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Do Firms Manage Working Capital for Survival or for Success: An Empirical Evidence from Literature Review?

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Abstract:

This paper reviews the extant literature on working capital management (WCM) for empirical evidence to establish whether or not firms manage working capital for survival or for success. And if they do, at what point is WC managed for firm's survival or for the success of the firm? And also, more importantly do firms really manage working capital to enhance shareholders value creation? The study revealed that while there are models to describe how working capital management practices influence firm value, there is practically no evidence that firms manage working capital so as to maximize shareholders' value. This is because most of the studies use profitability as a product of accounting metrics to measure firm's value. This measure suits financial performance more than shareholders value because of its limitation. Again, there is no indication as to what point in working capital management (WCM) is the firm managing for survival or for success. It is therefore recommended that future research attention in WCM should focus on operationalizing the concept of survival and success of a firm in the context of WCM, and providing indicator measure for managing working capital for survival and success to enable financial managers ensure operational efficiency in working capital management.

1. Introduction

Firms need liquidity to support their operations with the aim of maximizing profit but it takes proper balance between the liquidity and profitability to achieve such an objective. If the scale tilts too much in favour of either of the two variables it is dangerous to the survival or the success of the company (Garcia- Teruel & Martinez-Solano, 2007; Zariyawati et al., 2009, Bhattacharya, 2001). However, it is important to note that managing for survival is not the same as managing for success. Although success is relative, the ultimate success of an entity can be measure in terms of the extent to which it attains its organizational goal – maximizing shareholders' wealth – the dividend from investment and the market value of its shares (Copeland et al, 1994). Further, merely maintaining a good balance between liquidity (cash) and profitability does not necessarily mean value has been created for the shareholders. Maintaining liquidity-profitability balance is a necessary condition but not sufficient condition. There is symbiotic relationship between the two variables: liquidity for operating fixed assets has the tendency to influence profitability and in the same way the returns obtained from business operations when plough back also helps in improving the liquidity of the firm. Although profitability needs to boost up liquidity but that is not always the case. Firm may report high profit yet may be in cash distress, especially when majority of sales transactions are on credit basis couple with weak credit policy and poor debtor's management. This mean that firm may make profit alright but if it is not significant or does not translate into sufficient cash, it may not improve the liquidity of the firm. Invariably dividend may not be declared or paid. Stated differently if the firm continuous to declare high profit yet has liquidity problems coupled with inability to pay dividend it may adversely affect the market price of its share and no value could be created for the shareholders. The questions therefore to ask if firms report high profit are; (1) Does the increase in profitability lead to increase in liquidity and dividend as well as increase in share value of the firm? and (2) Are shareholders willing to maintain or transfer their shares? When answers to these questions are positive, then accurate inference could be drawn from liquidity –profitability relations about the contribution of WCM to value creation. In view of the above, a number of studies have focused on how firms manage working capital to create value. What is not clear to the researcher is whether or not these studies achieve this objective. And if they do how do they measure firm's value, and do those measures best describe the contribution of WCM to firm's value creation? This study therefore intends to review the extant literature on the phenomenon in order to establish whether the firms manage WCM with aim of maintaining liquidity – profitability relationship which is good measure of firm's financial performance or really manage working capital to enhance firm's overall value creation.

2. Literature Review

2.1. Value and its Measurement

There are a number of objectives that firms pursue, but there is no universal agreement on the primary objective of firms (McGrath, 1999; Tewolde, 2002). Notwithstanding, the main objective of a firm is often considered to be, the creation of economic value or profit maximization to the owners (Rappaport, 1986). This is because when investors bring a firm into existence they do so on condition that managers will follow their wishes - to make profit and to increase their value in the business firm (Galliger and Poe, 1995). To make analysis of this study more manageable and for the sake of clarity of focus of objective, it is argued that firms engage in activities that create shareholder value. The term value has been used by both researchers and practitioners in different ways. The traditional terms commonly used for value created by a firm are operating profit, residual income, economic value added (EVA) and Total shareholder value (TSR). Operating profit (before interest and taxation) is measured as the difference between the net sales (revenue) and the cost of operation. Based on this accounting metric, Porter (1998) describes value as the amount buyers are willing to pay for what a firm provides them, which is measured by the total revenue, as reflected in the price of a firm's product and the units it can sell. And that a firm creates value when total revenue exceeds total costs in creating a product. Operating profit approach ignores the cost of capital and gives misleading signals about whether value is created or destroyed (Gerry et al., 2008).

To overcome the limitations of operating profit approach, two measures, EVA and TSR, which are based on residual income – thus the net operating income earned above the required return on operating assets, and the cost of capital, are used respectively as internal and external measures for shareholder's value. EVA modifies accounting principles in various ways to adjust financial statement for performance evaluation purposes. TRS measures value as a quotient of the share price plus dividend received, and the sum divided by share price at the beginning of the period (Johnson et al., 2007). Used effectively, both EVA and the subsequent improvement in TSR performance align the interest of owners and managers (Noreen, 2005). These traditional earning measures too do not reflect the real value creation. They do not take into account the risk notion, neither the impacts of inflation, nor opportunity costs (Young and O.Byrne, 2001). Besides, they are based on assumption that sales-growth or revenue-growth is often the governing objective. But there is a paradigm shift with regard to management objectives. Stewart et al (1999) calls this the switch from managing for earning to managing for value (MFV). Moreover, Residual Income Theory applied to customer or product profitability analysis reveals that not every growth is a good thing to pursue (Copeland et al., 2000).

