddad A. E., AlHajjar M. (2010). Working Capital Management, Operating Cash Flow and Corporate Performance. *International Journal of Strategic Management*, 10 (1), pp. 84-88.

Chapter 2. Review of Literature

Al-Shubiri, Faris. (2010). Analysis of the relationship between working capital policy and operating risk. ~~An Empirical study on Jordanian industrial companies. Investment Management & Financial Innovations.~~ 7. 49-58.

Altaf N. & Shah F. (2017). Working capital management, firm performance and financial constraints. *Asia-Pacific Journal of Business Administration*, 206-219.

ARB No.30 Paul J. Beckert, CPA

Arunkumar O. N., & Jayakumar S. (2010). Analysis of Working Capital Management in Major Public Sector Electrical Industries in Kerala. *Udyog Pragati*, 34(1), 45-55.

Banos-Caballero S., Garcia-Teruel P. J., & Martinez-Solano P. (2012). How does Working Capital Management affect the Profitability of Spanish SMEs? *Small Business Economics*, 39(2), 517-529.

Bansal S. P. (1999), Working Capital Management of Profit-Making, Undertakings – A Case Study of Himachal Pradesh Agro-Industries Corporation Limited, Working Capital Management, Deep and Deep Publications Pvt. Ltd., New Delhi, pp. 76-84

Bansal S. P. (1999). Determinants/Techniques for the Management of Working Capital. Working Capital Management (85-98). Deep and Deep Publications Pvt. Ltd.

Basman Al Dalayeen (2017) Working Capital Management and Profitability of Real Estate Industry in Jordan: An Empirical Study, *Journal of Applied Finance & Banking*, vol. 7, no. 2

Batra G. S. & Sharma A. K. (1999). Working Capital Management in Corporate Sector, Working Capital Management, Edited by Rao Mohana D and Pramanik Alok Kumar, Deep and Deep Publications Pvt. Ltd., New Delhi, pp. 51- 64

Baveld M. B. (2012) *Impact of Working Capital Management on the Profitability of Public Listed Firms in The Netherlands During the Financial Crisis*, *Semantic Scholar*
<https://www.semanticscholar.org/paper/Impact-of-Working-Capital-Management-on-the-of-in-Baveld/54abfe658681442989e7ef644f46f8f1632cbc2d>

Ben-Nasr, H. (2016). State and foreign ownership and the value of working capital management. *Journal of Corporate Finance*, 41, 217-240.

Beranek, W. (1988). A historical perspective of research and practice in working-capital management : a research annual. In: KIM, Y. H. & SRINIVASAN, V. (eds.) *Advances in working capital management* Greenwich: JAI.

Bhattacharyya H. (1987). Towards a Comprehensive Theory of Working Capital: A Techno-Financial Approach. *Economic and Political Weekly*, 22(35), pp 101-110.

Bierman H., K. Chopra and J. Thomas (1975). Ruin considerations: Optimal working capital and capital structure. *J. Financial Quantitative Analysis*, 10: 98-108

Blinder and Manccini (1991) The Resurgence Of Inventory Research: What Have We Learned? *Journal of Economic Journals* Vol. 5 issue 4 (December)

Brealey R.A., Mayers S.C. and Allen, F., (2006). Corporate Finance. 8th edition. New Bacon. Belgian Firms" Journal of Business Finance and Accounting, vol. 30

Brealey, R.A., Myers, S.C., Allen, F. and Mohanty, P. (1997), Principles of Corporate Finance, Tata McGraw-Hill Education, New York, NY

Brigham, F. and Houston, F. (2003), 'Fundamentals of financial management', 10th ed. McGraw-Hill Inc: New York

Brigham E. F. and M. C. Ehrhardt (2008), Financial Management: Theory and Practice. 12th Edition, Thomson South-Western, Mason, OH.

Capkun, Vedran, Hameri, Ari-Pekka & Weiss, Lawrence A. (2009). On the relationship between inventory and financial performance in manufacturing. International Journal of Operations & Production Management, vol.29, iss.8, pp.789–806.

Chambers, D., Lacey, N. (2011). Modern Corporate Finance, Sixth Edition, Michigan: Hayden McNeil Publishing.

Chandra B., Chouhan V., & Goswami S. (2012). Analyzing Trends and Profitability vis-à-vis Working Capital Management (WCM): A Study of Selected Information Technology (IT) Organizations in India. Indian Journal of Finance, 6(7), 13-26.

Chandra H., & Selvaraj A. (2012). Working Capital Management in Selected Indian Steel Companies. Indian Journal of Finance, 6(11), 5-15.