Rappaport (1986) argues that the conventional accounting system combines costs that belong to different value activities or separate costs that belong to the same value activity. Based on the value chain, he adjusts the conventional accounting net operating profit to net cash flow, which is the cash flow from operations. Cash flow is computed by adding back the non-cash expenses to profit after tax and deducting increases in net working capital and capital expenditures, which according to him is the more objective measure of value created compared to the conventional operating profit. The net cash flow approach values companies, business units or strategies on the basis of the present value of future free cash flow. The cost of capital is central to the shareholder value approach. Only when value created exceeds the risk-adjusted costs of capital is added value created for the shareholders. SVA is applicable within an overall approach for managing for value throughout the firm rather than merely as a technique for the purpose of analysis (Mills and Weinstein, 2000). Under the net cash flows approach, income is considered to be realized only if cash is collected from the goods sold or services rendered and expenses are recognized only if cash is paid for the goods bought or services received. Without going into details about the pros and cons of these approaches we can safely conclude that the net cash flow approach gives a relatively accurate measure of value but only in an environment where there are financial institutions and capital markets. For this reason, this approach can be easily adapted to the study of value creation in the developed (western) countries than in the developing countries where there are no efficient financial institutions and capital markets.

2.2. Shareholder Value Network Models

Rappaport (1986) argues that to be effective in creating value, management must be guided by a set of principles that can be applied to decision making in various situations. To this effect, he developed a number of financial management approaches and basic principles applicable for the management of working capital. He summarizes the chief relationships within the shareholder value concept in a succinct chart, shown in Figure. 1. The starting point is at the bottom of the chart with the distinction between the operating, investment and financing management decisions which contribute to value creation. The major value creation factors of these individual areas are shown on the next level. These are described aptly as value drivers which are the variables that create value and are taken as the building blocks by which firms create a product valuable to buyers (Tewolde, 2002). Each of the individual value drivers affects one of the three valuation components of 'Cash Flow from Operations', 'Discount Rate' and 'Debt', which are ultimately used to derive shareholder value added (SVA) – the sole corporate purpose in the strategy presented here. As the last link in the chain, the owners ultimately gain from this added value in the form of dividends and capital gains.

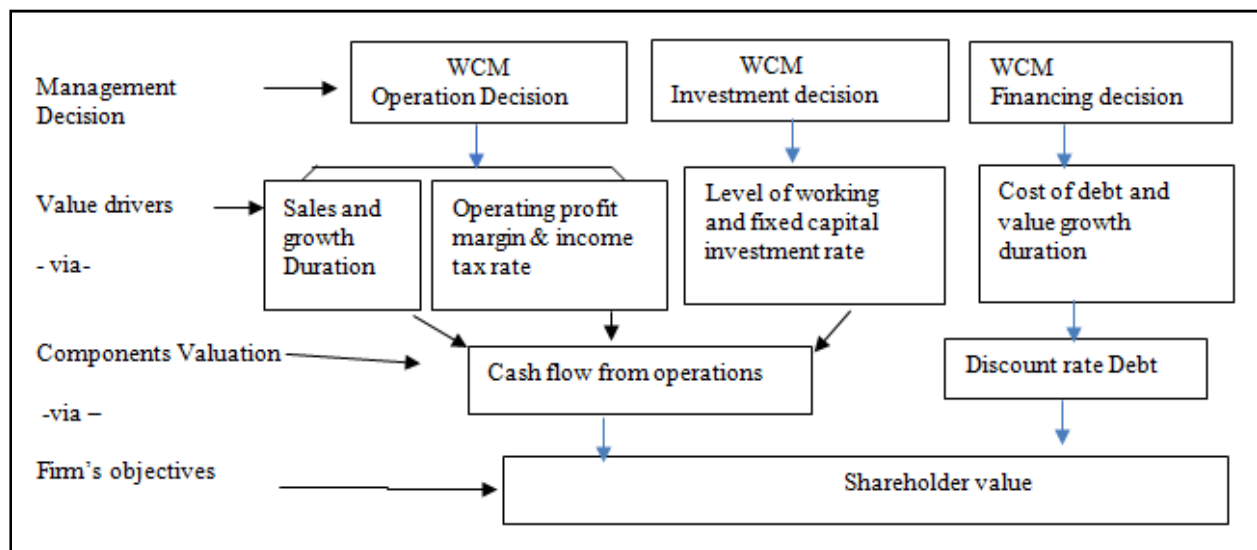


Figure 1: Rappaport's shareholder value network

Source: Adopted from Tewolde, 2002 (Based on Rappaport 1986)

The shareholder value approach is a conceptually consistent, self-contained, market based model for company valuation. The theoretical foundation and comprehensive analysis of the shareholder value approach provides a means of corporate valuation which is superior to traditional methods (Wolter, 2001). It puts a company's internal competition for resources on an objective footing, significantly simplifying both the setting of objectives and the ongoing monitoring of performance. Additional specific opportunities and risks can be identified by drawing up scenarios and sensitivity analyses for cash flow and the costs of capital (Noreen, 2005; Strand 2009; Gordon, 2010). Its transparent methodology and open presentation of assumptions are major advantages. It is more meaningful than conventional, accounting-based approaches to valuation (Johnson et al., 2007)

However, there are certain problems in its practical application, most of which relate to the measurement techniques used. Its particular focus on risk and future potential demands a high level of forecasting and planning skills, and its application therefore requires great expertise and experience (Copeland et al., 2000). In contrast to the USA, where the term - the maximization of shareholder value- enjoys a long tradition of positive and popular associations, there are broadly-held reservations in Europe and Japan about the term as a company's sole raison d'être. Whilst shareholder value maximization is commonly taken as firms' primary objectives in USA, the balanced stakeholder's value is taken as the primary objective in Japan and Europe (Copeland, Koller and Murrin, 1994; Young and O.Byrne, 2001).

Another issue is whether or not the maximization of shareholder value should be pursued as a corporate aim. In many cases this skepticism is based on the misunderstanding that the concept of shareholder value is based on short-term profit (Gerry et al., 2008). The 'stakeholder value' approach – which takes into account the objectives of all who have an interest in the company – has been proposed as an alternative. This approach views a company as an amalgamation of interest groups from all sectors (shareholders, debt holders, staff, customers, suppliers, the state, etc.) who all have an equal say in setting the company's targets and measuring its performance (Mills and Weinstein, 2000). However, from a theoretical point of view, the stakeholder value concept does not distinguish clearly between those who have a genuine interest and those who do not, since everyone might ultimately be affected in one way or another by a company's decision. A further unanswered question is how the differing – and at times vague and conflicting – aims of the various stakeholders can be combined into a cohesive and hierarchical system of objectives (Johnson et al., 2008; Chen et al., 2010). By contrast, the shareholder value concept is characterized by a transparent and focused decision-making structure. Shareholders have free powers of disposal over their company, which eliminates conflicting aims (Stratton 2009; Piotroski and Wong 2011). In this particular study, we identify the value creating activities as both internal and external working capital management practices. Therefore, it will be beyond the scope of this research to evaluate the management of internal and external working capital levels and operations from the point of view of all the stakeholders

2.3. Importance of Working Capital Management for Business Survival or Success

In more recent times practitioners and business managers have come to the realization that the sustainability of a firm heavily depends on the ability and success of its financial management function. In view of this working capital management has attracted the attention of business and management research (Chiou, et al 2006; Alshubiri, 2011). According to Singh & Pandey, (2008) in order to maintain its activities, a firm typically needs two type of assets; fixed and current. Fixed assets (building, plant, machinery etc.) are not only purchased for the purpose of sale, but also for the purpose of generating profit for many years. Current assets are now seen as a key component of the firm's total assets (Moyer et al, 1995). Afza & Nazir, (2008) argued that a firm may be able to reduce its investment on fixed assets by renting them, but it is not possible to follow the same policy for the current assets. According to Pedro & Pedro (2007), researchers have particularly offered studies analyzing investments, capital structure, dividends or company valuation, among other topics. But the investment that firms make in short-term assets, and the resources used with maturities of under one year,

represent the main share of items on a firm's balance sheet. Moyer et al (1995) adds that large portion of a firm's investment is in current assets. It amounts usually to 40% in manufacturing industries and 50% - 60% in retailing and wholesales. And therefore firms can save relatively large amounts by economizing on working capital investments and short-term debts.

Further, Siddiquee and Khan (2009) indicate that the inefficient management of working capital not only reduces profitability but ultimately may also lead to financial crisis thus every organization, irrespective of its profit orientation, size and nature of business, needs requisite amount of working capital. Consequently, the efficient working capital management is the most crucial factor in maintaining survival, liquidity, solvency and profitability of the concerned business organization. Thus, its requirements are having an impact on the market valuation of a business, which in erratic times falls under even greater analysis by shareholders and investors and its had been point out that an efficient working capital management has becoming an essential element of the overall corporate strategy to create shareholder value (Shin & Soenen, 1998 and Afza & Nazir, 2007). For instance, a survey conducted in the UK indicated that above 20% of firm failures was due to irrecoverable debts or poor receivable management (Padachi, 2006). In other developed countries such as US, Canada, Australia and others, it has long been recognized that efficient management of working capital is crucial for prosperity and survival of businesses (Deloof, 2003).

Similar studies in developing countries also affirm that the importance of managing working capital is magnified when it refers to firms in developing economies. Tewolde (2002) remarked that proper working capital management is particularly important for the firms in developing countries. Citing example with government and privatized firms in manufacturing sector of Eritrea, he indicates that the firms have their major investment in working capital assets and mostly use short-term debts as a main financing source. Kyei (2008), postulated that it is imperative for managers of Ghanaian Oil Marketing Companies to design and implement strategies and policies and that will aim at stabilizing and managing the various components of working capital. They again recommended that managers pay particular attention to the efficient management of working capital since it impacts significantly on the main aim of business which is creating shareholders' value. In line with what kyei (2006) and Tewolde (2002), McComick (1999) had earlier numerated some of the problems firms in developing countries face with respect to working capital management. He stated problems such as being small in size (in terms of volume of investment and sales) and lack of resources. He added that the problems of managing working capital investments and short-term debt may be increased by such lack of managerial knowledge. Fishazion et al., (2001) reechoed the fact that firms in developing countries financially lack the opportunity of getting the benefit of financial markets. And even if financial markets exist the small firms have less opportunity to go public and benefit from the financial markets as sources of finance. Because of these factors, he believes that short-term debt management is even more important in developing than developed countries. Results of similar studies revealed the existence of an optimal level of working capital policy; and (ii) firms that converge to that optimal level improve their stock and operating performance. In addition, efficient WCM will allows firms to redeploy underutilized of firm's resources to higher-valued use in which could heightening of firm's performance (Aktas, & Croci, & Petmezas, 2015; Global Working Capital Management Market (2016)), for that matter both large and small firms need to have proper management on working capital (Sajid et.al ,2013).

Liquidity: Liquidity as a function of current assets and current liabilities is an important factor in determining working capital policy and indicates firm's capability of generating cash in case of need. Working capital requirement comes directly from the narrower definition of working capital and measures the needed working capital (Chiou & Cheng, 2006). Current Ratio, Acid Test Ratio and Cash Ratio as traditional measures of liquidity are static balance sheet based measures that cannot provide detailed and accurate information about working capital management effectiveness (Finnerty 1993, Jos et al 1996). Formulae used for calculating them consider both liquid and operating assets in common. However, considering operating assets like receivables and inventories with cash and cash-equivalent assets is logical for basic principle of cash management. Besides, these traditional ratios are also not meaningful in terms of cash flow (Richards and Laughlin, 1980).