Charitou M. S., Elfani M., & Lois P. (2010). The effect of Working Capital Management on firms Profitability: Empirical evidence from an Emerging Market. Journal of Business and Economic Research, 8(12), 63 -68.

Chatterjee S. (2010). Impact of Working Capital Management on the Profitability of the Listed Companies in the London Stock Exchange.

Chen C., & Kieschnick R. (2018). Bank credit and corporate working capital management. Journal of Corporate Finance, 579–596.

Chiou, J.-R., Cheng, L. and Wu, H.-W. (2006), "The determinants of working capital management", Journal of American Academy of Business, Vol. 10 No. 1, pp. 149-155.

Chittenden F., Poutziouris, P., & Michaelas, N. (1998). Financial management and working capital practices in UK SMEs: Manchester Business School Manchester.

Daniel Atnafu & Assefa Balda | Shaofeng Liu (Reviewing editor) (2018) The impact of inventory management practice on firms' competitiveness and organizational performance: Empirical

Chapter 2. Review of Literature

evidence from micro and small enterprises in Ethiopia, Cogent Business & Management, 5.1, DOI: 10.1080/23311375.2018.1503219

Das, Somnath. (2017). Corporate cash management: A study on retail sector. Accounting. 3. 23-40.

Dave Piasecki (2001). "Optimizing economic order quantity." IIE Solutions 33.1 30. Academic Search Elite. <http://search.ebscohost.com/login.aspx?direct=true&d>

David M. (2010), "The influence of Working Capital Management Components on Corporate Profitability: A Survey on Kenyan Listed Firms", Research Journal of Business Management, Vol. 4, pp.1-11

Deep and Deep Publications Pvt. Ltd. international study of management perceptions of the working capital process. J. International Business Stud., 10: 28-38

Dinesh M. (2008). Working Capital Management: Challenges and Strategies. The Accounting World (37-40). ICAI University Press.

Ding Sai, G. A. & Knight J. (2012). Investment and Financing Constraints in China: Does Working Capital Management make a Difference? Journal of Banking and Finance, 30(30), 1-18.

Divya J. and Simran J. (2017)Effect of Receivables Management on Profitability: A Study of Commercial Vehicle Industry in India, International Journal of Applied Sciences and Management Vol. 2, No. 2, 246-255.

Dong H. P. (2010). The Relationship between Working Capital Management and Profitability. International Research Journal of Finance and Economic, 49.

Eljelly (2004). Liquidity-profitability tradeoff: An empirical investigation in an emerging market. International Journal of Commerce and Management, 14(2), 48- 61.

Elsa George (2019), A study on the impact of inventory management on profitability of firms with special reference to steel industry, International journal of basic and applied research (May) Volume 9 Number 5

Eneje B. C., Nweze, A. U. & Udeh A. (2012). Effect of Efficient Inventory Management on Profitability: Evidence from Selected Brewery Firms in Nigeria. International Journal of Current Research, 4(11), 350-354.

Etiennot Hernan, Preve, Lorenzo A. and Allende, Virginia Sarria, (2012), "Working Capital Management: An Exploratory Study", Journal of Applied Finance, Vol. 22 Issue: 1, pp.162

Eton, Marus & Uwonda, Gilbert & Mwosi, Fabian & Bernard, Patrick & Ogwel, Patrick & Obote, Dennis. (2019). Cash Management and Financial Performance of Business Firms in Northern Uganda a Case of Lira District.

Faque, Mustapher. (2018). Cash management strategies and firm financial performance: A comprehensive literature review. Bussecon Review of Finance & Banking. 2. 36-43.