Drawing attention to limitations of traditional liquidity ratios, many researchers have insisted on using ongoing liquidity measures in working capital management. Ongoing liquidity refers to the inflows and outflows of cash through the firm as inventory acquisition, production, sales receipts and collection process take place overtime. As the firm's ongoing liquidity is a function of firm's cash conversion cycle (CCC), it will be more appropriate and accurate to evaluate effective of working capital management by cash conversion cycle rather than the tradition liquidity measures (Hager, 1976; Richards and Laughlin, 1980; Kamath, 1989; Gentry et al 1990; Pinches 1992; Schilling 1996; Boer 1999). According to Jose et al. (1996), the cash conversion cycle was introduced by Gitman (1974) and later refined by Gitman and Sachdeva (1982). Keown *et al* (2003) stated that the popular measure of working capital management requirement is the cash conversion cycle. Similarly, Gitman (1974) also argued that the cash conversion cycle is a key factor in working capital management. Actually, decisions about how much to invest in the customer and inventory accounts, and how much credit to accept from suppliers, are reflected in the firm's cash conversion cycle, which represents the average number of days between the date when the firm must start paying its suppliers and the date when it begins to collect payments from its customers. The CCC refers to the number of days between the expenditure of the firm's cash for the purchase of raw materials and the collection of cash from sales (Sathyamoorthi and Wally-Dima, 2008).It is the time between purchase of raw materials and getting finished goods paid. Longer cash cycle means more investment on working capital.

Profitability: Brigham and Erhardt (2008) define profitability as the net return of a number of policies and decision. Profitability is the measure of a firm use of its assets and control of expense to generate acceptability rate of return (Zane et al 2004).Weygandt et al (2006) identified profitability measures as tools used to measure the income of operating success of an enterprise for a given period of time. According to them, income or lack of it affects the company's ability to obtain debt and equity financing, the company's liquidity position and the company's ability to grow. As consequences, creditors and investor alike are interested in evaluating easy power. According to Ayadi et al (2006) one measure of firm's profit is the relationship between the firm cost and its sales. The greater

the firm ability to control cash in relation to its revenue the more its earning power is enhanced. Block and Hirt (2002)) classify profit measures of a firm as Profit Margin, Return on Assets (ROA), Return on Equity (ROE) and Earning Power Per Share of Common Equity. In addition, Brigham and Erhardt (2008) introduced the Basic Earning Power (BEP) ratio as another measure of profit. According to these writers the above measures allow the assessment of firm ability to earn adequate return on sales, total assets and invested capital. Lusz (2008) also added that the concept of Return on Assets (ROA) and Return on Equity (ROE) are important for understanding the profit of a business enterprise. Secondly a return ratio illustrates the relationship between profit and investment needed to generate that profit. Gyasi (1992) and Addo (2008) however categories profitability measures into two: profit in relation to sales; and profit in relation to investment. They further sub-divided investment to total assets and shareholders' equity and explain that these measures are indicators of a firm's ability to make profit on the resources available to it. Ayadi et al (2006) and Burns et al (2008) define and elaborate on these measures on assessing a company's profitability's and indicate that among the ROE, which measure the firm's rate of return on shareholders' equity, is accepted as the best profit meter to evaluate the performance of a business in relation to profit generation. Repeated findings and several financial studies (Mechlin and Berg 2000: Watte 2006: Dubofsky and Varadariajan 2007: and Obi 2008) have reveal that in spite of their empirical short-coming the most frequently used measures are those based on the firm profit especially ROE, profit Margin on sales, ROCE and basic earning power ratios. However, Burn et al (2008) argue that the primary emphasis in evaluation of business condition must be in operating performance where value creation takes place

2.4. Liquidity-profitability Relationship

The main body of the literature of working capital focuses on studying the relation between individual components of WC cash and marketable securities, e.g. Mauer, Sherman and Kim (1998), trade credit, e.g. Rajan and Peterson (1997), etc. and the joint effects of these individual policies, or the overall WCM (liquidity) and firm's profitability as well as on overall working capital management, on profitability (Schiff and Lieber (1974), Sartoris and Hill (1983), and Kim and Chung (1990) Prior studies reported that working capital management may have an important effect on the firm's profitability. Various studies on the effect of WCM, measured working capital with cash conversion cycle, on a firm's profitability e.g. authors such as Deloof (2003), Shin and Soenen (1998), Lazaridis and Tryfonidis (2006), Garcia-Teruel and Martinez-Solano (2007), Samiloglu and Demirgunes (2008), Karaduman et al. (2011), Uyar (2009) and Wang (2002) whom did research in respectively Belgium, USA, Greece, Spain, Turkey, Turkey, Turkey and Japan, and Taiwan all found a negative relation between WCM, using the CCC, and firm profitability. This means that having a WCM policy which results in a low as possible accounts receivables and inventories and the highest amount of accounts payables leads to the highest profitability. Other studies have mainly focussed on emerging market. These studies are Raheman and Nasr (2007), Zariyawati et al. (2009), Falope and Ajilore (2009), Dong and Su (2010), Mathuva (2010), Quayyum (2012) and Korankye & Adarquah (2013) who did research in Pakistan, Malaysia, Nigeria, Vietnam, Kenya, Bangladesh and Ghana respectively. All these studies have found a significant negative relation between the cash conversion cycle and a firm's profitability. They concluded that managers can create value for their firms, by keeping their working capital to a reasonable minimum.

Contradicting evidence is found by Gill et al. (2010), who did research in the USA and found a positive relation between CCC and a firm's profitability. But they did find a highly significant negative relation between accounts receivables and a firm's profitability. They suggest that firm can enhance their profitability by keeping their working capital to a minimum. This is because they argue that less profitable firms will pursue a decrease of their accounts receivables in an attempt to reduce their cash gap in the CCC. Another contradicting evidence is found in India by Sharma and Kumar (2011). They found evidence of a positive relation, which means that loosening the three parts of a firm working capital management leads to higher profit. They argue that this is caused by the fact that India is an emerging market and reputations of creditworthiness of firms are not fully developed and therefore many companies loosen their working capital management. Another reason they state is that only profitable firms can loosen their working capital and therefore it's because these firms are profitable, that they loosen their working capital management and not the other way around.