- Farzaneh (1997) Comparative analysis of inventory costs of JIT and EOQ purchasing, *International Journal of Physical Distribution & Logistics Management*, Volume 27, Number 8, pp. 496-504(9)
- Filbeck G. & Thomas, M. K. (2005). An Analysis of Working Capital Management Results Across Industries, *Mid-American Journal of Business*, 20(2), 11-18.
- Flannery M. & Lockhart B. (2009). Credit Lines and the Substitutability of Cash and Debt. *Social Science Research Network*, 1-52.
- Ganas, Ioannis & Hyz, Alina. (2015). Inventory Management and its Impact on Firms' Performance: An Empirical study in the region of Epirus, Greece. https://www.researchgate.net/publication/280597962_Inventory_Management_and_its_Impact_on_Firms'_Performance_An_Empirical_study_in_the_region_of_Epirus_Greece
- Ganesan V. (2007). An Analysis of Working Capital Management Efficiency in Telecommunication Equipment Industry. *Rivier Academic Journal*, 3(2), 1-10.
- Garg Pawan Kumar (1999), Working Capital Trend and Liquidity Analysis of the State Industrial Enterprises in India – A Case Study, Working Capital Management Deep and Deep Publications Pvt. Ltd., New Delhi, pp. 26-42
- Gaur J. & Bhattacharya S. (2011). The relationship of financial and inventory performance of manufacturing firms in Indian context. *California Journal of Operations Management*, vol. 9, iss.2, pp.70–77.
- Gaur V., Fisher M. & Raman A. (2005). An econometric analysis of inventory turnover performance in retail services. *Management Science*, 5(2), 181-194.
- Gentry J.A., R. Vaidyanthan and H.W. Lee (1990), 'A Weighted Cash Conversion Cycle', *Financial Management*, Vol. 19, No. 1, pp. 90–99.
- Gill A. & Mathur N. (2011). The impact of board size, and corporate liquidity on the profitability of Canadian service firms, *Journal of Applied Finance and Banking*, 1(3), 83-95.
- Gill A. & Shah C. (2012). Determinants of corporate cash holdings: evidence from Canada. *International Journal of Economics and Finance*, 4(1), 70-9.
- Gill A., Biger N. & Mathur N. (2010). The relationship between Working Capital Management and Profitability: Evidence from the United States. *Business and Economics Journal*, 1-9.
- Gitman L. J., E. A. Moses and I. T. White (1979). An assessment of corporate cash management practices, *Financial management*, 8: 32-41
- Grzegorz M. M. (2008). A profitability management approach in Accounts Receivable management. *Journal of south East European Journal of Economics and Business*, 3(2), 89- 96.
-

Chapter 2. Review of Literature

H. V. Kaur and S. Singh (2013), "Managing efficiency and profitability through working capital: An empirical analysis of BSE 200 companies," Asian Journal of Business Management, vol. 5, no.2, pp. 197-207.

Haq Ikram ul, M. S., Khalid, Z. & Ala, Z. (2011). The Relationship between Working Capital Management and Profitability: A Case Study of Cement Industry in Pakistan. Mediterranean Journal of Social Sciences, 2(2).

Harbans Lal Verma (1981), Management of Working Capital, Deep and Deep Publication, New Delhi

Harford J. & Klasa S. (2014). Refinancing Risk and Cash Holdings. The Journal of Finance, 975–1012.

Henk von Eije, Wim Westerman (2002) ,Multinational cash management and conglomerate discounts in the euro zone, International Business Review, Volume 11, Issue 4, Pages 453-464

Hoglund. J. Bierman, and A. K. Mc Adams (1962), Management Decisions for Cash and Marketable Securities, (New York : Graduate School of Business, Cornell University).

Hossain S. Z. (1999). Evaluation of Working Capital Management Through Accounting Ratios – A Suggested Framework. (1-11). Deep and Deep Publications Pvt. Ltd.

<http://dspace.knust.edu.gh/bitstream/123456789/8503/1/YAMOA%20GILBERT.pdf>

<https://collegegrad.com/industries/printing#nature> 9332 N. 100th Way, Scottsdale, AZ 85255 480-980-3977

<https://dart.deloitte.com/USDART/home/accounting/fasb/fasb-literature/concept-stmts/accounting-research-bulletins>

<https://fddocuments.in/document/chapter-3-review-of-literature-shodhganga-3-review-of-literature-31-studies.html>

https://link.springer.com/chapter/10.1007/978-1-349-20572-1_15 ,

https://link.springer.com/referenceworkentry/10.1007%2F978-1-349-58802-2_235

<https://pinnacle-business.com/top-5-financial-challenges-in-the-printing-industry/>

https://www.econlib.org/library/Smith/smWN.html?chapter_num=17#book-reader

https://www.files.ethz.ch/isn/125515/1366_KeynesTheoryofEmployment.pdf

<https://www.indianmirror.com/indian-industries/printing.html>

https://www.investopedia.com/terms/c/circulating_capital.asp

<https://www.minutemanpress.com/articles/the-importance-of-quality-printing-in-business.html>

https://www.researchgate.net/publication/280843339_A_study_on_the_effects_of_banks'_cash_management_on_their_share_value/citation/download

https://www.researchgate.net/publication/320709578_The_Effect_of_Conservatism_on_Earnings_Quality

https://www.researchgate.net/publication/327209956_Impact_of_cash_holding_on_firm_performance_A_case_study_of_non-financial_listed_firms_of_KSE

https://www.researchgate.net/publication/335396143_Cash_Management_and_Financial_Performance_of_Business_Firms_in_Northern_Uganda_a_Case_of_Lira_District/citation/download

https://www.researchgate.net/publication/341702995_Cash_Management_and_Performance_of_Listed_Firms_in_Nigeria

Hugo, W.M.J., Badenhorst-Weiss, J.A. & Van Biljon, E.H.B., 2004, Supply chain management: Logistics in perspective, 1st edn., Pretoria, South Africa, Van Schaik.PMCid:1388732

Huynh Phuong Dong Jyh-tay Su (2010) The Relationship between Working Capital Management and Profitability: A Vietnam Case, International Research Journal of Finance and Economics, Euro Journals Publishing, Issue 49 <http://www.eurojournals.com/finance.htm>

Hyderabad R. L. (1999). Management of Liquidity and Profitability. Working Capital Management (12-20).

Iftikhar, Raja. (2018). Impact of cash holding on firm performance: A case study of non-financial listed firms of KSE.

Intergraf, (2011). The Future of the European printing industry-In our own hands, What the industry says. <http://www.intergraf.eu/images/SociallyResponsible_Study_ENG.pdf>

J. M. Keynes (1936), Keynes's Finance motive https://link.springer.com/chapter/10.1007/978-1-349-11513-6_2 retrived on 24.02.2018

J.U.J Onwumere , Imo G. Ibe and O.C Ugbam (2012) The Impact of Working Capital Management on Profitability of Nigerian Firms: A Preliminary Investigation, European Journal of Business and Management Vol 4, No.15

Jain A. & Jain N. (1997). Inventory Control Techniques in Scooter Manufacturing Companies in India – A Case Study. Indian Journal of Accounting, 28, 57-63.

Chapter 2. Review of Literature

Jain P. K. & Yadav S. S. (2007). Working Capital Management Practices: A Study of Public Sector Enterprises in India. *Management and Change*, 11(2), 1-68.

Jain, P. K., and Yadav, Surendra S., (2001), Management of Working Capital: A Comparative Study of India, Singapore and Thailand, *Management and Change*, Vol. 5, No. 2, pp. 339-355

Jayarathne T. A. N. R. (2013). Impact of Working Capital Management on Profitability of Manufacturing Companies of Colombo Stock Exchange (Cse) in Sri Lanka. *International Journal of Research in Computer Application & Management*, 3(1), 269-274.

John, Akinyomi. (2014). Effect of cash management on firm profitability of Nigerian manufacturing firms. *International Journal of Marketing and Technology*. 4. 129-140.

Journal of Business, Humanities and Technology Vol.3 No.5; (May) pp 75-85

Kakeeto, Francis & Micheal, Timbirimu & Pastor, Kiizah & Osunsan, Olutayo. (2018). Accounts Receivable

Management and Organizational Profitability as a Function of Employee Perception in Gumutindo Coffee Cooperative Enterprise Limited (GCCE), Mbale District Uganda. 7. 31-37. https://www.researchgate.net/publication/326560045_Accounts_Receivable_Management_and_Organizational_Profitability_as_a_Function_of_Employee_Perception_in_Gumutindo_Coffee_Cooperative_Enterprise_Limited_GCCE_Mbale_District_Uganda

Kaplan R. S. (1994). Management Accounting (1984-1994): Development of new practice and theory *Management Accounting. Res.*, 5: 247-260

Karaduman H. A., Halil E. A., Arzu O. C., & Salih, D. (2011). The Relationship between Working Capital Management and Profitability: Evidence from an Emerging Market. *International Research Journal of Finance and Economics*, 62.

Karl Marx (1886) *Das Kapital* Marx (Marx, 1867, Vol. I, ch. 6)

Kartik C. N. (2011) Impact of Working Capital Management on Profitability (A Case Study of National Thermal Power Corporation Ltd.) *THE MANAGEMENT ACCOUNTANT*, Volume 46, Issue 1 (January)

Kaur H. V. & Singh S. (2013). Managing efficiency and profitability through working capital: An empirical analysis of BSE 200 companies. *Asian Journal of Business Management*, 5(2), 197-207.

Kesinmli and Gunay (2011) The impact of the global economic crisis on working capital of real sector in Turkey (January) *Business and Economic Horizons* 52-69

Khan and Jain (2013) *FINANCIAL MANAGEMENT TEXT, PROBLEMS AND CASES SIXTH EDITION* Tata McGraw Hill Education Private Limited NEW DELHI

Korent D. & Orsag S. (2018) The Impact of Working Capital Management on Profitability of Croatian Software Companies. *Zagreb International Review of Economics and Business*. 21. pp 47-66.

Kroflin, Petra & Kratz, Norbert. (2015). Working Capital Management as a routine: An action based access to the topic. *Business and Economic Horizons*. 11. 173-182.