As mentioned before, authors have also studied the three parts of the CCC- accounts receivables, accounts payables and inventories - individually. Amarjit et. al. (2010) primarily sought to extend Lazaridis and Tryfonidis's (2006) findings by testing with the same hypothesis. They found statistically significant relationship between the cash conversion cycle and profitability, measured through gross operating profit. The study concluded that managers can create profits for their companies by handling correctly the cash conversion cycle and by keeping accounts receivables at an optimal level. Contradicting evidence is found on the effect of accounts payables on the profitability of a firm. According to the cash conversion cycle, the number of accounts payables days needs to be as large as possible. But researchers such as Deloof (2003), Sharma and Kumar (2011), Lazaridis (2006), Baños-Caballero (2010) and Karaduman (2011) have all found a negative relationship between gross operating income and number of receivable days, payable days, inventories days and profitability. Wajahat and Hammad (2010) shows that managers cannot change the level of profitability by adopting any of the working capital policy because he found no relationship existing between working capital policy and profitability. In Nigeria, Falope and Ajilore (2009) conclude that a statistically significant negative correlation exists between net operating profitability and inventory turnover, cash conversion cycle, accounts receivable collection period and account payable days. More recently, Bagchi and Khamrui (2012) have shown that statistically significant inverse association exist between the return on assets of selected FMCG companies in India and each of cash conversion cycle, interest coverage ratio, age of debtors, age of creditors, age of inventory and debt ratio. Similarly, in Ghana Korankye & Adarquah (2013) found that inventory turnover period, account collection period and account payables payment period each negatively correlates with profitability. These findings are not significantly different from those of other researchers such as Ching et al (2011), Lazaridis and Tryfonidis (2006), Garcia-Teruel and Martinez-Solano (2007). Despite the findings of these authors, Agyei and Yeboah (2011) show that a positive relationship exists between cash

conversion cycle and bank profitability. Gill et al (2010) also found a statistically positive significant relationship between cash conversion cycle and gross operating profit ratio. This implies that longer cash conversion cycle might increase profitability because it leads to higher sales. But Deloof (2003) argues that corporate profitability might also decrease with the cash conversion cycle if the cost of higher investment in working capital is higher and rises faster than the benefits of holding more inventories and granting more trade credit to customers.

Another issue of concern is the impact of company size, firm-type and industry on profitability with respect to working capital management. Raheman and Nasr (2007) indicate that profitability is positive and highly significant when related to firm size. Teruel & Solano (2007) argued that small and medium-size firms also can increase their profitability by shortening cash conversion cycle. Consistent with this finding, the study by Garcia-Teruel and Martinez-Solano (2007) to evaluate the impact of working capital management on firms' profitability using a sample of Spanish SMEs show that the finance managers were capable of generating firms' value by dipping their inventories along with the age of debtors. Besides, the firm's profitability could be also improved by reducing the cash conversion cycle. Similarly, Chus (2009) indicated that large companies were more effective in their short term working capital management. This was shown by lower inventories and shorter accounts receivable. On the contrary, Chiou et al., (2006) in studying the working capital management of Taiwan firms found that the relation between debt and cash conversion cycle has an impact on working capital management but the type of industry and the size of the firm have no impact on working capital management. In the end, it is important to note that the variable of company size impacts performance and will need to be accounted for in any study looking at working capital management.

Further, Deloof (2003) used a sample of Belgian firms and found that firms can increase their profitability by reducing the account receivable collection period and the days-in-inventory period. He also found that less profitable firms wait longer to pay their bills. One paper which took Deloof's study further was Lee and Song (2010). In their study, they sought to test if the impact of cash conversion cycles on profitability remained the same across a number of industries. Specifically, Lee and Song looked at clothing manufacturers, car manufacturers, and retailers. Surprisingly, a longer C2C cycle was linked to a more profitable car or clothing manufacturing firm. This suggests that the amount of sales being generated by utility to customer outweighed the cost of holding extra inventory or getting paid later. Still, the retail companies followed a more traditional pattern with profit being positively correlated with a shorter C2C cycle (Lee & Song, 2010). That being said, Deloof's original theory, according to this study, holds true only in certain industries. It is empirically obvious that WCM policies are neither firm-specific nor country specific. This might probably be due to the fact that individual managers differ in terms of their behavioral prototype. It is therefore difficult to prescribe firm-specific or industry -specific WCM policy. Similarly, Kasiran et. al. (2016) analyzed the efficiency of working capital management in the selected small medium enterprise companies in Malaysia. The results reveal that the selected small medium enterprise company was less efficient in managing their working capital during this study period.

At country level, the Annual Global Working Capital Survey (2015) revealed that WC performance among the largest companies in the US and Europe reveals an improvement in both regions. Compared with 2013, leading companies in the US and Europe in 2014 reveals an improvement in working capital (WC) performance of both regions. For US, CCC decreased by 3% from its 2013 level, while Europe shows a reduction of 2%. However, closer analysis reveals a more complex picture. WC management still receives far greater attention than in the past, as companies continue to take rigorous steps to drive cash and cost out of WC. In the same report, Companies outside the US and Europe also fared better in 2014, with overall CCC dropping by a further 2%. In Asia, the Net Working Capital/Sales for all industries increased from 11.6% in 2010 to 13.5%. In Europe, it decreased from 12.2% to 10.8% and in the USA and Canada, it decreased from 9.6% to 9.3%. Six out of seven regions and countries analyzed reported an improvement in WC performance. Interestingly SMEs fared worse in 2014 than larger companies in the US, reversing a large part of the previous gains observed in previous years. A similar study by Wen-Lin(2016) tested whether national culture may explain the variation in working capital management. Using 81,585 firm year observations across 46 countries over the period from 1998 to 2010, he confirms that working capital management is positively associated with power distance, but negatively with individualism and masculinity. In general, his findings reinforce the importance of national culture in determining the effects of firm- and country-level factors on working capital management policies.