Ksenija D. M. (2013). Impact of Accounts Receivable management on profitability during the financial crises: Evidence from Serbia, 1-11.

Kumar S. and Sharma V. V. S. (2010) Performance and Challenges of Newspapers in India: A Case Study on English versus Vernacular Dailies in India, Twelfth AIMS International Conference on Management. <http://www.aims-international.org/aims12/12A-CD/PDF/K740-final.pdf>

Kushalappa S. & Kunder S. (2012). Working Capital Management in Manufacturing Industry: A Study with Reference to Selected Manufacturing Industries in India. *International Journal of Research in Computer Application and Management*, 2(12), 101-105.

Kwenda, F., & Holden, M. (2013). Working Capital Structure and Financing Pattern of Selected JSE-Listed Firms. *Mediterranean journal of social sciences*, 4, 531. <https://www.semanticscholar.org/paper/Working-Capital-Structure-and-Financing-Pattern-of-Kwenda-Holden/f5a05b368dde65295572d3e8fc4f32637c0e29ae>

Kwenda, Farai & Holden, Merle. (2013). Working Capital Structure and Financing Pattern of Selected JSE-Listed Firms. *Mediterranean Journal of Social Sciences*. 4. 531-540.

Kytönen, Erkki (2004), Cash management behavior of firms and its structural change in an emerging money market, OULU UNIVERSITY PRESS, <http://jultika.oulu.fi/files/isbn9514274148.pdf>

Lambrix R. J., & Singhvi S.S. (1979). Managing the Working Capital Cycle. *Financial Executive*, 32-41.

Lazaridis & Lyrودي K. (2000). Short-term financial management of the business in Greece and in Cyprus. *Bus Econ Soc Int*.

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.

Li S., Ragu-Nathan B. & Subba R. S. (2006). The Impact of Supply Chain Management Practices on Competitive Advantage and Organizational Performance. *Omega*, 34(1), 107-124.

Ishubiri, Faris. (2010). Analysis of the relationship between working capital policy and operating risk: An empirical study on Jordanian industrial companies. *Investment Management and Financial Innovations*. 7. 167-176.

M. Beaumont Smith and E. Begemann (1997) Measuring associations between working capital and return on investment, *South African Journal of Business Management* (March) Vol. 28, No. 1

Chapter 2. Review of Literature

Madishetti S. & Kibona D. (2013). Impact of inventory management on the profitability of SMEs in Tanzania. *International Commerce & Management*, vol.4,iss.2, pp.1-6.

Maness T. S., & Zietlow J. T. (2005). *Short-Term Financial Management*. South Western, Ohio.

Mann O. A. 1918. Working capital for rate-making purposes. *Journal of Accountancy* (November): 340-342.

Mashoka, Tareq & Abuhommous, Alaa Adden. (2017). The Effect of Conservatism on Earnings Quality.

Matarneh B., (2012). Working Capital Management of Small Scale Industries in Rajasthan. *International Journal of Financial Research*, 3(2), 78-85.

Mathuva D. (2009). The influence of working capital management components on corporate profitability: a survey on Kenyan listed firms. *Research Journal Business Management*, 31(3)

Mekonnen M. (2011). The Impact of Working Capital Management On Firms Profitability. Unpublished Master Thesis, Addis Ababa University: Ethiopia.

Mekonnen, M. (2011). The Impacts of Working Capital Management of Firms Profitability, Semantic Scholar <https://www.semanticscholar.org/paper/The-Impacts-of-Working-Capital-Management-of-Firms-Mekonnen/9a77ae158671129c02912e3fe788002e7bbd0881>

Meredith G (1986). *Financial management of the small enterprise*, McGraw Hill, Sydney, New South Wales.

Meryem Bellouma (2011) The Impact of Working Capital Management on Profitability: The Case of Small and Medium-Sized Export Companies in Tunisia, An article of the journal *Management international / International Management / Gestión Internacional*. Volume 15, Issue 3, pp. 71–88

Michna A. (2007). Dimensions of organizational learning and linking them with SME performance.

Nair, Tara. (2003). Growth and Structural Transformation of Newspaper Industry in India: An Empirical Investigation. *Economic and Political Weekly*. 38. 4182-4189. 10.2307/4414083.

Naliaka V.W., & Namusonge G. S. (2015). Role of Inventory Management on Competitive Advantage among Manufacturing Firms in Kenya: A Case Study of Unga Group Limited. *International Journal of Academic Research in Business and Social Sciences*, 5(5), 87-104.

Narender V., Menon S. & Shwetha V. (2008). Factors Determining Working Capital Management in Cement Industry. *South Asian Journal of Management*, 15(4), 64-78.

Natarajan Sundar (1980) Working Capital Management and Finance, *Economic and Political Weekly*, Vol. 15, No. 8 (February) pp. 25 - 31.

Nazir M. S., & Afzal. (2008). On the Factor Determining Working Capital Requirements, 15(1), 293-301.

Nazir, Mian Sajid & Afza, Talat. (2009). Impact of Aggressive Working Capital Management Policy on Firms' Profitability. The IUP Journal of Applied Finance. 15. 19-30.

Nobanee, Haitham & Alhajjar, Maryam. (2009). Working Capital Management and Firm's Profitability: An Optimal Cash Conversion Cycle. SSRN Electronic Journal. 10.2139/ssrn.1471230.

Ntui P., Kiemi C., Gwatako T. and Halim M. (2014) The Effect of Working Capital Management on Profitability. International Journal of Economics, Finance and Management Sciences. Vol. 2, No. 6, 2014, pp. 347-355.

Nur, Tuğba. (2017). THE IMPACT OF WORKING CAPITAL POLICIES ON THE FIRM PERFORMANCE: A PRACTICE OVER BIST 100. 3. 15-27.

Nwaorgu, Innocent & Iorlombagah, Jacob. (2017). Cash Management and Performance of listed Firms in Nigeria.

Nyabwanga R., & Ojera P. (2012). Inventory management practices and business performance for small

Olufemi I. Falope and Olubanjo T. Ajilore (2009). Working Capital Management and Corporate Profitability: Evidence from Panel Data Analysis of Selected Quoted Companies in Nigeria. Research Journal of Business Management, 3: 73-84.

P. R. Halani (2014) A Comparative Study of Working Capital Management of Selected Paper Companies in India, RESEARCH HUB – International Multidisciplinary Research Journal, Volume-1, Issue-5 (December)

Padachi K. (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, 2(2), 45-48.

Panigrahi, A. (2012). Impact of Working Capital Management on Profitability- A Case Study of ACC Ltd. Asian Journal of Management, 3(4), 210-218.

Panigrahi, A. K. (2013). Relationship between inventory management and profitability: An empirical analysis of Indian cement companies. Asia Pacific Journal of Marketing & Management Review, vol.2,iss.7, pp.107–120.

Pathania Kulwant Singh, (1999), Management of Working Capital – A Study of the H P State Cooperative Agricultural and Rural Development Bank, Working Capital Management, Edited by Rao Mohana D and Pramanik Alok Kumar, Deep and Deep Publications Pvt. Ltd., New Delhi, pp. 99-106

Paul J. Beckert (2019) <https://pinnacle-business.com/top-5-financial-challenges-in-the-printing-industry/>

Chapter 2. Review of Literature

Pestonji, Chosita & Wichitsathian, Sareeya. (2019). The Impacts of Working Capital Policy on Firms' Performances: An Empirical Study on Thai Listed Companies in Production Sector. https://www.researchgate.net/publication/333580837_The_Impacts_of_Working_Capital_Policy_on_Firms'_Performances_An_Empirical_Study_on_Thai_Listed_Companies_in_Production_Sector/citation/download

Pew Internet & American Life Project. Understanding the Participatory News Consumer: <http://www.pewinternet.org/Reports/2010/Online-News/Summary-of-Findings.aspx?r=1>

Pinku P. and Paroma M. (2018), Analysis of the Effect of Working Capital Management on Profitability of the Firm: Evidence from Indian Steel Industry, *Asia-Pacific Journal of Management Research and Innovation* 14(1–2) pp. 32–38

Raheman A. & Mohamed, N. (2007). Working Capital Management and Profitability - Case of Pakistani Firms. *International Review of Business Research Papers*, 3(1), 279-300.

Raheman A., Afza T., Qayyum, & Abdul M. A. (2010). Working Capital Management and Corporate performance of manufacturing sector in Pakistan. *International Research Journal of Finance and Economics*, 47, 151-163.

Raheman and Nasr (2007) Working Capital Management And Profitability – Case Of Pakistani Firms, *International Review of Business Research Papers* Vol.3 No.1. March 2007, Pp.279 – 300

Rahman M. M. (2011). Working Capital Management and Profitability: A study on Textiles Industry. *ASA University Review*, 5(1), 115-132.

Ramachandran A., & Janakiraman M. (2009). The Relationship between Working Capital Management Efficiency and EBIT. *Managing Global Transactions*, 7(1), 61-74.

Ramiah V., Zhao Y. and Moosa I. (2014), "Working capital management during the global financial crisis: the Australian experience", *Qualitative Research in Financial Markets*, Vol. 6 No. 3, pp. 332-351.