2.5. Working Capital Management and Shareholders' Value Creation

With respect to the effect of working capital management on firm value in the studies which measured firm value using profitability ratios, we find no direct evidence. While Schiff and Lieber (1974), Sartoris and Hill (1983), and Kim and Chung (1990) model the effects of working capital management practices on firm value, they do not provide evidence on whether firms actually do maximize their value by their working capital management choices. The study that comes nearest to addressing this issue is the study by Shin and Soenen (1998), which examines the relation between different accounting profitability measures and net trade cycles, a summary efficiency measure of a firm's working capital management. Their study implies, without providing direct evidence, that firms that manage their working capital more efficiently (i.e., shorter net trade cycle) experience higher operating cash flow and are potentially more valuable. However, this last implication does not necessary follow because firms that have longer net trade cycles are also investing in short-term assets which may pay off in subsequent periods. Further, their evidence does not speak to whether the market sees firms as over-investing in net working capital. So the question as to whether firms over-invest in net working capital on average is unanswered by prior research.

Nevertheless, there are some few studies on working capital management which measured firms value with measures other than accounting profitability. A direct relation between investment and firm value has been demonstrated by a number of studies (McConnell and Muscarella, 1985; Chung, Wright and Charoenwong, 1998; Burton, Lonie and Power, 1999). Additionally, since the

seminal work by Modigliani and Miller (1958) showing that investment and financing decisions are independent, extensive literature based on capital-market imperfections has been published that supports the relation between these two decisions (Fazzari, Hubbard and Petersen, 1988; and Hubbard, 1998). Besides, there is a large and growing literature documenting the sensitivity of investment to cash flow (Pawlina and Renneboog, 2005; Guariglia, 2008; among others). However, empirical evidence on the valuation effects of investment in working capital and more specifically the possible influence of financing on this relation is scant, despite the importance of taking into account the interrelations between the individual components of working capital when evaluating their influence on corporate performance (Schiff and Lieber, 1974; Sartoris and Hill, 1983; Kim and Chung, 1990). Previous studies on working capital management fall into two competing views of working capital investment. Under one view, higher working capital levels allow firms to increase their sales and obtain greater discounts for early payments (Deloof, 2003) and, hence, may increase firms' value. Alternatively, higher working capital levels need to be financed and, consequently, firms face additional financing expenses that increase their probability of going bankrupt (Kieschnick, LaPlante and Moussawi, 2009). Combining these positive and negative working capital effects leads to the prediction of a nonlinear relation between investment in working capital and firm value. Authors like Schiff and Lieber (1974), Smith (1980) and Kim and Chung (1990) suggested that working capital decisions affect firm performance. In this line, Wang (2002) finds that firms from Japan and Taiwan with higher values hold a significantly lower investment in working capital than firms with lower values. Recently, Kieschnick et al., (2009) studied the relation between working capital management and firm value. The last of these take Faulkender and Wang (2006) as their baseline valuation model and analyze how an additional dollar invested in net operating working capital is valued by shareholders of US corporations by using a stock's excess return as proxy for firm value. Their results show that, on average, an additional dollar invested in net operating working capital is worth less than a dollar held in cash. Additionally, they find that an increase in net operating working capital, on average, would reduce the excess stock return and show that this reduction would be greater for those firms with limited access to external finance. Since market imperfections increase the cost of outside capital relative to internally generated funds (Jensen and Meckling, 1976; Myers and Majluf, 1984; and Greenwald, Stiglitz, and Weiss, 1984) and may result in debt rationing (Stiglitz and Weiss, 1981), Fazzari, Hubbard and Petersen (1988) suggest that firms' investment may depend on financial factors such as the availability of internal finance, access to capital markets or cost of financing. Moreover, Fazzari and Petersen (1993) suggest in their analysis that investment in working capital is more sensitive to financing constraints than investment in fixed capital.

3. Findings

This section presents the findings from the literature reviewed on the phenomenon under consideration. Sample of the studies on WCM considered for this exercise are summarized in Table 1, evidence of importance of WCM to survival and success of firms, and the evidence for managing WC for survival or success as well as the evidence for managing WC to enhance firms value creation are covered

3.1. Evidence of Importance WCM to Firms

The earliest studies in the field of financial management centered on capital budgeting, capital structure to the neglect of working capital management. However, in more recent times practitioners, business managers and researchers have realized the importance of WCM to the survival and the success of business organizations of all types across the global. WCM is perceived as the life blood of a business entity. This is because without it firms cannot operate their fixed asset to generate revenue. It is therefore crucial for the survival or success of all firms respective of the size or the location of the firm. It was also revealed that poor WCM is one of the major causes of poor financial performance as well as the collapse of many firms. It was therefore recommended by most of the study that management should pay proper attention to the WCM, design and implement strategies and policies to manage the individual components as well as the overall WCM.

3.2. Managing WC for Survival or Success of Firms

Majority of the studies on WCM emphasized the need to manage WC for survival or success. However, there is no operationalized definition for what they mean by survival or success. It was not found in the literature at what point in WCM is the firm managing for survival and beyond which the firm is managing WCM for success. It was revealed that these studies measure manage WC for survival or success by considering the relationship between WCM and profitability. With respect to WCM, the studies cover overall working capital management and individual aspects of working capital management (cash and marketable securities, trade credit, etc.) as well as the joint effects of these individual policies on profitability. Very few studies covered both internal and external dimension of WCM. WCM was used as an independent variable with different proxies or measures such as Accounts Receivable Days (ARD), Inventory Days (ID) and Accounts Payable Days (APD) for the individual components, and cash conversion cycle (CCC) for overall WCM. Profitability was used as dependent variable with different measures, mostly using accounting metrics based on accrual concept of financial accounting. The most common ones are (1) Profitability in relation to sales such as Gross Profit Margins (GPM), Net Operating Margin (NOM) etc, and (ii) Profitability in relation to investment which includes Return on Total Assets (ROTA), Return on Equity (ROE), and Return on Investment (ROI) are the main measures of profitability. However, none of the studies considered the sensitivity of the different measures of profitability to WCM and its implications on the results of the study. It was also revealed that a good number of studies on the effect of WCM on a firm's profitability have been studied in both SMEs and large firms in countries across the economic divide. These studies showed inconsistent findings: some of the studies showed positive relationship between WCM and profitability whilst others showed negative relationship between the two variables. Other studies observed no statistically significant relationship between the WCM and profitability. Very few studies took a step further to consider the

significance of the changes in the amount of profit as a result of change in liquidity for operation. Besides, most of the studies used CCC as the measure for WCM. Findings of such studies also revealed inconsistent relationship between WCM and profitability. In one study, short CCC is inversely related to profitability, in another short CCC is directly related to profitability.

One thing is that none of these studies took a step further to find out whether or not the relationship between CCC and profitability as revealed by the study really gives a true picture about how WC is managed in the studied firms. For instance, if result of a study reveals that short CCC correlates inverse with profitability, it is an indication of efficient working capital management. However, this inference may or may not be true about the management of WC because of how accounting profit is determined. Of course, not all reductions in working capital are beneficial. Too little inventory can disrupt operations. Stretching supplier payment terms can leak back in the form of higher prices, if not negotiated carefully, or unwittingly send a signal of distress to the market. A further check is required to confirm the inference of such findings. This involves breaking profit to its basic components and analysis them. Profit is equal to cost of operation minus revenue from operation. Profit therefore can be broken into cost and revenue. The total cost operation captured in the income statement may not reflect the total cost if there are expenses prepayments during the period because of the accrual concept. While this approach may be good for profit determination for other purposes it may not be good for WCM because such payments may affect liquidity for operation when suppliers fail to provide the required services as and when due. Again the cost of operation reported for the determination of profit for a period may be more than the actual cost incurred which reflect the actual cash outflow when there are Owings during the period. Profit produced from this scenario does not truly reflect the real issues affecting liquidity. On the revenue side we have total revenue for the period consisting of cash sales and credit purchase. Recognition concept, matching and accrual concepts allow the inclusion of credit sales in the determination of profit for the period. It is a normal expectation that if CCC reduces, more liquidity may be released for operation hence increase in profitability. However, for profitability to really translate into cash it depends on the fact that sales are converted to cash. Consequently, if the ratio of cash sales is higher than the ratio of credit sales, it confirms that the inverse relationship between the short CCC and profit gives true description of the state of WCM.

Besides the profit, the composition of CCC also needs to be analyzed for further check for confirmation of the description about WCM performance. Although reduction in ARR is a sign of improvement in WCM, that is not always the case. It only measures the rate of collection but does not show the size of debt and also does not consider the liquidity implications of the incidence of recalcitrant debtors before they are declared bad. So by logical conclusion an improvement in ARR does not necessarily implies more liquidity especially when the percentage of credit sales of the total sales is too small and the rate of inventory turnover is slow. This may be possible because improvement in ARD is not the only factor responsible for improvement in ID. In the same way, an improvement in inventory ratio alone without a concurrent improve in ARD, may not result in improvement in liquidity when credit sales exceed cash sales or there is no significant difference between them. However, if cash sales ratio far exceeds credit sales ratio then an improvement in inventory ratio is more reliable indicator for WCM even when ARR is weak. Further, ID and ARD may decrease and APD may also increase but this does not also necessarily mean an improvement in liquidity unless the firm is able to honour its short-term financial obligation as and when due to avoid any risk. Another aspect of WCM that may be considered for such exercise is by comparing changes in cost of carrying WC and the cost of capital. the changes in either may affect improvement in WCM for instance cost of carrying WC increase and the cost of capital decrease, firm may choose to trade off WC improvements against sales growth, margin expansion or increased provision of financing solutions to the suppliers and customers

3.3. Managing WC for Shareholders Value

There is a large and growing literature documenting the effect of WCM on firm's value. However, only few studies used cash flow as a measure for firm value and considered the analysis of sensitivity of WCM to cash flow. In spite of the limitation of profitability as a measure of value, majority of the studies used profitability as the measure of firm's value instead of as a measure of management financial performance objective. Although firms value objective implies profitability, it goes beyond that to include the market value of shares of the firm. It is therefore expected that WCM researchers distinguish between the use of performance objective (usual profitability), shareholders value creation objective. The reason being that the achievement of performance objective is not the same as the achievement of value creation objective. With respect to the effect of working capital management on firm value, we find no direct evidence in their studies. Although some studies model the effects of working capital management practices on firm value, they do not provide evidence on whether firms actually do maximize their value by their working capital management choices.