Rao G. D., & Rao P. M. (1999). Impact of Working Capital on Profitability in Cement Industry – A Correlation Analysis. *Working Capital Management* (239-257). Deep and Deep Publications Pvt. Ltd.

Rao K. V., & Rao, C. (1991). Evaluating Efficiency of Working Capital Management – Are the Conventional Techniques Adequate Decision, 18(2), 81-97.

Rashid Aamir (2016), Impact of Inventory Management in Downstream Chains on Customer Satisfaction at Manufacturing Firms, *International Journal of Management, IT and Engineering*, Volume : 6, Issue : 6

Ray S. (2012). Evaluating the Impact of Working Capital Management Components on Corporate Profitability: Evidence from Indian Manufacturing.

Richard K. A., Awunyo-vitor D., & Angmor P.L. (2013). Working capital management and profitability:

Evidence from Ghanaian listed manufacturing firms, 5(9), 373–379.

Richards V., Laughlin E. (1980). A cash conversion cycle approach to liquidity analysis. *Financial Management*, 9, 32–38.

Ross, S.A, Randolph W.W. & Jordan B. D. (1996), *Essential of Corporate Finance*, Irwin McGraw-Hill, Inc.

Ross, W. Pandey, I.M (2004), *Essentials of Corporate Finance*, 4th Edition, New York: McGraw Hill Inc.

Sahari Salawati, Tinggi Michael, Norlina & Kadri. (2012). Inventory management in Malaysian construction firms: Impact on performance. *SIU Journal of Management*, 2(1), 59–72.

Şamiloğlu, Famil & Demirgüneş, Kartal. (2008). The Effect of Working Capital Management on Firm Profitability: Evidence from Turkey. *The International Journal of Applied Economics and Finance*. 2. 10.3923/ijaef.2008.44.50.

Samson A. A., Josiah M., Bosun-Fakunle Y., & Imuzeze E. O. (2012). The Impact of Working Capital on the Profitability of Small and Medium Scale Enterprises in Nigeria. *Research Journal of Business Management*, 6(2), 61-69.

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, pp 109-114

Shin H.H. and Soenen L. (1998) Efficiency of Working Capital Management and Corporate Profitability. *Financial Practice and Education*, 8, 37-45.

Shweta Mehrotra (2013) Working Capital Trends and Liquidity Analysis of FMCG Sector in India *IOSR Journal of Business and Management* Volume 9, Issue 4 (Mar. - Apr. 2013), 45-52

Singaravel P. (1999). Working Capital - Liquidity – Profitability – Triangle. *Working Capital Management* (21-25), Deep and Deep Publications Pvt. Ltd.

Singh J. P., & Pandey S. (2008). Impact of working capital management in the profitability of Hindalco industries limited. *Lefai University Journal of financial Economics*, 6(4), 62-72.

Singh Pradeep, (2008), *Inventory and Working Capital Management: An Empirical Analysis*, The ICAI Journal of Accounting Research, Vol. VII, No. 2, pp. 53-73

Singh S. (2006). Inventory control practices in IFFCO. *The Management Accountant*, 41(7), 577-582.

Singh S., & Bansal S. K. (2010). Management of Working Capital in IFFCO and KRIBHCO- A Comparative Study. *Indian Journal of Finance*, 4(2), 8-15.