4. Conclusions

The above review illustrates that while there are models to describe how working capital management practices influence firm value, there is practically no evidence that firms manage their working capital so as to maximize their value. This is because most of the studies use profitability, as product of accounting metrics to measure firm's value. This measure suits financial performance more than shareholders value because of its limitation. As a result, there is less certainty as to the influence of working capital management on value considering the findings of such studies. Thus, the question arises if working capital management is merely a necessity of good business, or can actually generate value for shareholders. Besides, the prior studies reviewed indicate inconclusive and inconsistent results with regard to the role of working capital management on firms' financial performance. This is due to the fact that researchers used either the conversion cycle as it relates to the firm's profitability or they examined only part of the components of the conversion cycle without a further check to confirm the implications of the findings on WCM of the studied firms. Further the reviewed studies could have emphasized the importance of WCM to survival and success of firms but the meaning of success and survival of firms in the context of working capital management is not clear in the literature. Again, there is no indication as to what point in WCM is the

firm managing for survival or for success. Could it mean that WC is managed for success when the firm experience positive WC and still holds excess cash over and above the optimal WC required for operation? And for survival when firm holds negative operating capital or experiencing positive WC but not yet up to the level of optimal requirement? Or are the terms (success and survival) used in their ordinary sense without any reference to their technical or operational implications in WCM? Better still are the two terms used as synonymous constructions? The sense in which they are used as well as the distinction between them is not clear in the WCM literature

5. Recommendation

Researchers of WCM should use cash flow instead of profitability as a measure of firm's value. However, if accounting metrics is used a further check be made to confirm the inference from the findings about the state of WCM. Or before using profitability, the researcher should adjust the accounting metric used to determine the profitability in other to overcome its limitations posed by account concepts used as the basis for preparation of income statements. Finally, future research attention in WCM should focus on operationalizing the concept of survival and success of a firm in the context of WCM, and providing indicator measure for managing working capital for survival and success to enable financial managers ensure operational efficiency in working capital management

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Annexure

Author	Year	Variables used	Country	Results of the study
Kasiran	2016	CCC and profitability	Malaysia	the selected SMEs were less efficient in managing their working capital during this study period
Wen-Lin	2016	CCC and cultural factors	across 46 countries	working capital management is positively associated with power distance, but negatively with individualism and masculinity
Annual Global Working Capital Survey	2015	CCC and Profitability	USA, Europe, Asia	working capital has shown a significant improvement, which has contributed to a jump of 11.3% in the cash-on-hand of companies
Deloof	2003	CCC and Profitability	Belgium	a significant negative relation between CCC, ARD, APD, ID and firm profitability
Shin and Soenen	1998	CCC and Profitability	USA	a significant negative relation between WCM, and firm profitability
Laziridis and Tryfonidis	2006	CCC and Profitability	Greece	a significant negative relation between WCM, and firm profitability
Garcia-Teruel and Martinez-Solano	2007	CCC and Profitability	Spain	a significant negative relation between WCM, and firm profitability
Samiloglu and Demirgunes	2008	CCC and Profitability	Turkey	a significant negative relation between WCM, and firm profitability
Karaduman et al.	2011	CCC and Profitability	Turkey	a significant negative relation between WCM, and firm profitability
Uyar	2009	CCC and Profitability	Japan	a significant negative relation between WCM, and firm profitability
Wang	2002	CCC and Profitability	Taiwan	a significant negative relation between WCM, and firm profitability
Raheman and Nasr	2007	CCC and Profitability	Pakistan,	a significant negative relation between the cash conversion cycle and a firm's profitability
Garcia-Teruel and Martinez-Solano	2007	CCC, ID, ARD, APD and Profitability	Spanish	a significant negative relation between profitability and CCC, ARD, APD, ID
Zariyawati et al.	2009	CCC and Profitability	Malaysia	a significant negative relation between the cash conversion cycle and a firm's profitability
Dong and Su	2010	CCC and Profitability	Vietnam	a significant negative relation between the cash conversion cycle and a firm's profitability
Falope and Ajilore	2009	CCC, ID, ARD, APD and Profitability	Nigeria	Statistically significant negative correlation between net operating profitability and CCC, CCC, ARD, APD, ID .
Mathuva	2010	CCC and Profitability	Kenya	a significant negative relation between the cash conversion cycle and a firm's profitability
Quayyum	2012	CCC and Profitability	Bangladesh	a significant negative relation between the cash conversion cycle and a firm's profitability
Korankye & Adarquah	2013	CCC and Profitability	Ghana	a significant negative relation between profitability and CCC, ARD, APD, ID
Sharma and Kumar	2011	CCC and Profitability	India	statistically significant positive relationship between CCC and a firm's profitability
Gill et al.	2010	CCC and Profitability	USA.	statistically significant positive relationship between CCC and gross operating profit ratio
Wajahat and Hammad	2010	CCC and Profitability		no statistically significant relationship between working capital policy and profitability
Bagchi and Khamrui	2012	CCC and Profitability	India	statistically significant inverse association between ROA and each of CCC, ARD, APD, ID and interest coverage ratio,
Agyei and Yeboah	2011	CCC and Profitability	Ghana	a positive relationship exists between cash conversion cycle and bank profitability.
Raheman and Nasr	2007	CCC and Profitability		indicate that profitability is positive and highly significant when related to firm size.
Teruel & Solano	2007	CCC and Profitability		small and medium-size firms also can increase their profitability by shortening cash conversion cycle
Chus	2009	CCC and Profitability		large companies were more effective in their short term working capital management. This was shown by lower inventories and shorter accounts receivable
Lee & Song,	2010	CCC and Profitability		longer CCC cycle was linked to a more profitable car or clothing manufacturing firm, and profit correlated positively with a shorter CCC cycle for retail companies
Faulkender and Wang	2006	firm value and net operating working capital	US	On average, an additional dollar invested in is worth less than a dollar held in cash. Additionally, an increase in net operating working capital, on average, would reduce the excess stock return.
Wang	2002	CCC and Profitability	Japan and Taiwan	Firms with higher values hold a significantly lower investment in working capital than firms with lower values.
Kieschnick et al.	2013	net operating working capital	USA	on average, an additional dollar invested in net operating working capital is worth less than a dollar held in cash

Table 1 Sample of Prior Studies on Working Capital Management