Chapter 2. Review of Literature

- Smith, K. V. (1973), State of the Art of Working Capital Management, Financial Management, Vol. 2 No. 3, pp. 58-59.
- Soenen L A (1993), "Cash Conversion Cycle and Corporate Profitability", Journal of Cash Management, Vol. 13, No. 4, pp. 53-58. 30.
- Soni A. (2012). Inventory Management of Engineering Goods Industry in Punjab: An empirical analysis. International Journal of Multidisciplinary Research, 2(2), 247–261.
- Sonia Anvar, Naveed Ahmad, Mehreen Kanwal and Naqvi Hamad (2007) Impact of Working Capital Management on Firm's Profitability : Evidence from Textile Sector of Pakistan, Arabian Journal of Business and Management Review, Vol.2 No. 5
- Srinivasa R. K. (2014). An Analytical Study on Inventory Management in Commercial Vehicle Industry in India. International Journal of Engineering Research, 3(6), 378-383.
- Stevenson B. U. (2010). Operations Management (321-340). N-Y Mc Grau Hill Publishing Inc.
- T.Hall,(2008)https://ir.canterbury.ac.nz/bitstream/handle/10092/17626/LeanPrinting_E10_4%20v4%20Nov%202019.doc?sequence=2&isAllowed=y
- Taghizadeh K.V., Akbari K. M. and Ebrati M. (2012) The Impact of Working Capital Management Policies on Firm's Profitability and Value: Evidence from Iranian Companies, International Research Journal of Finance and Economics Issue 88
- Tanwar S. K. and Shah C. K. (2012), Analysis of Inventory Management of Selected Companies in India, The Indian Journal of Commerce, Vol. 65, No. 3, pp. 83-91
- Tauringana V. & Afrifa G.A. (2013). The relative importance of management of WC and its components to SMEs' profitability. Journal of Small Business and Enterprise Development, 20(3), 453 – 469.
- Thakur, Oli & Mukit, Dewan. (2017). Working Capital Financing Policy and Profitability: Empirical Study on Bangladeshi Listed Firms. British Journal of Economics, Management & Trade. 17. 1-6.
- Thiago G., Cristina G., and Frederico R. (2018) The impact of Working Capital Management on firm profitability in different economic cycles Evidence from the United Kingdom, Asian Economic and Financial Review, Economics and Business Letters, , Vol. 7, No. 2, , pp 70-75
- Thomke S. and von Hippel E., (2002). "Customers as innovators: a new way to create value." Harvard Business Review, 80(4), pp. 74–81.
- Thussu, D. K. (2007). Mapping global media flow and contra-flow. In D. K. Thussu (Ed.), Media on the move: Global flow and contra-flow (pp. 11-32). London: Routledge.
- Timothy Lwiki, Patrick Boniface Ojera, Nebat Galo Mugenda & Virginia Kirigo Wachira (2013). The Impact of Inventory Management Practices on Financial Performance of Sugar Manufacturing Firms in Kenya

Ulius E., Michael G. and Jussi N. (2014) The impact of working capital management on firm profitability in different business cycles: Evidence from Finland, *Research in International Business and Finance*, Volume 32, Pages 36-49

Umar N. K. & Tracy-Anne D. S. & Christopher G.(2019). A systematic literature review on working capital management – an identification of new avenues, *Qualitative Research in Financial Markets*, Emerald Group Publishing, vol. 11(3), pages 352-366, (August)

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, 186-193.

Valipour S., & Jamshidi H. (2012). Determining the Optimal Efficiency Index of Working Capital Management and its Relationship with Efficiency of Assets in Categorized Industries: Evidence from Tehran Stock Exchange (TSE), 2(2), 191–209.

Van Horne J. C., & Wachowicz J. M. (2001). *Fundamentals of Financial Management*. (11th ed.). Delhi, India: Addison Wesley Longman Pte Ltd., p. 434.

VanHorne J. C., & Wachowicz J.M. (2004). *Fundamentals of financial management*, Prentice Hall.

Vehmas, K., Ervasti, M., Tihinen, M. and Mensonen, A., (2015). Digitalization Boosting Novel Digital Services for Consumers. *ACSIJ Advances in Computer Science: an International Journal*, Vol. 4, Issue 4, No.16, July 2015, pp. 80–92.

Viljakainen, A., (2015). Exploring the transformation of media sector through the lens of service-dominant (S-D) logic. Espoo: VTT Science: 79. 146 p. + app. 78 p.

Viskari S., Pirttila M., & Karri T. (2011). Improving profitability by managing working capital in the value chain of pulp and paper industry. *Inder Science Publishers*, 3(4), 348-366.

Walker Ernest W. (1964). Toward a Theory of Working Capital. *The Engineering Economist*, 9(2), 21-35.

Weinraub H J and Visscher S (1998), "Industry Practice Relating to Aggressive Conservative Working Capital Policies", *Journal of Financial and Strategic Decision*, Vol. 11, No. 2, pp. 11-18

Wild, Tony. (2017). *Best practice in inventory management*, third edition.

Zakaria, Syed. (2014). A study on the effects of banks' cash management on their share value. *Management Science Letters*. 4.

Zaman, K., Sohail, M., & Alam, Z. (2011). The Relationship between Working Capital Management and Profitability: A Case Study of Cement Industry in Pakistan. *Mediterranean Journal of Social Sciences*, 2(2), 2039-2117.

Zaman, M., (1991), Working Capital Management Practices of Public Sector Jute Enterprises in Bangladesh, Indian Journal of Accounting, Vol. XXII, pp. 45-60

Zariyawati M., Annuar M., Taufiq, H., & Rahim, A. A. (2009). Working capital management and corporate performance: case of Malaysia. J Mod Account Audit 5(11), 47–54.

Zubairi H. J. (2010). Impact of Working Capital Management and Capital Structure on Profitability of Automobile Firms in Pakistan. Social Science Research Network.